UNITED STATES DEPARTMENT OF THE INTERIOR
HAROLD L. ICKES, Secretary
GEOLOGICAL SURVEY
W. C. MENDENHALL, Director

Water-Supply Paper 727

SURFACE WATER SUPPLY *of the* UNITED STATES 1932

PART 2

SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS

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

Prepared in cooperation with the States of
ALABAMA, FLORIDA, MISSISSIPPI, NORTH CAROLINA
SOUTH CAROLINA, and VIRGINIA

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1934

For sale by the Superintendent of Documents, Washington, D.C. - - - - - - Price 15 cents

CONTENTS

ILLUSTRATION

SURFACE WATER SUPPLY OF SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS, 1932

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, 1932.

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, 1895–193**

1895	$12,500.00	1911–17	$150,000.00	1928	$147,000.00
1896	24,500.00	1918	175,000.00	1929	270,500.00
1897–99	50,000.00	1919	148,244.10	1930	275,000.00
1900	70,000.00	1920	175,000.00	1931	565,000.00
1901–2	100,000.00	1921–23	180,000.00	1932	711,000.00
1903–6	200,000.00	1924–25	170,000.00	1933	600,000.00
1907	150,000.00	1926	165,000.00		
1908–10	100,000.00	1927	151,000.00		

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 6,590 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1932, 2,790 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 artifical 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, 1931, and ending September 30, 1932. At the beginning of January in most parts of the United States much of the precipitation in the pre-

ceding 3 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.

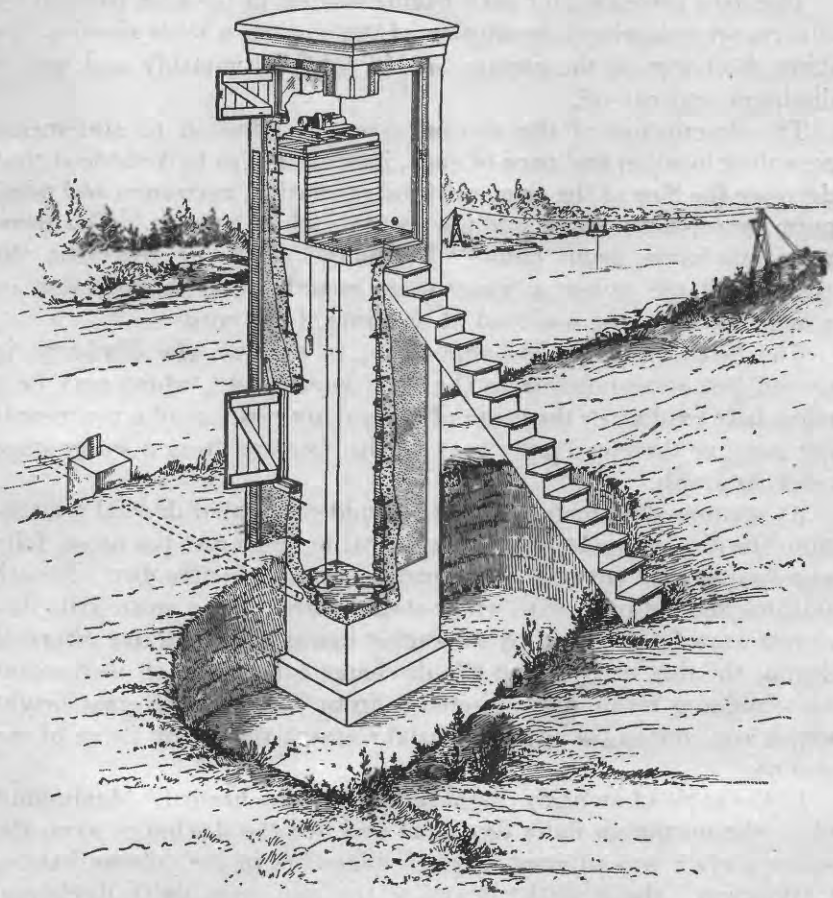

FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings of a staff or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods

outlined in standard textbooks on the measurement of river discharge. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in figure 1.

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

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

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

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

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

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

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

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

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

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

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

PUBLICATIONS

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

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

Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River Basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. North Pacific slope basins, in three parts:
    A, Pacific slope basins in Washington and upper Columbia River Basin.
    B, Snake River Basin.
    C, Pacific slope basins in Oregon and lower Columbia River Basin.

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

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

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

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

Augusta, Me., Statehouse.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 203 Federal Building.
Albany, N.Y., 603 State Public Works Building.
Trenton, N.J., 228 Federal Building.
Harrisburg, Pa., 492 Education 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.
Montgomery, Ala., Post Office Building.
Chattanooga, Tenn., 630 Power Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Urbana, Ill., 302 University New Agricultural Building.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 632 State Office Building.
Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
Topeka, Kans., State House.

Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Highway Building.
Santa Fe, N.Mex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 303 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 421 New Federal Building.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 510 Eighth and Figueroa Building.
Honolulu, Hawaii, 225 Federal Building.

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

Stream-flow records have been obtained at about 6,590 points in the United States, and the data have been published in the reports tabulated as follows:

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

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

Report	Character of data	Year
10th A, pt. 2	Descriptive information only	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to Sept. 1890.
12th A, pt. 2	do	1884 to June 30, 1891.
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893–94.
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).	1895–96. 1897.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Misssouri River above junction with Kansas River.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings,and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4	Monthly discharge	1900.
W 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.

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

Report	Character of data	Year
W 301 to 312	Complete data	1911.
W 321 to 332	do	1912.
W 351 to 362	do	1913.
W 381 to 394	do	1914.
W 401 to 414	do	1915.
W 431 to 444	do	1916.
W 451 to 464	do	1917.
W 471 to 484	do	1918.
W 501 to 514	do	1919–20.
W 521 to 534	do	1921.
W 541 to 554	do	1922.
W 561 to 574	do	1923.
W 581 to 594	do	1924.
W 601 to 614	do	1925.
W 621 to 634	do	1926.
W 641 to 654	do	1927.
W 661 to 674	do	1928.
W 681 to 694	do	1929.
W 696 to 709	do	1930.
W 711 to 724	do	1931.
W 726 to 739	do	1932.

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 1932. The data for any particular station will, as a rule, be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

Numbers of water-supply papers containing results of stream measurements, 1899–1932

[For basins included see p. 6]

Year	1	2	3	4	5	6	7	8	9	10	11	12-A	12-B	12-C
1899 [a]	35	[b] 35, 36	36	36	36	[c] 36, 37	37	37	[d] 37, 38	38, [e] 39	38, [f] 39	38	38	38
1900 [g]	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] 124, [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
1930	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1931	711	712	713	713	715	716	717	718	719	720	721	722	723	724
1932	726	727	728	729	730	731	732	733	734	735	736	737	738	739

[a] Rating tables and index to Water-Supply Papers 35–39 contained in Water-Supply Paper 39. Monthly discharge for 1899 in Twenty-first Annual Report, part 4.
[b] James River only.
[c] Gallatin River.
[d] Green and Gunnison Rivers and Colorado River above Gunnison River.
[e] Mohave River only.
[f] Kings and Kern Rivers and south Pacific slope basins.
[g] Rating tables and index to Water-Supply Papers 47–52, and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52. Monthly discharge for 1900 in Twenty-second Annual Report, part 4.
[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 River.
[k] Tributaries of Mississippi River 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.
[r] The Great Basin in California, except Truckee and Carson River Basins.
[s] Below junction with Gila River.
[t] Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

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

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

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

DIVISION OF WORK

The data for the stations in the several States were collected and prepared for publication as follows: In Alabama, Mississippi, and for the Apalachicola River Basin in Florida and Georgia and the Choctawhatchee River Basin in Florida by C. E. McCashin, district engineer, assisted by D. M. Corbett, J. L. Saunders, C. H. Prior, E. J. Tripp, I. E. Anderson, W. M. Littlefield, and Miss Annie L. Hardin; in Florida (except for the Apalachicola and Choctawhatchee River Basins) and for the Altamaha, St. Marys, Satilla, and Suwannee River Basins in Georgia by D. S. Wallace, district engineer, assisted by Verne Alexander, R. P. Mangold, and Miss Louise Volland; in North Carolina by E. D. Burchard, district engineer, assisted by

T. M. Bell, R. E. Cabell, H. A. Taylor, A. G. Hely, and Mrs. Effie T. Workman; in South Carolina and the Savannah River Basin in Georgia by A. E. Johnson, district engineer, assisted by F. W. Wagener and Mrs. Alice E. McCravy; in Virginia by J. J. Dirzulaitis, district engineer, assisted by O. D. Mussey, F. F. Schrader, A. R. Green, T. F. Hanly, A. D. Ash, E. A. Gdaniec, P. N. Shackelford, and Miss Sue F. Norris.

The records were reviewed and the manuscript assembled by M. T. Thomson.

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 1932.
EXTREMES.—Maximum discharge during year, 5,680 second-feet May 1 (gage height, 9.98 feet); minimum, 63 second-feet Sept. 19 (gage height, 2.80 feet).
1925–32: Maximum discharge, 6,850 second-feet Nov. 16 1926 (gage height, 10.90 feet); minimum, 58 second-feet at times in September and October 1930 (gage height, 2.90 feet).
Maximum stage known, about 25.6 feet March 1913 (discharge not determined).
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	68	92	377	824	258	2,270	3,660	180	318	112	71
2	100	70	97	674	628	230	1,640	2,770	169	258	116	72
3	93	67	87	584	772	230	1,180	1,480	158	217	119	72
4	92	68	79	428	2,760	244	866	980	158	180	119	73
5	85	68	76	344	4,250	318	710	812	148	3,540	107	74
6	85	66	73	312	1,990	572	710	662	148	3,900	107	75
7	87	66	70	674	1,480	812	616	530	138	1,810	96	74
8	85	66	66	940	980	616	530	471	138	1,110	94	72
9	85	67	77	1,430	710	572	866	452	128	710	92	70
10	80	66	97	1,060	572	471	922	710	119	490	93	68
11	80	66	135	772	530	382	866	1,040	128	399	90	71
12	77	66	156	584	510	382	760	1,810	138	334	104	74
13	74	66	200	483	452	366	662	1,810	158	303	93	74
14	73	66	212	464	416	334	572	1,250	169	244	87	73
15	76	66	225	428	382	318	510	922	169	217	84	72
16	74	66	212	394	366	303	452	710	158	192	83	72
17	73	66	177	344	416	866	399	572	148	217	84	70
18	73	66	145	312	434	2,990	366	510	148	192	86	65
19	71	66	135	281	434	1,990	334	434	138	169	102	65
20	70	66	120	238	399	1,250	318	382	128	148	96	67
21	71	66	111	225	366	1,110	288	350	217	138	88	72
22	71	66	166	212	382	1,640	288	399	258	138	84	72
23	71	66	394	200	382	1,720	258	350	169	148	80	73
24	71	66	344	200	334	1,180	258	303	148	138	77	74
25	71	66	312	200	318	866	303	273	138	128	77	73
26	68	66	266	177	288	710	452	244	128	117	77	74
27	66	64	212	188	288	710	399	230	119	114	74	77
28	67	66	200	238	288	4,260	350	244	1,040	119	72	79
29	79	68	188	360	273	2,770	318	217	1,040	119	72	74
30	74	77	166	1,000	------	1,990	303	192	490	110	74	77
31	70	------	156	1,350	------	1,810	------	180	------	109	72	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	109	66	78.1	0.191	0.22
November	77	64	66.8	.163	.18
December	394	66	163	.399	.46
January	1,430	177	499	1.22	1.41
February	4,250	273	766	1.87	2.02
March	4,260	230	1,040	2.54	2.93
April	2,270	258	626	1.53	1.71
May	3,660	180	805	1.97	2.27
June	1,040	119	224	.548	.61
July	3,900	109	527	1.29	1.49
August	119	72	90.7	.222	.26
September	79	65	72.3	.177	.20
The year	4,260	64	413	1.01	13.76

JAMES RIVER AT LICK RUN, VA.

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

DRAINAGE AREA.—1,370 square miles.

RECORDS AVAILABLE.—April 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 28,500 second-feet Feb. 5 (gage height, 18.14 feet); minimum, 184 second-feet Sept. 10, 11, 18, 19 (gage height, 1.50 feet).

1925–32: Maximum discharge, that of Feb. 5, 1932; minimum, 153 second-feet Oct. 11, 1930 (gage height, 1.51 feet).

Flood of September 1877 reached a stage of 29.1 feet and that of March 1913 reached a stage of 27.2 feet (discharge not determined).

REMARKS.—Records excellent.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	276	220	242	910	2,820	994	5,300	8,120	650	857	314	190
2	269	217	246	2,100	2,100	906	4,990	11,900	608	675	374	194
3	257	210	257	1,820	2,560	864	3,820	5,280	568	568	305	227
4	250	213	238	1,350	7,390	950	3,010	3,560	529	491	346	234
5	246	199	224	1,010	20,200	1,230	2,510	2,820	508	3,460	434	230
6	242	203	224	991	7,090	2,950	2,210	2,330	491	4,980	305	213
7	242	203	217	1,860	4,240	4,840	2,040	1,930	476	4,710	268	200
8	235	206	213	3,040	3,140	3,140	1,760	1,660	460	2,420	248	200
9	231	206	238	4,640	2,510	2,570	2,790	1,510	424	1,740	238	190
10	228	210	272	4,670	1,980	2,100	4,240	1,660	389	1,230	230	187
11	228	210	320	3,010	1,760	1,760	3,680	3,470	384	957	238	190
12	224	210	422	2,110	1,660	1,610	3,340	4,320	429	782	248	197
13	217	206	467	1,660	1,760	1,560	2,820	6,160	470	668	252	206
14	213	210	525	1,450	1,510	1,510	2,390	4,900	508	574	241	203
15	217	210	525	1,350	1,410	1,360	2,040	3,530	557	524	223	200
16	213	206	546	1,250	1,280	1,230	1,760	2,750	574	470	220	200
17	210	206	483	1,100	1,460	1,960	1,560	2,270	540	439	220	190
18	206	210	407	975	1,760	8,170	1,410	1,930	513	481	238	187
19	210	206	355	873	1,660	5,840	1,320	1,610	481	434	256	184
20	206	210	324	786	1,460	4,100	1,190	1,410	546	370	252	187
21	210	210	304	723	1,320	3,340	1,110	1,280	650	332	245	213
22	206	206	454	668	1,410	3,820	1,030	1,360	763	323	227	213
23	206	206	828	632	1,820	5,140	979	1,410	585	323	216	213
24	206	206	975	614	1,610	3,680	927	1,190	470	327	210	227
25	206	206	806	591	1,410	2,880	950	1,070	384	305	203	2
26	203	199	711	552	1,280	2,390	1,240	964	355	288	200	13 216
27	203	203	597	568	1,190	2,150	1,230	892	370	280	200	216
28	206	210	525	638	1,150	11,000	1,110	892	750	276	197	216
29	235	213	483	866	1,110	11,100	994	843	2,470	296	197	213
30	235	231	452	2,600	------	6,100	950	750	1,400	292	194	2
31	224	------	417	4,100	------	4,990	------	693	------	264	194	----

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	276	203	225	0.164	0.19
November	231	199	209	.153	.17
December	975	213	429	.313	.36
January	4,670	552	1,600	1.17	1.35
February	20,200	1,110	2,830	2.07	2.23
March	11,100	864	3,430	2.50	2.88
April	5,300	927	2,160	1.58	1.76
May	11,900	693	2,720	1.99	2.29
June	2,470	355	610	.445	.50
July	4,980	264	972	.709	.82
August	434	194	249	.182	.21
September	234	184	205	.150	.17
The year	20,200	184	1,300	.949	12.93

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 1932.
EXTREMES.—Maximum discharge during year, 35,000 second-feet Feb. 5 (gage height, 15.30 feet); minimum, 255 second-feet several days in September (gage height, 1.60 feet).
1895–1932: Maximum gage height, 31 feet Mar. 27, 1913 (discharge not determined); minimum discharge, that of September 1932.
REMARKS.—Records excellent. Discharge estimated for Oct. 9–21, Feb. 12–15.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	474	366	374	1,850	4,890	1,440	9,030	6,900	928	1,380	376	263
2	430	348	385	3,560	3,370	1,320	8,050	20,000	870	1,000	552	279
3	405	340	390	2,940	3,560	1,220	6,070	8,790	814	838	558	327
4	380	331	400	2,180	7,840	1,270	4,660	5,480	774	743	533	347
5	371	331	374	1,660	26,800	1,600	3,740	4,040	736	986	558	344
6	366	315	348	1,440	13,100	5,500	3,200	3,280	715	3,150	564	327
7	362	315	344	2,020	7,120	9,320	2,940	2,780	701	6,490	441	295
8	358	319	335	4,210	4,980	5,590	2,540	2,320	674	3,200	390	283
9	350	331	362	7,810	3,740	4,340	3,680	2,110	660	2,180	362	275
10	350	327	436	8,960	2,940	3,560	7,910	2,110	622	1,540	348	267
11	340	331	474	5,800	2,470	2,940	6,680	3,890	603	1,150	340	259
12	340	331	558	3,740	2,330	2,620	5,750	5,500	654	934	353	259
13	330	327	656	2,860	2,500	2,470	4,870	9,990	694	790	353	271
14	330	319	696	2,400	2,300	2,400	4,040	8,120	750	703	353	279
15	320	323	717	2,110	2,150	2,180	3,370	5,680	846	656	344	291
16	320	327	710	1,910	2,040	1,980	2,860	4,380	894	604	323	287
17	320	327	703	1,720	2,110	2,250	2,470	3,530	854	564	315	279
18	315	323	636	1,530	2,470	10,500	2,250	2,920	822	521	331	267
19	315	327	571	1,380	2,400	8,950	2,040	2,520	743	552	358	259
20	315	323	527	1,240	2,180	6,210	1,840	2,150	729	497	362	259
21	315	327	497	1,130	1,910	4,870	1,720	1,940	870	452	358	283
22	315	331	597	1,030	1,980	5,260	1,600	1,880	982	441	344	319
23	319	327	1,120	972	2,470	8,170	1,490	2,150	928	441	319	311
24	315	327	1,540	943	2,470	5,980	1,390	1,810	758	436	303	311
25	311	323	1,280	914	2,180	4,450	1,360	1,560	667	430	295	307
26	307	319	1,010	888	1,980	3,650	1,460	1,400	615	425	283	315
27	307	319	888	862	1,780	3,110	1,660	1,340	615	415	279	323
28	311	335	760	880	1,660	11,900	1,500	1,290	738	425	275	331
29	436	335	703	1,150	1,600	18,400	1,340	1,210	2,040	405	271	327
30	400	348	662	3,090	------	9,390	1,260	1,100	2,220	415	271	315
31	371	------	636	6,440	------	7,410	------	991	------	410	263	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	474	307	348	0.167	0.19
November	366	315	329	.158	.18
December	1,540	335	635	.305	.35
January	8,960	862	2,570	1.24	1.43
February	26,800	1,600	4,110	1.98	2.14
March	18,400	1,220	5,170	2.49	2.87
April	9,030	1,260	3,430	1.65	1.84
May	20,000	991	3,970	1.91	2.20
June	2,220	603	851	.409	.46
July	6,490	405	1,070	.514	.59
August	564	263	367	.176	.20
September	347	259	295	.142	.16
The year	26,800	259	1,920	.923	12.61

JAMES RIVER AT HOLCOMBS ROCK, VA.

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

DRAINAGE AREA.—3,250 square miles.

RECORDS AVAILABLE.—August 1931 to September 1932. January 1900 to September 1915 (gage heights only).

EXTREMES.—Maximum discharge during year, 33,100 second-feet Feb. 5 (gage height, 17.90 feet); minimum, 162 second-feet Aug. 29 (gage height, 3.45 feet).

1931–32: Maximum discharge, that of Feb. 5, 1932; minimum, that of Aug. 29, 1932.

Flood of March 1913 reached a stage of about 36 feet on present gage (discharge not determined).

REMARKS.—Records excellent. Flow regulated by power plants above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	784	602	566	2,220	6,920	2,330	11,300	3,610	1,420	1,890	598	399
2	644	532	552	4,650	5,070	2,200	11,300	20,900	1,360	1,460	552	422
3	718	572	563	4,440	4,570	2,040	9,040	12,300	1,300	1,240	1,140	590
4	527	567	614	3,460	8,610	2,020	7,270	7,740	1,210	1,030	1,000	636
5	617	508	574	2,610	27,000	2,200	5,900	5,780	1,150	1,130	662	494
6	662	560	582	2,180	18,400	8,790	5,150	4,920	1,190	4,270	850	566
7	546	471	580	3,560	10,200	14,000	4,750	4,010	958	6,680	750	542
8	530	485	587	5,820	7,180	9,000	4,350	3,660	1,110	4,920	600	526
9	640	503	514	11,000	5,730	6,800	4,710	3,080	990	2,970	558	288
10	568	506	733	12,100	4,800	5,700	8,640	3,210	916	2,190	536	338
11	368	506	758	8,690	3,940	4,860	9,040	3,870	870	1,730	550	388
12	564	474	989	5,970	3,600	4,190	8,160	6,350	968	1,470	520	380
13	567	490	863	4,900	3,130	3,870	7,160	9,910	1,140	1,250	482	400
14	571	550	1,020	3,900	3,890	4,020	5,870	10,200	1,190	992	494	420
15	506	486	1,060	3,570	3,470	3,740	5,150	7,340	1,160	1,070	420	411
16	566	502	1,010	3,210	2,920	3,320	4,530	5,760	1,400	948	422	398
17	461	452	988	2,700	2,880	3,300	3,880	4,780	1,470	818	504	384
18	502	544	960	2,730	3,340	10,100	3,040	2,840	1,300	830	515	381
19	506	500	888	2,380	3,380	13,600	3,150	3,120	1,160	840	512	384
20	472	476	834	2,190	3,100	9,270	3,040	3,150	1,120	830	510	390
21	480	467	656	2,010	2,830	7,530	2,550	2,610	1,190	735	510	386
22	434	546	772	1,700	3,520	7,750	2,620	2,370	1,150	716	603	393
23	491	540	1,930	1,370	3,400	10,400	2,530	3,160	1,350	551	502	401
24	484	426	1,080	1,460	3,490	9,460	2,330	2,780	1,290	683	502	409
25	468	553	1,370	1,480	3,210	7,120	2,340	2,200	976	590	493	454
26	548	467	1,520	1,660	2,900	5,730	2,180	2,120	786	677	430	439
27	420	552	1,360	1,720	2,700	4,930	2,570	2,000	854	618	330	430
28	540	421	1,020	1,850	2,510	11,100	2,500	2,090	1,180	572	468	532
29	478	540	1,060	1,700	2,460	23,100	2,360	1,810	1,530	562	320	484
30	1,120	533	1,030	3,100	------	13,900	2,170	1,760	3,210	570	342	508
31	586	------	908	7,340	------	10,900	------	1,500	------	566	417	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,120	368	560	0.172	0.20
November	602	421	511	.157	.18
December	1,930	514	901	.277	.32
January	12,100	1,370	3,800	1.17	1.35
February	27,000	2,460	5,490	1.69	1.82
March	23,100	2,020	7,330	2.26	2.61
April	11,300	2,170	4,990	1.54	1.72
May	20,900	1,500	4,870	1.50	1.73
June	3,210	786	1,230	.378	.42
July	6,680	551	1,460	.449	.52
August	1,140	320	552	.170	.20
September	636	288	439	.135	.15
The year	27,000	288	2,670	.822	11.22

JAMES RIVER AT BENT CREEK, VA.

LOCATION.—Water-stage recorder at highway bridge at Bent Creek, Appomattox County, 150 feet below Bent Creek and 1 mile below Gladstone.
DRAINAGE AREA.—3,670 square miles.
RECORDS AVAILABLE.—March 1925 to September 1932.
EXTREMES.—Maximum discharge during year, 41,000 second-feet Feb. 6 (gage height, 13.30 feet); minimum, 218 second-feet Sept. 26 (gage height, 2.25 feet).
1925–32: Maximum discharge, 74,000 second-feet Aug. 17, 1928 (gage height, 18.80 feet); minimum, 192 second-feet Oct. 13, 14, 1930 (gage height, 2.21 feet).
REMARKS.—Records good. Discharge estimated for Feb. 27, Mar. 16–22, Mar. 25 to Apr. 3, Aug. 5–10. Flow regulated by power plants above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	664	822	1,420	7,640	2,860	12,800	2,750	1,430	2,540	342	427
2	806	598	674	4,120	6,060	2,360	12,800	17,700	1,170	1,520	757	432
3	744	718	641	4,720	4,910	2,250	10,200	20,100	1,520	1,690	726	678
4	758	620	726	3,980	5,900	2,280	8,180	11,400	1,170	993	1,840	500
5	763	650	1,150	3,080	22,800	2,380	7,290	7,560	1,480	1,100	1,030	622
6	1,070	642	627	2,860	28,800	17,600	6,600	6,180	1,050	1,970	900	531
7	596	639	376	3,580	12,700	14,500	5,600	4,500	1,250	5,510	760	558
8	611	522	610	4,670	8,580	11,700	5,000	4,280	1,210	6,640	790	553
9	696	568	763	11,100	6,530	8,080	5,090	3,540	793	3,380	650	587
10	688	660	765	14,000	5,660	6,430	7,640	3,450	988	2,710	710	484
11	662	576	944	11,000	4,650	5,690	10,500	3,780	972	1,480	649	462
12	416	612	712	7,220	4,520	4,520	9,060	8,940	1,190	1,460	758	314
13	706	596	1,330	5,450	4,810	4,500	8,010	8,790	998	1,320	590	402
14	720	562	808	4,760	4,370	4,300	6,770	11,700	1,420	1,200	632	457
15	658	600	1,200	4,380	3,830	3,860	6,160	8,610	1,340	1,090	515	427
16	660	651	1,290	3,740	3,690	3,700	5,240	6,520	1,210	1,030	550	420
17	649	581	928	3,640	3,960	3,800	4,600	5,530	1,480	1,010	441	389
18	554	584	952	3,660	3,260	11,400	3,760	5,020	1,690	756	387	346
19	327	606	1,070	2,420	3,390	15,300	4,000	4,260	1,260	848	459	264
20	612	684	912	2,940	3,750	10,500	3,280	3,500	1,060	814	576	438
21	610	682	960	2,250	2,590	8,500	2,820	3,640	1,110	822	546	410
22	644	494	887	2,020	3,050	8,700	2,540	3,370	1,490	894	326	467
23	608	584	1,680	1,420	3,360	10,100	2,620	2,820	860	958	680	490
24	614	747	1,250	1,940	3,770	10,800	2,900	3,520	1,410	484	776	609
25	515	634	2,310	1,740	3,500	8,040	2,390	3,060	1,270	453	590	538
26	334	632	1,740	1,560	3,450	6,460	2,420	2,320	1,160	714	558	315
27	556	494	2,000	1,920	3,200	5,560	2,540	2,560	56	680	518	416
28	628	713	926	1,140	3,400	12,500	2,660	2,030	1,210	754	414	612
29	600	546	1,010	2,220	2,610	26,000	2,580	2,520	1,790	676	268	593
30	585	606	1,170	2,430	------	15,700	2,450	1,740	2,380	680	346	591
31	1,220	------	1,060	5,470	------	12,200	------	1,640	------	520	464	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,220	327	667	0.182	0.21
November	747	494	616	.168	.19
December	2,310	376	1,040	.283	.33
January	14,000	1,140	4,090	1.11	1.28
February	28,800	2,590	6,160	1.68	1.81
March	26,000	2,250	8,470	2.31	2.66
April	12,800	2,390	5,620	1.53	1.71
May	20,100	1,640	5,660	1.54	1.78
June	2,380	561	1,260	.343	.38
July	6,640	453	1,510	.411	.47
August	1,840	268	631	.172	.20
September	678	264	478	.130	.14
The year	28,800	264	3,010	.820	11.16

JAMES RIVER AT SCOTTSVILLE, VA.

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

DRAINAGE AREA.—4,570 square miles.

RECORDS AVAILABLE.—February 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 31,400 second-feet Mar. 30 (gage height, 13.14 feet); minimum, 306 second-feet Sept. 21 (gage height, 1.47 feet).

1925–32: Maximum discharge, 75,600 second-feet Aug. 17, 1928 (gage height, 20.92 feet); minimum, 302 second-feet (revised) Oct. 1, 1930 (gage height, 1.46 feet).

REMARKS.—Records excellent except those estimated for Jan. 4–7, Feb. 5–7, Mar. 7, Apr. 30 to May 2, Aug. 30 to Sept. 4, which are good. Flow regulated by power plants above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,340	1,410	813	1,880	7,960	3,300	15,600	3,400	2,230	3,350	628	488
2	1,250	872	1,060	4,220	7,500	2,910	14,800	8,800	2,020	2,120	466	770
3	1,000	748	858	5,240	7,060	3,020	13,500	22,100	1,700	1,900	1,010	940
4	924	910	827	5,500	6,340	2,820	10,600	11,800	2,070	2,040	1,500	850
5	912	777	1,120	4,900	15,000	2,990	8,700	8,260	1,640	1,360	2,140	818
6	1,020	784	1,180	4,300	25,200	7,320	7,520	6,940	1,980	2,080	1,300	875
7	1,160	774	794	5,800	17,100	22,500	6,870	6,200	1,650	3,940	943	630
8	720	780	570	7,320	11,000	16,900	5,980	5,020	1,890	6,630	984	572
9	765	670	803	10,700	8,300	11,000	5,660	4,320	1,440	5,220	802	558
10	922	692	1,330	17,500	7,120	8,320	6,540	5,660	1,260	3,300	888	630
11	876	839	1,350	14,500	6,380	7,400	9,140	5,530	1,440	2,650	628	512
12	826	730	1,310	10,000	5,080	6,310	10,800	11,000	1,650	2,030	652	492
13	535	764	1,210	7,550	4,820	5,740	9,480	9,520	1,880	1,480	833	438
14	800	750	1,800	6,800	5,380	4,930	8,260	12,500	1,960	1,620	652	380
15	926	694	1,240	5,180	4,260	5,480	7,270	11,600	2,020	1,610	710	493
16	858	746	1,500	5,020	4,690	4,530	6,640	8,580	2,070	1,360	566	456
17	834	821	1,590	4,770	3,800	4,240	5,910	7,180	2,100	1,360	617	456
18	769	758	1,190	3,550	4,060	4,090	4,850	6,410	2,250	1,300	506	412
19	672	749	1,330	3,940	4,120	11,900	4,900	5,380	2,060	1,000	464	398
20	483	800	1,390	3,560	4,430	13,600	4,350	4,700	1,860	1,020	556	356
21	693	896	1,250	3,280	4,140	10,000	4,280	3,930	1,640	1,030	663	382
22	748	898	1,400	2,860	3,360	10,200	3,820	4,100	1,790	1,120	618	450
23	786	659	2,060	2,680	4,180	11,600	3,550	3,030	1,810	1,240	423	504
24	764	720	2,200	2,020	4,020	12,400	3,740	4,200	1,260	1,180	681	634
25	750	895	2,100	2,370	4,280	10,500	3,030	3,700	1,800	656	834	755
26	635	772	2,310	2,560	3,930	8,300	3,540	2,860	1,660	538	621	608
27	487	750	1,960	2,470	3,750	7,180	3,470	2,970	1,650	910	588	483
28	640	673	2,350	1,960	3,450	11,400	3,300	2,740	1,260	859	548	432
29	817	912	1,270	2,480	3,500	20,600	3,490	2,790	2,200	990	483	704
30	843	784	1,480	2,840	-------	24,900	3,600	2,860	2,280	823	430	682
31	816	-------	1,600	4,980	-------	15,700	--------	2,220	-------	792	370	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,340	483	825	0.181	0.21
November	1,410	659	801	.175	.20
December	2,350	570	1,400	.306	.35
January	17,500	1,880	5,250	1.15	1.33
February	25,200	3,360	6,700	1.47	1.58
March	24,900	2,820	9,420	2.06	2.38
April	15,600	3,030	6,770	1.48	1.65
May	22,100	2,220	6,460	1.41	1.63
June	2,280	1,260	1,820	.398	.44
July	6,630	538	1,860	.407	.47
August	2,140	370	745	.163	.19
September	940	356	572	.125	.14
The year	25,200	356	3,550	.777	10.57

JAMES RIVER AT CARTERSVILLE, VA.

LOCATION.—Water-stage recorder at highway bridge between Pemberton and Cartersville, Cumberland County, 1 mile below Willis River.
DRAINAGE AREA.—6,240 square miles.
RECORDS AVAILABLE.—January 1899 to September 1932.
EXTREMES.—Maximum discharge during year, 54,800 second-feet Mar. 7 (gage height, 17.13 feet); minimum, 320 second-feet Sept. 22 (gage height, 0.11 foot).
1899–1932: Maximum discharge, about 106,000 second-feet Dec. 30, 1901 (gage height, 26.7 feet); minimum, that of Sept. 22, 1932.
REMARKS.—Records excellent. Discharge estimated Dec. 28–30. Flow regulated by power plants above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,320	1,190	1,070	2,360	7,530	3,510	20,300	3,920	2,540	2,490	904	415
2	1,470	1,380	1,120	4,370	9,420	3,550	17,800	4,930	2,410	3,890	780	470
3	1,280	1,040	1,250	6,080	8,180	3,250	16,800	22,400	2,280	2,300	685	948
4	1,110	942	1,110	6,280	7,550	3,440	13,300	15,800	2,040	2,160	1,170	1,010
5	1,050	1,070	1,090	5,520	13,700	3,980	10,800	10,400	2,200	1,930	2,040	1,040
6	1,060	955	1,470	4,760	34,600	9,650	9,420	9,420	1,950	1,960	1,750	950
7	1,280	989	1,260	5,800	26,300	47,400	8,540	8,980	2,060	3,120	1,280	1,000
8	1,120	980	1,050	8,160	14,300	29,400	7,540	6,920	1,960	7,860	978	762
9	858	958	918	15,700	10,600	18,800	7,980	6,020	1,980	7,770	1,050	672
10	932	894	1,310	26,800	8,540	11,800	11,100	5,650	1,540	4,590	966	642
11	1,070	920	1,890	21,400	7,450	9,420	12,200	8,980	1,520	3,540	881	718
12	1,040	1,040	1,790	15,200	6,310	8,330	13,900	23,500	1,690	2,240	732	583
13	960	947	1,560	10,600	5,930	6,820	11,900	22,400	2,220	2,240	730	539
14	705	980	1,690	8,540	5,840	6,540	10,400	17,500	2,120	1,620	886	516
15	994	976	1,910	7,360	5,640	6,200	8,980	16,500	2,690	1,650	736	396
16	1,030	910	1,610	6,620	4,930	5,620	8,320	11,700	2,900	1,660	759	516
17	1,060	971	1,710	5,740	4,980	5,520	7,180	9,650	3,140	1,390	600	495
18	1,020	1,050	1,750	5,710	4,920	5,180	6,510	9,420	2,860	1,400	675	485
19	930	989	1,400	4,520	4,500	8,420	5,790	8,100	2,680	1,320	578	455
20	834	1,010	1,580	4,160	4,750	16,800	5,860	6,610	2,220	1,080	530	425
21	642	1,050	1,540	4,300	4,870	12,200	4,990	5,400	2,100	1,180	630	386
22	843	1,130	1,710	3,680	4,440	11,600	4,730	5,090	2,040	1,140	733	358
23	920	1,110	2,550	3,430	4,550	15,800	4,340	4,880	2,130	1,400	672	526
24	950	924	3,090	3,220	4,450	14,200	4,330	3,940	1,920	1,450	497	589
25	924	973	2,550	2,850	4,670	13,300	4,460	4,740	1,650	1,200	734	835
26	891	1,100	2,720	2,800	4,680	10,400	4,020	4,320	1,840	838	830	980
27	790	1,020	2,440	2,940	4,540	8,760	4,180	3,290	1,780	853	668	812
28	648	1,030	2,800	3,240	3,950	23,000	3,970	4,080	2,050	1,060	628	698
29	814	972	1,600	2,460	4,260	27,600	3,910	3,250	2,100	1,110	564	547
30	1,010	1,170	1,800	4,120	-------	34,200	4,070	3,400	2,680	1,070	500	931
31	1,060	-------	1,850	4,920	-------	22,100	-------	3,030	-------	963	465	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,470	642	988	0.158	0.18
November	1,380	894	1,020	.163	.18
December	3,090	918	1,720	.276	.32
January	26,800	2,360	6,890	1.10	1.27
February	34,600	3,950	8,150	1.31	1.41
March	47,400	3,250	13,100	2.10	2.42
April	20,300	3,910	8,590	1.38	1.54
May	23,500	3,030	8,850	1.42	1.64
June	3,140	1,520	2,180	.349	.39
July	7,860	838	2,210	.354	.41
August	2,040	465	827	.133	.15
September	1,040	358	657	.105	.12
The year	47,400	358	4,600	.737	10.03

WARM SPRING AT WARM SPRINGS, VA.

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

RECORDS AVAILABLE.—June 1928 to September 1932.

EXTREMES.—Maximum mean daily discharge during year, 2.48 second-feet May 4, July 15; minimum, 1.42 second-feet Dec. 25.

1928–32: Maximum mean daily discharge, 5.45 second-feet Nov. 18, 1929 (flow probably increased somewhat by local surface run-off); minimum, 1.35 second-feet Feb. 25, 26, 1931.

REMARKS.—Records excellent except those estimated for Feb. 3, 4, Apr. 16, May 1, June 27, July 5, 6, which are good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.75	1.64	1.58	1.54	1.62	1.64	2.00	2.20	2.12	2.13	2.21	2.03
2	1.78	1.60	1.58	1.53	1.60	1.64	1.99	2.13	2.18	2.15	2.16	1.96
3	1.86	1.91	1.58	1.50	1.60	1.64	1.99	2.12	2.28	2.08	2.16	2.02
4	1.80	1.93	1.56	1.50	1.75	1.68	1.96	2.48	2.15	2.17	2.17	2.08
5	1.74	1.75	1.63	1.48	1.78	1.70	1.99	2.21	2.12	2.20	2.14	2.06
6	1.73	1.96	1.61	1.50	1.75	1.72	1.99	2.09	2.12	2.25	2.16	2.08
7	1.72	1.82	1.62	1.56	1.73	1.70	1.96	2.10	2.14	2.25	2.10	1.98
8	1.74	1.59	1.59	1.56	1.72	1.70	1.98	2.16	2.18	2.38	2.04	2.00
9	1.76	1.61	1.61	1.62	1.73	1.70	2.08	2.12	2.16	2.38	2.06	2.02
10	1.71	1.67	1.60	1.57	1.72	1.68	2.04	2.14	2.10	2.24	2.10	2.04
11	1.72	1.69	1.56	1.56	1.74	1.67	2.00	2.17	2.12	2.15	2.16	2.02
12	1.67	1.65	1.72	1.54	1.79	1.65	2.02	2.23	2.12	2.14	2.15	1.98
13	1.70	1.61	1.83	1.55	1.76	1.65	1.96	2.24	2.12	2.13	2.08	1.97
14	1.76	1.67	1.85	1.55	1.73	1.68	1.91	2.21	2.14	2.32	2.06	2.00
15	1.73	1.63	1.67	1.56	1.66	1.67	1.95	2.40	2.09	2.48	2.06	2.03
16	1.75	1.64	1.52	1.51	1.67	1.67	2.00	2.29	2.08	2.36	2.05	2.02
17	1.75	1.65	1.48	1.52	1.70	2.02	1.99	2.13	2.11	2.17	2.06	2.08
18	1.70	1.59	1.48	1.52	1.71	1.88	1.92	2.18	2.12	2.13	2.06	1.97
19	1.70	1.58	1.49	1.54	1.68	1.82	1.90	2.16	2.10	2.12	2.06	1.93
20	1.60	1.56	1.49	1.55	1.68	1.82	1.94	2.22	2.14	2.13	2.06	1.96
21	1.67	1.58	1.60	1.55	1.69	1.76	1.93	2.14	2.14	2.13	2.05	1.90
22	1.69	1.59	1.58	1.54	1.75	1.94	2.02	2.13	2.13	2.18	2.07	1.94
23	1.69	1.54	1.56	1.60	1.73	1.83	1.97	2.14	2.14	2.13	2.08	1.91
24	1.67	1.54	1.50	1.58	1.71	1.81	2.02	2.19	2.14	2.12	2.10	1.94
25	1.67	1.52	1.42	1.58	1.73	1.81	2.04	2.14	2.18	2.17	2.14	1.93
26	1.64	1.56	1.47	1.60	1.73	1.82	2.06	2.12	2.24	2.13	2.12	1.81
27	1.69	1.55	1.50	1.60	1.69	1.88	2.02	2.15	2.25	2.10	2.15	1.85
28	1.69	1.54	1.50	1.61	1.67	2.15	2.02	2.14	2.25	2.18	2.15	1.80
29	1.69	1.60	1.50	1.64	1.62	1.98	2.03	2.12	2.18	2.12	2.22	1.87
30	1.66	1.59	1.50	1.65	------	1.98	1.97	2.16	2.08	2.13	2.15	1.90
31	1.67	------	1.56	1.62	------	2.02	------	2.12	------	2.21	2.01	------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	1.86	1.60	1.71	May	2.48	2.09	2.18
November	1.96	1.52	1.65	June	2.28	2.08	2.15
December	1.85	1.42	1.57	July	2.48	2.08	2.19
January	1.65	1.48	1.56	August	2.22	2.01	2.11
February	1.79	1.60	1.70	September	2.08	1.80	1.97
March	2.15	1.64	1.78				
April	2.08	1.90	1.99	The year	2.48	1.42	1.88

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 1932.

EXTREMES.—Maximum discharge during year, 3,590 second-feet May 1 (gage height, 7.85 feet); minimum, 8 second-feet Aug. 27, 28, 30 (gage height, 0.88 foot).

1928–32: Maximum discharge, about 4,890 second-feet Nov 18, 1929 (gage height, 9.46 feet); minimum, that of Aug. 27, 28, 30, 1932.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	16	20	199	227	99	660	3,090	45	51	15	9
2	15	16	20	227	172	91	470	1,000	39	43	16	10
3	15	16	18	138	492	83	337	470	36	35	15	16
4	15	15	18	99	1,480	114	256	320	35	33	17	11
5	14	15	16	78	1,000	172	199	242	35	32	17	12
6	15	15	16	86	428	514	186	186	33	33	14	12
7	13	15	16	186	272	514	150	160	33	33	12	10
8	12	16	16	242	213	354	136	132	30	32	11	10
9	12	16	24	514	167	304	688	119	29	27	10	10
10	13	16	26	409	138	227	825	354	26	22	13	10
												10
11	13	15	29	242	123	186	537	470	27	24	17	
12	13	15	35	157	134	162	428	1,360	32	24	17	24
13	12	16	49	121	157	157	337	1,420	35	22	15	18
14	13	15	51	99	147	154	272	635	46	20	12	15
15	13	15	50	86	134	134	213	372	42	20	12	12
16	13	15	46	73	119	117	170	272	42	19	12	11
17	13	15	39	65	199	770	147	213	37	18	13	11
18	13	16	34	59	256	1,180	132	164	33	18	14	10
19	13	15	30	54	227	537	116	136	29	16	14	10
20	14	16	29	49	172	372	104	116	33	15	13	11
21	13	15	27	46	145	287	94	104	32	14	12	13
22	13	15	51	43	199	470	89	164	33	15	11	14
23	13	15	121	42	320	428	81	117	33	16	10	12
24	13	15	83	42	256	304	79	101	29	15	10	12
25	13	15	65	39	199	242	81	89	27	16	10	12
26	14	15	52	36	162	199	84	78	25	15	10	12
27	14	16	44	42	143	172	78	72	25	15	9	15
28	15	18	42	49	134	2,330	72	72	91	14	9	15
29	19	18	38	114	114	880	66	60	125	12	9	14
30	18	20	35	409	-------	492	66	55	79	11	9	13
31	16	-------	33	390	-------	449	-------	47	-------	11	9	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	19	12	13.9	0.084	0.10
November	20	15	15.7	.095	.11
December	121	16	37.8	.228	.26
January	514	36	143	.861	.99
February	1,480	114	273	1.64	1.77
March	2,330	83	403	2.43	2.80
April	825	66	238	1.43	1.60
May	3,090	47	393	2.37	2.73
June	125	25	39.9	.240	.27
July	51	11	22.3	.134	.15
August	17	9	12.5	.075	.09
September	24	9	12.5	.075	.08
The year	3,090	9	134	.807	10.95

POTTS CREEK NEAR COVINGTON, VA.

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

DRAINAGE AREA.—158 square miles.

RECORDS AVAILABLE.—December 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 1,800 second-feet Mar. 28 (gage height, 4.40 feet); minimum, 16 second-feet Aug. 26, 30, Sept. 6, 8 (gage height, 1.34 feet).

1928–32: Maximum discharge, 3,480 second-feet Nov. 18, 1929 (gage height, 6.27 feet); minimum, 13 second-feet Nov. 29, 1930 (gage height, 1.30 feet).

REMARKS.—Records good.

Discharge, in second-feet, 1930–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1930–31												
1	19	31	26	28	35	71	655	121	214	35	55	55
2	19	27	26	28	34	82	620	113	205	36	480	49
3	19	30	26	28	32	71	408	103	158	40	294	54
4	19	32	24	29	30	69	414	93	132	44	110	52
5	19	35	23	142	29	65	480	85	121	47	192	49
6	19	35	49	620	27	60	515	80	118	44	210	43
7	19	35	126	352	29	62	620	620	123	40	110	41
8	19	30	74	136	29	78	728	620	108	35	82	39
9	20	30	47	73	34	132	655	447	96	34	65	36
10	20	30	31	62	35	105	550	364	80	58	58	34
11	20	29	30	44	34	93	447	278	73	108	54	34
12	19	24	27	49	34	91	329	247	69	54	55	32
13	20	29	26	44	36	74	252	224	62	46	49	31
14	20	30	26	38	41	65	205	201	64	41	47	28
15	20	30	23	31	41	85	173	188	80	41	43	28
16	22	29	20	31	41	105	155	169	78	47	38	29
17	22	28	15	34	65	105	132	152	73	35	35	35
18	22	31	15	39	252	98	113	142	62	87	36	31
19	21	29	15	39	224	85	105	121	55	64	34	32
20	21	26	16	38	148	74	98	105	50	52	38	31
21	22	24	16	38	116	73	89	878	44	49	52	32
22	22	26	15	31	98	80	480	690	71	41	142	35
23	22	26	15	32	82	136	728	990	80	43	655	31
24	22	23	16	35	67	273	447	655	58	65	402	39
25	22	23	20	38	65	294	371	515	57	100	205	39
26	28	23	27	36	58	224	294	414	50	64	145	50
27	28	22	43	36	54	181	237	311	46	55	121	65
28	31	22	65	36	50	233	188	228	47	47	93	44
29	32	16	47	38	------	952	155	192	40	44	80	38
30	32	22	32	36	------	550	139	162	36	38	71	35
31	32	------	28	38	------	408	------	136	------	35	62	------

Discharge, in second-feet, of Potts Creek near Covington, Va., 1930–32—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1931–32												
1	31	29	31	247	273	129	690	1,470	76	49	26	19
2	28	27	32	311	228	108	585	802	71	44	28	21
3	28	24	31	196	358	100	447	515	67	40	31	21
4	28	26	30	145	840	118	346	377	64	39	85	19
5	28	24	27	118	952	166	278	306	60	36	65	18
6	27	24	27	118	585	447	242	237	60	39	39	16
7	26	24	24	158	414	408	205	192	69	38	31	18
8	26	23	26	263	335	317	188	169	62	36	28	16
9	27	26	31	620	258	278	728	155	55	35	29	19
10	27	27	39	550	201	210	690	152	50	31	29	17
11	24	27	46	414	185	192	585	201	55	34	27	20
12	24	26	52	294	210	169	515	480	58	38	29	20
13	24	24	55	181	317	162	395	1,030	62	35	32	21
14	24	27	58	162	263	158	323	690	76	31	30	20
15	27	27	60	139	214	136	263	480	71	31	26	20
16	26	27	62	110	188	142	219	352	64	31	23	19
17	24	27	52	103	233	358	185	294	58	29	24	18
18	24	27	44	89	237	765	166	233	54	28	23	19
19	24	27	39	85	196	515	152	188	50	28	26	19
20	27	27	39	76	173	408	132	155	71	24	30	19
21	26	27	39	69	155	335	126	139	62	27	26	21
22	24	27	76	67	247	383	123	340	57	28	23	23
23	26	27	103	67	263	402	108	177	47	30	21	22
24	24	27	100	65	247	323	105	145	44	28	19	20
25	24	27	78	60	188	268	105	123	39	28	18	19
26	27	26	65	60	169	224	108	105	41	27	16	20
27	27	26	57	65	155	205	98	100	39	29	17	24
28	27	28	52	69	145	1,470	87	105	52	28	17	27
29	34	27	47	91	139	878	78	100	71	30	18	24
30	32	31	46	402	------	585	82	89	58	27	16	23
31	30	------	46	447	------	620	------	80	------	22	18	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1930–31					
October	32	19	22.3	0.141	0.16
November	35	16	27.6	.175	.20
December	126	15	31.9	.202	.23
January	620	28	73.5	.465	.54
February	252	27	65.0	.411	.43
March	952	60	164	1.04	1.20
April	728	89	359	2.27	2.53
May	990	80	311	1.97	2.27
June	214	36	85.0	.538	.60
July	108	34	50.6	.320	.37
August	655	34	133	.842	.97
September	65	28	39.0	.247	.28
The year	990	15	114	.722	9.78
1931–32					
October	34	24	26.6	.168	.19
November	31	28	26.4	.167	.19
December	103	24	48.8	.309	.36
January	620	60	188	1.19	1.37
February	952	139	289	1.83	1.97
March	1,470	100	354	2.24	2.58
April	728	78	278	1.76	1.96
May	1,470	80	322	2.04	2.35
June	76	39	58.8	.372	.42
July	49	22	32.3	.204	.24
August	85	16	28.1	.178	.21
September	27	16	20.1	.127	.14
The year	1,470	16	139	.880	11.98

Records for year ending Sept. 30, 1930, supersede those published in Water-Supply Paper 712.

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 1932.
EXTREMES.—Maximum discharge during year, 7,120 second-feet Feb. 5 (gage height, 9.90 feet); minimum, 38 second-feet Sept. 2 (gage height, 1.70 feet).
1907–8, 1925–32: Maximum gage height, 10.0 feet, original datum, June 14, 1907 (discharge not determined); minimum discharge, that of Sept. 2, 1932.
Maximum stage known, 20.8 feet in March 1913 (discharge not determined).
REMARKS.—Records good except those prior to Mar. 1, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	e 68	98	348	e 850	252	1,720	3,290	173	200	92	40
2	88	e 68	109	e 700	e 650	234	1,400	3,070	162	170	109	45
3	81	e 65	119	614	792	224	1,100	1,480	153	145	96	114
4	77	e 65	e 100	e 450	2,660	289	890	1,030	134	137	112	105
5	72	e 65	e 85	e 350	7,000	348	700	792	129	671	96	112
6	e 80	e 62	e 75	e 320	5,560	482	642	642	132	890	86	72
7	e 85	e 60	e 70	730	1,900	960	586	532	124	1,240	79	60
8	e 80	e 60	e 70	1,240	960	1,030	507	458	119	700	72	56
9	e 80	e 60	e 80	1,560	e 700	825	e 1,200	434	112	507	69	53
10	e 80	e 60	e 100	1,560	e 600	671	e 1,500	586	107	348	70	53
11	e 78	e 60	e 130	1,170	e 550	532	e 1,000	1,100	107	270	70	54
12	77	e 60	e 160	700	e 500	507	890	1,480	121	224	75	50
13	74	e 60	197	586	e 520	507	792	1,720	132	191	72	58
14	68	e 60	210	458	e 450	482	700	1,240	142	167	70	56
15	e 70	e 60	220	434	e 400	412	586	1,030	142	156	66	54
16	e 70	e 60	e 210	412	e 370	412	482	730	159	139	60	52
17	e 70	e 60	e 170	390	e 440	586	412	614	162	132	59	49
18	e 70	e 60	e 140	328	e 500	2,860	369	532	164	132	56	45
19	e 70	e 60	e 130	289	e 440	1,720	328	458	170	137	83	42
20	e 68	e 60	e 120	e 240	e 400	1,560	289	390	197	114	86	45
21	e 65	e 60	e 110	e 230	e 360	1,240	289	328	207	107	74	55
22	e 65	e 60	e 170	e 220	e 380	1,560	270	328	182	98	62	59
23	e 65	e 60	e 400	e 210	e 460	1,720	270	348	162	101	59	59
24	e 65	e 60	e 350	e 200	e 400	1,170	252	328	132	98	56	64
25	e 65	e 60	e 310	e 190	348	890	270	289	103	92	55	62
26	e 65	60	270	e 180	308	730	270	270	105	86	53	58
27	e 68	62	e 220	e 200	289	700	308	234	116	83	50	58
28	e 70	68	e 200	270	289	4,840	328	252	173	79	48	64
29	92	74	e 180	e 400	276	3,070	289	224	482	90	46	60
30	e 80	86	e 160	e 1,000	------	1,720	328	197	289	94	44	56
31	e 70	------	e 150	e 1,400	------	1,560	------	182	------	81	42	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	96	65	74.3	0.163	0.19
November	86	60	62.8	.138	.15
December	400	70	165	.362	.42
January	1,560	180	561	1.23	1.42
February	7,000	270	1,010	2.21	2.38
March	4,840	224	1,100	2.41	2.78
April	1,720	252	632	1.39	1.55
May	3,290	182	793	1.74	2.01
June	482	103	160	.351	.39
July	1,240	79	248	.544	.63
August	112	42	69.9	.153	.18
September	114	40	60.3	.132	.15
The year	7,000	40	410	.899	12.25

e Estimated.

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 1932.
EXTREMES.—Maximum discharge during year, 3,380 second-feet May 1 (gage height, 7.90 feet); minimum, 30 second-feet Aug. 30, 31, Sept. 1, 3, 11, 12, 19, 20.

1925–32: Maximum discharge, 16,900 second-feet Aug. 17, 1928 (gage height, 15.60 feet); minimum, 29 second-feet Oct. 1, 5, 1930 (gage height, 3.42 feet).
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	53	59	655	790	288	1,550	1,550	154	88	50	30
2	49	51	61	940	625	253	1,650	2,200	142	81	54	31
3	48	49	59	514	902	238	902	1,100	122	70	49	30
4	46	49	56	372	2,080	268	688	755	112	64	88	32
5	44	45	53	288	2,200	417	595	595	105	63	120	33
6	43	44	51	268	1,270	790	514	514	99	64	64	33
7	43	45	49	308	865	1,750	440	440	94	67	49	34
8	42	46	49	568	688	980	417	372	92	64	43	33
9	42	46	56	1,970	568	790	1,100	350	84	61	40	32
10	40	46	74	1,750	488	625	1,970	329	77	56	37	31
11	40	48	105	980	440	540	1,360	417	74	53	36	30
12	40	48	110	655	488	488	1,180	1,020	82	51	36	30
13	39	48	110	514	720	464	940	1,750	97	51	38	32
14	40	49	125	440	595	440	755	1,270	136	52	40	36
15	44	49	118	372	514	417	595	902	208	50	37	39
16	44	46	112	329	464	372	514	655	154	49	35	36
17	43	46	101	288	440	440	440	540	157	51	34	33
18	42	46	88	260	464	980	417	464	122	46	37	32
19	40	46	82	241	440	902	372	417	110	42	40	30
20	46	50	76	216	372	720	329	350	112	41	37	30
21	43	49	70	201	350	625	308	329	148	40	37	36
22	48	46	118	187	394	865	288	308	163	40	36	40
23	46	49	394	174	488	1,550	268	350	133	40	34	39
24	42	49	288	167	464	902	260	288	112	39	33	37
25	42	46	208	157	440	688	257	253	97	40	32	37
26	41	44	154	148	394	568	253	226	84	40	32	34
27	40	46	125	148	372	540	238	208	84	42	32	37
28	41	50	112	160	350	1,550	216	205	97	49	31	39
29	51	52	105	230	308	1,970	194	212	115	49	32	39
30	61	56	103	980	------	1,180	194	180	108	42	30	39
31	67	------	105	1,450	------	1,020	------	167	------	37	30	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	67	39	44.8	0.135	0.16
November	56	44	47.9	.145	.16
December	394	49	109	.329	.38
January	1,970	148	514	1.55	1.79
February	2,200	308	654	1.98	2.14
March	1,970	238	762	2.30	2.65
April	1,970	194	640	1.93	2.15
May	2,200	167	604	1.82	2.10
June	208	74	116	.350	.39
July	88	37	52.3	.158	.18
August	120	30	42.7	.129	.15
September	40	30	34.1	.103	.11
The year	2,200	30	301	.909	12.36

MEADOW CREEK AT NEWCASTLE, VA.

LOCATION.—Water-stage recorder 500 feet above Newcastle-Salem highway bridge and just outside town limits of Newcastle, Craig County.
DRAINAGE AREA.—13,8 square miles.
RECORDS AVAILABLE.—September 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 75 second-feet Mar. 28 (gage height, 2.38 feet); minimum, 2.1 second-feet Sept. 26 (gage height, 1.03 feet).
1929–32: Maximum discharge, 242 second-feet Oct. 2, 1929 (gage height, 3.64 feet); minimum, 0.8 second-foot Sept. 4, 1930 (gage height, 0.91 foot).
REMARKS.—Records good except those estimated May 19, 20, 22–27, May 29 to June 3, June 5–10, 12–15, 17, 19–24, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	7.6	5.5	34	33	14	47	57	11	6.4	4.5	3.2
2	6.0	7.6	4.1	38	32	14	43	43	10	5.9	5.4	3.4
3	5.8	7.3	3.6	30	46	13	36	33	10	5.9	7.3	3.4
4	5.5	7.6	4.1	26	61	16	30	27	9.7	5.9	12	3.6
5	5.2	7.6	3.9	24	54	16	26	24	9	5.9	6.4	4.9
6	5.2	7.3	3.9	24	43	21	24	21	9	6.2	5.4	5.4
7	5.2	8.0	3.9	28	35	24	21	19	9	6.2	4.8	3.8
8	5.2	8.0	4.1	43	31	24	20	18	8	7.4	4.5	3.6
9	5.5	7.6	8.0	63	24	22	51	17	8	5.7	4.1	3.4
10	5.2	7.6	12	54	22	20	54	16	8	5.7	4.1	3.2
11	5.2	7.3	10	40	21	18	52	19	8.9	6.6	4.3	3.4
12	5.5	6.3	10	33	26	18	45	23	10	5.4	5.7	3.8
13	5.0	6.0	11	29	24	19	38	30	12	5.0	4.1	3.8
14	5.2	6.3	12	24	22	18	33	28	16	6.4	4.1	3.2
15	6.6	5.5	10	23	21	17	27	26	14	7.6	3.6	3.0
16	6.6	5.5	9.3	22	20	17	24	22	12	6.5	3.4	3.0
17	7.3	5.2	8.6	20	21	36	22	20	10	6.9	3.4	3.0
18	6.6	5.2	7.6	19	20	47	21	19	8.4	5.7	4.3	3.0
19	5.8	5.2	6.6	18	19	40	20	18	9	5.2	4.8	3.0
20	4.7	5.5	6.0	17	18	38	18	16	12	5.0	3.8	3.0
21	4.4	5.5	5.8	16	18	36	17	15	11	5.0	3.4	4.8
22	4.4	5.0	21	15	20	61	16	24	10	5.0	3.2	3.2
23	4.1	4.7	17	14	19	52	16	17	9	5.0	3.2	3.0
24	4.4	4.4	12	13	18	40	15	15	8	4.8	3.2	2.8
25	5.2	4.1	10	12	18	33	15	14	7.2	4.3	3.2	2.8
26	6.0	3.6	8.9	12	18	30	15	14	7.4	4.1	3.2	2.8
27	5.8	4.4	7.6	13	17	27	13	14	7.6	7.8	3.2	4.8
28	6.0	5.2	7.0	12	16	66	13	13	9.7	6.4	3.2	4.5
29	9.3	4.7	6.0	26	15	54	12	13	7.9	4.5	3.2	3.4
30	8.0	6.0	5.5	51	-------	43	12	12	6.6	4.3	3.2	3.2
31	7.6	-------	6.0	43	-------	46	-------	12	-------	4.1	3.2	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9.3	4.1	5.76	0.417	0.48
November	8.0	3.6	6.06	.439	.49
December	21	3.6	8.10	.587	.68
January	63	12	27.0	1.96	2.26
February	61	15	25.9	1.88	2.03
March	66	13	30.3	2.20	2.54
April	54	12	26.5	1.92	2.14
May	57	12	21.3	1.54	1.78
June	16	6.6	9.61	.696	.78
July	7.8	4.1	5.70	.413	.48
August	12	3.2	4.37	.317	.37
September	5.4	2.8	3.51	.254	.28
The year	66	2.8	14.5	1.05	14.31

JOHNS CREEK AT NEWCASTLE, VA.

LOCATION.—Chain gage at highway bridge 500 feet east of town limits of Newcastle, Craig County, and a quarter of a mile above mouth.
DRAINAGE AREA.—106 square miles.
RECORDS AVAILABLE.—April 1926 to September 1932.
EXTREMES.—Maximum discharge during year, 1,560 second-feet Mar. 28 (gage height, 7.40 feet); minimum, 9 second-feet Aug. 22, Sept. 11, 19, 24, 25, 26. 1926–32: Maximum discharge, 3,500 second-feet Aug. 16, 1928 (gage height, 9.10 feet); minimum, 7 second-feet Aug. 11, Sept. 3, 6, 7, 1930 (gage height, 2.26 feet).
REMARKS.—Records good. Discharge estimated Feb. 9, Mar. 7.

Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	15	22	420	256	103	490	1,230	51	36	13	10
2	13	15	21	238	221	103	365	490	43	33	15	10
3	13	14	18	157	455	97	295	317	40	26	26	14
4	15	15	17	116	740	143	238	238	36	25	32	17
5	15	14	17	103	525	221	204	204	33	25	31	13
6	13	13	16	103	365	275	188	172	34	27	23	13
7	12	12	15	136	275	600	172	136	30	31	17	12
8	12	13	15	275	238	275	143	122	30	29	20	11
9	12	13	19	565	204	238	490	116	20	25	17	11
10	12	15	39	390	204	212	420	143	25	21	17	12
11	11	15	45	256	164	172	340	238	28	21	15	9
12	11	15	40	150	295	150	317	317	30	21	15	13
13	11	15	44	172	275	150	256	525	47	18	13	15
14	12	13	45	150	238	143	221	365	110	17	12	14
15	12	15	42	129	221	116	172	275	86	16	10	13
16	15	14	39	116	180	116	157	212	65	14	10	11
17	15	15	32	97	204	212	143	172	42	17	10	10
18	12	15	27	129	180	340	136	157	37	21	13	10
19	12	15	27	91	157	256	129	136	40	15	13	9
20	12	15	24	75	136	212	116	122	80	13	13	10
21	12	15	23	70	129	188	103	103	75	14	12	12
22	12	15	116	70	180	490	91	196	60	17	10	10
23	12	15	129	65	204	340	86	129	56	15	10	10
24	12	13	91	58	157	275	80	97	45	13	11	10
25	12	14	60	56	172	238	91	91	33	10	10	9
26	12	14	49	48	143	188	97	75	31	12	10	10
27	12	15	40	60	129	180	91	70	37	15	10	12
28	12	18	43	60	122	1,390	80	80	48	20	10	15
29	19	18	42	188	110	605	60	70	56	17	10	15
30	17	19	43	565	------	390	65	60	37	16	10	13
31	11	------	36	365	------	455	------	56	------	11	10	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	19	11	12.8	0.121	0.14
November	19	12	14.7	.139	.16
December	129	15	39.9	.376	.43
January	565	48	177	1.67	1.92
February	740	110	237	2.24	2.42
March	1,390	97	286	2.70	3.11
April	490	60	195	1.84	2.05
May	1,230	56	217	2.05	2.36
June	110	25	46.4	.438	.49
July	36	10	19.7	.186	.21
August	32	10	14.5	.137	.16
September	17	9	11.8	.111	.12
The year	1,390	9	106	1.00	13.57

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 1932.
EXTREMES.—Maximum discharge during year, 1,160 second-feet Mar. 6 (gage height, 8.94 feet); minimum, 7 second-feet Aug. 30 (gage height, 1.80 feet).
1928–32: Maximum discharge, about 2,100 second-feet Oct. 2, 1929 (gage height, 12.60 feet); minimum discharge, 3 second-feet Aug. 13, Sept. 2?, 29, 1930; minimum gage height, that of Aug. 30, 1932.
REMARKS.—Records fair. Discharge estimated for Jan. 7, Mar. 7–9, July 14–16.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	18	14	722	205	59	205	86	55	25	14	10
2	22	18	14	205	192	54	231	123	47	21	18	9
3	19	18	14	160	231	53	179	205	43	20	25	8
4	17	18	16	92	472	98	104	134	39	23	23	10
5	18	18	16	67	328	80	134	98	36	23	22	11
6	16	19	14	10[illegible]	244	1,160	116	98	32	26	18	10
7	18	14	14	150	231	300	110	92	28	43	14	10
8	20	22	12	388	153	230	98	86	28	38	12	10
9	25	16	14	388	128	180	508	80	34	34	13	8
10	19	16	34	314	110	153	372	116	31	28	12	10
11	18	16	30	328	104	166	314	205	34	21	12	8
12	18	20	36	153	166	179	286	342	94	18	14	8
13	17	16	32	146	128	122	231	267	58	16	12	10
14	18	14	72	110	160	122	192	164	61	16	12	10
15	34	16	44	104	153	110	166	140	58	16	12	8
16	18	17	26	86	128	110	153	134	78	31	12	10
17	18	16	25	74	122	122	146	122	88	25	12	8
18	18	16	25	66	98	286	128	128	43	23	1[illegible]	10
19	16	16	18	57	98	218	110	110	28	16	2[illegible]	8
20	16	16	18	53	80	205	218	100	36	13	1[illegible]	10
21	18	8	23	49	74	179	98	88	69	10	12	8
22	16	15	140	49	110	472	92	83	54	12	12	14
23	14	10	110	49	86	272	86	78	42	16	1[illegible]	17
24	16	32	88	44	80	205	86	67	34	15	1[illegible]	14
25	16	16	28	37	80	179	67	67	23	12	1[illegible]	14
26	14	12	17	33	74	153	69	63	22	14	[illegible]	14
27	18	12	18	37	74	153	57	88	30	12	1[illegible]	12
28	78	10	21	33	74	508	61	100	134	12	1[illegible]	12
29	60	14	25	231	74	300	51	100	38	12	[illegible]	12
30	38	17	24	205	------	231	47	88	26	12	[illegible]	10
31	22	------	27	192	------	286	------	78	------	12	[illegible]	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	78	14	22.5	0.216	0.25
November	32	8	16.2	.156	.17
December	140	12	32.5	.312	.36
January	722	33	152	1.46	1.68
February	472	74	147	1.41	1.52
March	1,160	53	224	2.15	2.48
April	508	47	158	1.52	1.70
May	342	63	124	1.19	1.37
June	134	22	47.4	.456	.51
July	43	10	19.8	.190	.22
August	25	8	13.4	.129	.15
September	17	8	10.4	.100	.11
The year	1,160	8	80.5	.774	10.52

NORTH RIVER AT GOSHEN, VA.

LOCATION.—Chain gage at highway bridge at Goshen, Rockbridge County, 500 feet below confluence of Mill Creek and Calfpasture River.
DRAINAGE AREA.—190 square miles.
RECORDS AVAILABLE.—March 1925 to September 1932.
EXTREMES.—Maximum discharge during year, 4,200 second-feet Feb. 4 (gage height, 7.10 feet); minimum, 8 second-feet numerous days in September.
1925–32: Maximum discharge, 7,310 second-feet Nov. 16, 1926 (gage height, 9.70 feet); minimum, 8 second-feet July 22, 1926, and numerous days in September and October 1930 and September 1932.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	16	14	125	280	78	730	1,380	54	41	19	8
2	21	16	14	179	236	78	640	1,460	50	38	28	10
3	19	15	14	125	226	73	472	670	42	34	30	11
4	19	15	15	106	2,090	88	365	390	41	34	25	9
5	17	15	16	83	2,290	103	285	295	40	315	23	9
6	17	15	17	91	990	365	265	236	36	528	21	8
7	16	14	15	270	528	820	231	195	34	390	19	8
8	15	17	14	390	335	390	187	162	30	208	16	8
9	15	17	21	730	236	290	231	143	29	140	15	8
10	16	16	30	610	191	222	300	174	28	97	13	9
11	17	15	29	325	166	200	390	582	27	73	15	9
12	15	15	29	226	154	187	390	640	32	61	16	8
13	15	15	32	191	140	179	325	730	35	50	14	8
14	17	15	32	170	122	174	250	555	35	41	12	8
15	16	17	29	166	109	162	222	390	32	38	12	8
16	16	17	28	150	100	154	191	275	34	38	11	8
17	16	16	27	136	109	310	162	226	42	109	11	8
18	15	16	24	118	103	1,540	143	187	68	63	13	8
19	15	15	22	100	94	920	129	150	73	44	22	8
20	15	16	22	86	91	610	115	132	59	35	15	8
21	14	17	25	80	88	472	106	115	54	32	13	8
22	14	17	50	73	100	885	97	445	48	29	11	8
23	15	16	42	73	100	920	88	222	41	29	11	8
24	15	15	40	70	94	555	83	158	34	27	11	8
25	15	15	38	63	88	365	100	125	29	24	9	8
26	15	15	38	59	88	275	166	106	28	22	9	8
27	15	14	35	76	88	255	166	94	29	22	9	8
28	14	16	35	86	94	3,600	147	91	83	21	9	8
29	19	15	32	109	86	1,540	129	76	70	21	9	8
30	18	15	32	320	-------	850	122	66	48	22	9	8
31	16	-------	32	445	-------	700	-------	57	-------	19	9	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	22	14	16.3	0.086	0.10
November	17	14	15.6	.082	.09
December	50	14	27.2	.143	.16
January	730	59	188	.989	1.14
February	2,290	86	325	1.71	1.84
March	3,600	73	560	2.95	3.40
April	730	83	241	1.27	1.42
May	1,460	57	340	1.79	2.06
June	83	27	42.8	.225	.25
July	528	19	85.3	.449	.52
August	30	9	14.8	.078	.09
September	11	8	8.30	.044	.05
The year	3,600	8	155	.816	11.12

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 1932.

EXTREMES.—Maximum discharge during year, 5,880 second-feet Feb. 4 (gage height, 8.20 feet); minimum, 13 second-feet Sept. 20 (gage height, 0.87 foot). 1928–32: Maximum discharge, 6,180 second-feet Nov. 18, 1929 (gage height, 8.58 feet); minimum, 11 second-feet (revised) Nov. 28, 1930 (gage height, 0.76 foot).

REMARKS.—Records excellent. Discharge estimated for Feb. 6–12.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	25	42	285	471	153	1,100	1,820	88	63	2[illegible]	15
2	32	25	37	316	385	147	927	2,020	80	59	34	16
3	30	24	33	229	403	139	758	1,080	72	52	4[illegible]	16
4	29	24	30	173	2,910	158	590	690	66	46	42	22
5	28	24	30	144	3,400	194	476	528	64	230	33	21
6	28	23	29	200	1,450	1,090	471	441	64	547	2[illegible]	17
7	27	24	28	554	860	1,500	394	354	57	536	27	16
8	25	24	26	790	610	796	349	300	50	289	2[illegible]	15
9	25	25	32	1,290	450	607	471	271	46	194	20	14
10	26	25	57	1,060	360	471	660	309	43	144	2[illegible]	15
11	25	25	59	641	320	398	790	809	43.	108	2[illegible]	15
12	24	25	54	436	300	380	783	894	54	84	2[illegible]	16
13	24	25	55	362	264	376	654	995	59	74	22	15
14	23	25	55	316	220	358	539	802	84	61	2[illegible]	16
15	24	25	55	296	200	312	446	642	66	61	19	15
16	24	25	49	260	188	292	376	497	59	54	17	14
17	24	24	46	233	216	814	324	389	68	105	17	14
18	22	25	44	210	210	2,210	282	332	103	92	2[illegible]	14
19	22	26	42	179	191	1,330	253	267	106	64	3[illegible]	15
20	22	26	42	158	179	960	229	233	86	52	3[illegible]	14
21	22	28	40	147	173	790	210	210	74	46	2[illegible]	15
22	22	28	55	136	194	1,150	197	553	70	42	2[illegible]	17
23	22	28	103	126	207	1,170	176	336	57	37	18	17
24	22	26	84	126	188	861	167	246	49	40	17	16
25	22	26	74	113	182	648	185	200	43	36	17	17
26	19	25	64	103	176	518	253	170	40	33	16	17
27	21	26	61	128	176	486	253	150	42	30	16	18
28	21	28	59	131	182	3,250	220	153	116	34	16	20
29	33	30	59	170	170	2,210	197	126	142	43	15	19
30	36	33	55	532	-------	1,290	185	108	86	32	15	18
31	28	-------	52	678	-------	1,100	-------	97	-------	28	15	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	36	19	25.3	0.77	0.09
November	33	23	25.7	.078	.09
December	103	26	50.0	.152	.18
January	1,290	103	339	1.03	1.19
February	3,400	170	525	1.60	1.73
March	3,250	139	844	2.57	2.96
April	1,100	167	430	1.31	1.46
May	2,020	97	515	1.57	1.81
June	142	40	69.2	.210	.23
July	547	28	107	.325	.37
August	44	15	23.1	.070	.08
September	22	14	16.3	.050	.06
The year	3,400	14	247	.751	10.25

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 1932.
EXTREMES.—Maximum discharge during year, 8,650 second-feet Feb. 5 (gage height, 11.05 feet); minimum, 34 second-feet Sept. 18 (gage height, 1.87 feet). 1925–32: Maximum discharge, 10,000 second-feet Apr. 16, 1929 (gage height, 11.95 feet); minimum, 34 second-feet Sept. 6, 1930, and Sept. 18, 1932.
REMARKS.—Records good except those estimated for Nov. 20 21, Aug. 18 to Sept. 4, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	64	73	511	598	227	1,510	1,760	143	117	77	37
2	73	61	71	518	483	213	1,240	2,410	128	108	115	38
3	73	58	61	355	497	207	1,010	1,250	119	98	98	40
4	70	56	60	269	2,980	218	780	862	115	90	111	60
5	71	58	58	224	5,020	263	656	680	115	231	88	66
6	64	60	60	328	2,020	1,870	656	589	106	552	75	53
7	66	52	63	888	1,160	2,530	556	488	108	586	58	47
8	64	56	58	1,420	835	1,210	501	414	108	344	55	45
9	63	56	70	2,020	603	862	622	382	111	245	52	42
10	63	58	100	1,700	497	680	808	402	104	187	45	41
11	63	58	111	882	431	570	950	878	92	148	42	41
12	66	58	102	606	410	529	980	980	102	122	46	38
13	63	58	100	506	374	524	835	1,140	115	106	58	38
14	66	58	100	440	326	501	705	950	148	94	55	38
15	64	56	100	402	295	442	594	780	133	96	50	37
16	64	58	94	362	276	419	506	632	134	86	49	37
17	63	58	86	326	292	848	457	515	162	122	49	37
18	58	53	82	302	302	2,720	406	457	143	136	55	36
19	58	56	82	269	276	1,760	366	378	166	98	80	35
20	58	55	80	242	263	1,260	329	329	150	82	80	36
21	56	55	79	224	251	1,010	305	298	124	77	60	36
22	49	58	102	204	263	1,330	289	545	115	75	55	37
23	44	53	158	198	285	1,540	269	466	108	70	50	38
24	45	46	140	196	273	1,100	257	340	98	68	46	40
25	41	44	124	179	260	862	263	285	90	70	42	38
26	44	42	111	163	257	705	309	251	84	66	40	38
27	44	42	104	176	248	632	333	233	84	63	38	44
28	45	46	104	190	254	3,940	302	236	166	66	38	45
29	104	46	104	206	248	3,110	276	198	213	71	38	45
30	92	56	102	530	------	1,810	260	168	150	70	37	44
31	75	------	101	795	------	1,470	------	155	------	60	37	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	104	41	62.8	0.129	0.15
November	64	42	54.5	.112	.12
December	158	58	91.6	.188	.22
January	2,020	163	504	1.03	1.19
February	5,020	248	699	1.44	1.55
March	3,940	207	1,140	2.34	2.70
April	1,510	257	578	1.19	1.33
May	2,410	155	627	1.29	1.49
June	213	84	124	.255	.28
July	586	60	142	.292	.34
August	115	37	58.7	.121	.14
September	66	35	41.6	.085	.09
The year	5,020	35	343	.704	9.60

KERRS CREEK NEAR LEXINGTON, VA.

LOCATION.—Chain gage at highway bridge 3½ miles northwest of Lexington Rockbridge County, and a quarter of a mile above mouth.
DRAINAGE AREA.—34 square miles.
RECORDS AVAILABLE.—January 1927 to September 1932 (fragmentary prior to August 1930).
EXTREMES.—Maximum discharge during year, 1,280 second-feet Mar. 6 (gage height, 7.90 feet); minimum, 4 second-feet numerous days in August and September.
1927–32: Maximum discharge recorded, 1,560 second-feet Aug. 16, 1928 (gage height, 8.50 feet); minimum, that of August and September 1932.
REMARKS.—Records good. Discharge estimated June 15.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	10	12	118	29	19	82	156	14	10	6	5
2	10	9	9	36	35	19	68	53	13	10	15	4
3	9	8	8	26	49	18	60	38	13	10	10	6
4	9	9	8	21	403	23	46	32	11	11	8	14
5	8	8	7	17	118	24	42	30	13	10	7	8
6	9	8	7	38	80	815	36	29	12	10	6	6
7	8	9	8	58	53	127	32	26	11	10	5	5
8	8	8	8	146	46	68	30	23	9	10	5	5
9	8	8	13	146	36	58	70	22	10	10	5	4
10	8	8	14	93	34	52	70	26	10	10	5	4
11	8	10	12	53	32	43	82	28	12	9	5	5
12	8	9	12	43	32	44	68	30	15	8	6	5
13	8	8	12	38	29	38	53	30	14	7	5	5
14	9	8	12	33	26	38	46	26	29	10	5	5
15	9	8	12	30	23	34	40	26	16	12	5	4
16	8	10	10	26	23	34	36	24	24	10	5	5
17	8	8	10	25	29	73	32	23	20	10	6	5
18	8	8	9	22	26	115	30	23	11	8	5	4
19	8	8	8	20	24	78	29	21	12	8	7	4
20	8	8	9	20	23	60	26	19	12	6	6	5
21	8	8	8	21	23	52	26	19	11	7	6	8
22	8	9	21	18	29	101	24	19	10	7	5	6
23	8	8	20	17	27	64	23	16	10	8	5	5
24	8	8	16	16	26	46	22	17	10	6	5	5
25	8	8	12	16	23	43	24	16	8	6	5	6
26	8	9	12	16	23	36	23	14	10	6	5	5
27	8	10	11	16	22	34	21	16	10	6	5	7
28	8	10	11	16	24	200	20	15	20	6	5	6
29	22	10	10	24	21	93	19	14	12	6	5	6
30	12	12	10	48	------	64	19	14	10	6	4	5
31	10	------	10	34	------	78	------	14	------	6	5	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	22	8	8.9	0.262	0.30
November	12	8	8.7	.256	.29
December	21	7	11.0	.324	.37
January	146	16	40.4	1.19	1.37
February	403	21	47.2	1.39	1.50
March	815	18	83.6	2.46	2.84
April	82	19	40.0	1.18	1.32
May	156	14	27.7	.815	.94
June	29	8	13.1	.385	.43
July	12	6	8.4	.247	.28
August	15	4	5.9	.174	.20
September	14	4	5.6	.165	.18
The year	815	4	25.0	.735	10.02

TYE RIVER AT ROSELAND, VA.

LOCATION.—Chain gage at highway bridge three quarters of a mile southwest of Roseland, Nelson County, and three quarters of a mile above Hat Creek.
DRAINAGE AREA.—68 square miles.
RECORDS AVAILABLE.—January 1927 to September 1932.
EXTREMES.—Maximum discharge during year, 722 second-feet Mar. 6 (gage height, 5.50 feet); minimum, 3 second-feet numerous days in August and September.

1927–32: Maximum discharge, 2,240 second-feet Aug. 16, 1928 (gage height, 8.65 feet); minimum, 2 second-feet Sept. 30, Oct. 1, 1930.

REMARKS.—Records good. Discharge estimated for Dec. 27, 29, Jan. 2–4, 6, Mar. 13.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	21	36	481	112	64	400	182	47	25	6	3
2	31	21	22	350	123	64	342	121	44	28	14	3
3	27	21	22	280	146	57	306	106	44	22	17	3
4	27	21	25	240	361	81	272	100	38	24	13	6
5	25	21	24	225	361	81	240	106	42	33	10	8
6	25	23	21	300	289	380	225	110	42	30	8	6
7	25	21	21	380	240	256	196	90	38	26	7	4
8	23	23	19	460	210	196	182	90	38	21	6	4
9	31	21	43	566	172	161	240	106	38	21	5	4
10	27	21	68	440	159	156	196	121	35	19	5	4
11	25	21	48	324	142	144	210	156	40	17	5	4
12	25	21	41	272	166	128	182	240	57	14	5	4
13	24	21	47	324	128	115	182	240	50	13	5	3
14	23	23	41	289	112	106	169	210	50	15	5	3
15	23	23	40	256	106	110	156	177	38	16	4	3
16	23	21	34	225	102	100	151	151	50	17	4	4
17	22	21	32	196	102	210	132	137	54	16	4	3
18	21	21	31	166	98	306	121	128	47	14	5	3
19	20	24	30	142	92	240	114	110	44	12	5	3
20	20	35	28	128	83	240	110	100	38	10	5	3
21	20	30	28	119	86	240	100	90	38	9	5	3
22	21	26	70	102	92	420	100	86	34	10	4	4
23	21	22	60	98	83	342	90	81	32	10	4	8
24	20	22	47	83	76	306	90	76	28	8	4	10
25	21	21	44	79	72	256	94	72	27	7	4	5
26	21	20	38	74	72	210	90	64	27	7	4	5
27	21	20	38	92	72	210	81	69	28	7	4	6
28	22	24	38	74	72	632	81	72	44	7	3	7
29	57	25	35	106	64	420	72	57	44	7	3	7
30	29	34	32	142	------	342	72	57	26	5	3	7
31	23	------	34	119	------	420	------	50	------	5	3	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	57	20	25.0	0.368	0.42
November	35	20	23.0	.338	.38
December	70	19	36.7	.540	.62
January	566	74	230	3.38	3.90
February	361	64	138	2.03	2.19
March	632	57	226	3.32	3.83
April	400	72	167	2.46	2.74
May	240	50	115	1.69	1.95
June	57	26	40.1	.590	.66
July	33	5	15.3	.225	.26
August	17	3	5.8	.085	.10
September	10	3	4.7	.069	.08
The year	632	3	85.4	1.26	17.13

HARDWARE RIVER NEAR SCOTTSVILLE, VA.

LOCATION.—Chain gage at bridge on Woodridge-Scottsville highway 3 miles north of Scottsville, Albemarle County, and 9 miles above mouth.
DRAINAGE AREA.—104 square miles.
RECORDS AVAILABLE.—May 1925 to September 1932.
EXTREMES.—Maximum discharge during year, 2,080 second-feet Mar. 6, May 12; minimum, 1.5 second-feet Sept. 2, 22 (gage height, 1.20 feet).
1925–32: Maximum discharge, 4,690 second-feet Aug. 26, 1928 (gage height, 16.62 feet); minimum, that of Sept. 2, 22, 1932.
REMARKS.—Records fair. Low-water flow regulated by dam and gristmill above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	20	24	93	60	39	278	108	52	30	19	2.5
2	26	23	25	74	56	37	210	78	49	32	28	6
3	32	24	26	48	56	40	160	60	46	28	25	41
4	33	20	23	43	130	48	142	60	42	26	25	15
5	29	24	26	36	177	52	118	82	42	29	25	24
6	24	23	20	64	108	794	113	130	42	32	17	14
7	22	20	26	136	93	348	102	73	41	35	15	13
8	22	22	22	203	78	210	97	60	35	87	20	10
9	22	22	29	492	69	172	184	56	37	30	20	6
10	22	23	52	355	64	160	197	148	38	26	18	17
11	24	23	30	147	64	148	172	664	35	23	21	8
12	22	20	28	114	64	142	142	1,300	47	20	9	17
13	22	20	26	93	64	130	118	363	51	19	6	7
14	22	23	29	93	52	118	108	223	50	23	9	13
15	22	21	24	98	52	108	102	172	92	19	15	6
16	24	23	24	88	48	108	97	142	197	22	14	14
17	28	23	24	69	52	108	87	118	68	20	18	12
18	24	23	28	60	52	102	82	142	60	22	8	5
19	24	24	29	56	48	97	73	113	47	21	13	14
20	22	20	22	52	45	102	73	97	44	16	3.5	2.0
21	21	22	28	52	52	102	68	92	44	18	14	2.0
22	22	20	30	52	52	278	68	87	56	26	12	2.5
23	24	22	48	48	45	160	64	78	38	124	6	22
24	23	23	34	43	42	130	64	78	40	29	20	24
25	22	24	30	44	44	118	64	68	39	26	18	10
26	20	23	27	45	42	113	64	64	33	22	6	6
27	23	25	24	52	44	113	60	60	26	26	2.5	17
28	22	23	24	44	45	784	54	82	60	30	4	19
29	26	22	26	48	48	250	54	60	44	27	2.5	15
30	24	22	27	74	------	172	54	55	34	24	2.0	8
31	24	------	26	69	------	197	------	52	------	18	2.5	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	33	20	24.0	0.231	0.27
November	25	20	22.2	.213	.24
December	52	20	27.8	.267	.31
January	492	36	96.3	.926	1.07
February	177	42	63.7	.612	.66
March	749	37	177	1.70	1.96
April	278	54	109	1.05	1.17
May	1,300	52	160	1.54	1.78
June	197	26	51.0	.490	.55
July	124	16	30.0	.288	.33
August	28	2	13.5	.130	.15
September	41	2	12.4	.119	.13
The year	1,300	2	65.8	.633	8.62

SLATE RIVER NEAR ARVONIA, VA.

LOCATION.—Chain gage at 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 1932.
EXTREMES.—Maximum discharge during year, 3,320 second-feet Mar. 7 (gage height, 10.74 feet); minimum, 3 second-feet Sept. 24.
1926–32: Maximum discharge, 5,300 second-feet Aug. 12, 1928 (gage height, 14.12 feet); minimum, 2 second-feet Sept. 28 to Oct. 2, 1930.
REMARKS.—Records good. Discharge estimated Oct. 11, 12. Jan. 14, Sept. 1. Operation of gristmill 7½ miles upstream affects low-water flow.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	43	54	154	187	74	644	187	69	53	18	5
2	37	43	54	256	133	74	300	158	64	80	12	4
3	36	34	50	116	240	74	218	110	63	60	20	141
4	26	31	54	78	325	97	187	97	60	44	24	80
5	40	36	54	68	338	168	158	97	57	39	26	46
6	39	34	51	102	197	914	150	540	53	64	24	28
7	33	34	54	718	158	3,260	141	187	53	252	22	20
8	31	27	53	574	133	794	125	118	59	91	27	16
9	31	42	54	1,440	110	275	364	110	49	50	25	13
10	31	47	102	1,620	104	197	478	110	46	39	20	13
11	32	36	96	508	97	158	300	996	47	40	17	12
12	32	36	84	275	110	150	263	2,160	64	35	19	11
13	33	39	78	187	118	141	197	1,210	97	34	18	9
14	33	40	78	160	97	118	168	338	133	38	12	10
15	34	43	78	133	91	110	141	218	85	24	14	12
16	35	49	68	110	80	97	133	187	80	26	10	11
17	34	39	59	104	91	104	125	141	150	27	10	10
18	26	40	56	97	91	97	118	208	141	26	8	8
19	38	45	59	91	85	97	110	158	64	25	11	10
20	32	55	62	85	74	91	104	125	110	24	16	9
21	31	48	60	80	74	91	97	97	85	21	16	9
22	31	49	116	74	125	680	97	91	174	28	17	8
23	31	50	303	74	125	540	97	97	74	37	14	6
24	34	51	162	69	97	364	97	85	53	25	12	3
25	29	47	78	69	91	208	97	85	43	20	12	5
26	33	47	68	69	85	133	110	80	39	22	10	7
27	32	53	63	91	85	125	97	74	45	19	9	8
28	31	55	61	85	85	2,830	97	74	118	20	8	10
29	37	52	63	97	74	1,300	91	64	118	23	7	11
30	45	53	61	275	------	325	85	63	74	21	12	14
31	55	------	63	300	------	364	------	69	------	16	6	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	55	26	34.2	0.146	0.17
November	55	27	43.3	.184	.21
December	303	50	77.3	.329	.38
January	1,620	68	263	1.12	1.29
February	338	74	128	.545	.59
March	3,260	74	453	1.93	2.22
April	644	85	180	.766	.85
May	2,160	63	269	1.14	1.31
June	150	39	76.6	.326	.36
July	252	16	42.7	.182	.21
August	27	6	15.4	.066	.08
September	141	3	18.3	.078	.09
The year	3,260	3	134	.570	7.76

RIVANNA RIVER BELOW MOORES CREEK, NEAR CHARLOTTESVILLE, VA.

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

DRAINAGE AREA.—507 square miles.

RECORDS AVAILABLE.—August 1925 to September 1932. February to August 1925 at station half a mile upstream.

EXTREMES.—Maximum discharge during year, 7,100 second-feet Mar. 6 (gage height, 10.37 feet); minimum, 18 second-feet numerous days in September. 1925–32: Maximum discharge, 11,200 second-feet Apr. 16, 1929 (gage height, 14.15 feet); minimum, 2 second-feet Oct. 1, 1930 (gage height, 1.19 feet).

REMARKS.—Records good except those below 40 second-feet and those estimated for Jan. 5–7, 12, May 3–11, 24, June 28 to July 4, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	62	92	571	214	143	888	483	198	95	3[illegible]	26
2	98	70	92	544	218	136	657	717	187	100	47	27
3	60	72	65	260	206	136	549	400	175	90	60	46
4	60	62	68	206	651	198	488	300	168	85	89	42
5	58	55	72	170	1,300	304	425	400	161	120	47	101
6	70	55	68	500	729	2,340	425	600	154	168	40	46
7	68	55	92	1,000	549	3,630	370	400	150	365	3[illegible]	24
8	80	53	80	1,440	445	1,220	365	300	136	461	3[illegible]	21
9	80	68	120	1,820	360	855	488	250	133	172	36	20
10	80	70	198	1,620	313	651	855	700	110	113	32	20
11	60	80	126	795	286	532	759	2,500	98	92	30	19
12	51	83	104	500	278	466	705	4,260	140	78	32	20
13	55	70	95	456	256	425	604	2,580	175	70	30	21
14	65	60	104	445	226	385	532	1,500	187	65	30	21
15	58	60	101	390	226	341	472	1,080	527	62	30	21
16	126	92	78	341	206	336	415	825	483	60	30	21
17	68	86	78	295	214	336	375	651	256	62	29	20
18	53	75	75	282	202	505	360	888	198	55	33	19
19	72	78	78	247	187	554	341	588	165	51	3[illegible]	20
20	70	78	78	226	172	488	318	494	154	60	3[illegible]	20
21	80	70	78	198	165	472	300	435	150	70	30	19
22	68	70	218	191	195	705	291	385	168	58	29	19
23	62	89	210	179	179	711	278	341	126	72	29	21
24	53	75	130	172	161	582	264	310	107	55	29	46
25	49	72	101	172	161	494	282	282	92	44	29	23
26	49	62	86	143	157	425	318	264	86	44	2[illegible]	19
27	68	68	83	191	157	425	269	286	83	53	2[illegible]	20
28	58	68	107	179	161	2,660	247	313	150	161	27	22
29	70	70	120	183	157	1,500	235	226	120	49	2[illegible]	21
30	107	92	101	243	-------	985	231	218	100	36	27	21
31	75	-------	75	226	-------	855	-------	206	-------	34	23	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	126	49	70.1	0.138	0.16
November	92	53	70.7	.139	.16
December	218	65	102	.201	.23
January	1,820	143	458	.903	1.04
February	1,300	157	301	.594	.64
March	3,630	136	768	1.51	1.74
April	888	231	437	.862	.96
May	4,260	206	748	1.48	1.71
June	527	83	171	.337	.38
July	461	34	100	.197	.23
August	89	26	34.9	.069	.08
September	101	19	26.9	.053	.06
The year	4,260	19	275	.542	7.39

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 1932.
EXTREMES.—Maximum discharge during year, 2,050 second-feet Mar. 8 (gage height, 14.90 feet); minimum, 8 second-feet Aug. 31 (gage height, 2.45 feet).
1926–32: Maximum discharge, 3,330 second-feet Mar. 7, 1929 (gage height, 19.95 feet); minimum, 2 second-feet Sept. 30, Oct. 1, 4, 12, 1930.
REMARKS.—Records good. Discharge estimated Oct. 19. 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 natural flow at gage.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	33	40	128	272	77	662	94	60	70	16	12
2	24	24	38	300	167	70	626	144	54	40	15	13
3	22	27	35	217	191	74	375	133	54	63	26	94
4	24	31	35	133	272	81	258	113	57	54	24	42
5	24	26	35	103	406	244	204	94	48	38	21	35
6	21	29	38	85	330	806	179	487	45	81	21	40
7	26	31	38	133	204	1,850	167	1,350	45	63	27	24
8	24	29	38	286	155	2,020	144	734	48	77	24	21
9	20	27	38	825	123	1,760	360	179	45	70	26	20
10	20	27	74	1,090	118	555	958	133	40	40	21	15
11	26	27	85	1,310	103	230	882	882	38	29	17	16
12	24	33	81	1,270	123	191	454	1,480	40	27	16	14
13	24	31	63	345	138	167	330	1,720	54	22	16	12
14	24	33	57	230	128	155	230	1,480	70	22	13	15
5	24	35	60	191	108	133	179	644	60	21	13	15
16	24	29	54	167	103	123	155	272	57	21	11	13
17	24	35	51	128	94	118	144	230	66	20	13	12
18	24	35	42	123	94	118	133	844	77	18	15	11
19	22	35	42	118	103	113	123	521	57	21	15	11
20	21	35	40	103	90	103	118	258	51	19	16	14
21	26	35	38	98	81	103	113	167	57	19	16	11
22	24	38	144	94	94	191	103	144	51	21	13	13
23	24	33	422	81	144	470	103	128	42	48	11	11
24	26	35	422	81	133	454	94	108	38	29	12	20
25	22	35	144	77	113	217	94	103	35	20	13	31
26	22	35	85	74	85	167	103	90	31	16	14	16
27	22	33	70	90	77	133	123	90	45	70	13	13
28	26	33	57	118	85	1,350	108	85	128	57	11	13
29	26	38	70	128	123	1,760	90	85	155	27	13	16
30	26	40	63	204	-------	1,880	94	70	108	22	10	20
31	31	-------	63	345	-------	1,030	-------	70	-------	20	9	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	31	20	24.0	0.097	0.11
November	40	24	32.2	.130	.14
December	422	35	82.6	.334	.39
January	1,310	74	280	1.13	1.30
February	406	77	147	.595	.64
March	2,020	70	540	2.19	2.52
April	958	90	257	1.04	1.16
May	1,720	70	417	1.69	1.95
June	155	31	58.5	.237	.26
July	81	16	37.6	.152	.18
August	27	9	16.0	.065	.07
September	94	11	20.4	.083	.09
The year	2,020	9	160	.648	8.81

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.
DRAINAGE AREA.—306 square miles.
RECORDS AVAILABLE.—March 1926 to September 1932.
EXTREMES.—Maximum discharge during year, 4,090 second-feet Mar. 7 (gage height, 16.36 feet); minimum, 6 second-feet Oct. 6, 7, 8, Sept. 20.
1926–32: Maximum discharge, 6,960 second-feet Aug. 12, 1928 (gage height, 21.10 feet); minimum, that of Oct. 6, 7, 8, 1931, Sept. 20, 1932.
REMARKS.—Records excellent except those estimated for Jan. 9–15, July 24, 28, Aug. 4–6, Sept. 4, 5, 25, which are fair. Low-water flow regulated by dam above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	46	58	249	220	112	1,070	132	88	62	27	12
2	40	44	57	279	208	110	714	176	86	96	32	10
3	39	45	53	147	373	108	392	136	76	61	37	100
4	38	46	54	104	498	248	284	122	74	51	35	70
5	34	48	58	92	524	334	245	164	72	56	40	40
6	32	46	58	92	337	1,810	226	260	68	54	80	32
7	35	46	56	316	240	3,680	204	150	93	96	40	25
8	27	48	53	635	197	1,520	188	119	71	72	35	21
9	34	49	74	2,100	174	470	361	106	66	54	30	17
10	40	50	143	3,200	155	308	400	144	64	44	26	15
11	39	52	112	1,500	148	252	314	629	60	35	27	16
12	38	51	87	500	166	234	312	1,180	76	39	27	16
13	34	52	76	350	196	218	244	1,110	112	34	26	15
14	33	50	75	250	160	197	206	351	106	31	22	15
15	36	50	77	200	152	177	186	248	97	34	20	12
16	41	52	70	172	134	174	170	194	82	34	20	16
17	42	54	63	164	136	172	164	201	92	32	18	15
18	34	55	62	147	142	170	156	468	75	29	18	12
19	32	54	61	136	128	161	148	268	71	31	22	16
20	35	56	62	124	124	157	142	180	78	23	23	9
21	43	56	62	121	120	152	140	156	69	23	16	10
22	34	54	442	119	173	382	136	144	65	27	18	14
23	36	52	458	119	174	462	132	130	60	62	16	65
24	37	52	215	118	142	266	130	119	52	30	18	44
25	39	53	120	112	132	212	128	112	50	40	14	30
26	38	52	92	108	128	187	155	103	48	32	14	22
27	37	50	79	146	125	192	165	106	52	27	13	26
28	38	54	80	149	126	2,390	130	180	170	60	11	38
29	44	56	84	159	120	2,510	120	187	220	40	13	52
30	50	58	73	328	------	665	116	114	92	32	10	40
31	53	------	70	369	------	522	------	96	------	31	10	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	53	27	37.8	0.124	0.14
November	58	44	51.0	.167	.19
December	458	53	103	.337	.39
January	3,200	92	407	1.33	1.53
February	524	120	195	.637	.69
March	3,680	108	598	1.95	2.25
April	1,070	116	249	.814	.91
May	1,180	96	251	.820	.95
June	220	48	82.8	.271	.30
July	96	23	44.3	.145	.17
August	80	10	24.5	.080	.09
September	100	9	27.5	.090	.10
The year	3,680	9	173	.565	7.71

APPOMATTOX RIVER AT MATTOAX, VA.

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

DRAINAGE AREA.—745 square miles.

RECORDS AVAILABLE.—August 1900 to December 1905; March 1926 to September 1932.

EXTREMES.—Maximum discharge during year, 5,800 second-feet Mar. 10 (gage height, 22.50 feet); minimum, 14 second-feet Sept. 25 (gage height, 3.55 feet).

1900–1905, 1926–32: Maximum discharge, 12,200 second-feet May 25, 1901 (gage height, old datum, 24.6 feet); minimum, 11 second-feet Oct. 2, 1930 (gage height, 3.52 feet).

REMARKS.—Records good. Discharge estimated July 30, 31, Sept. 5, 12.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	90	147	298	814	259	4,130	274	202	230	67	15
2	80	95	116	962	545	259	2,300	320	176	151	51	15
3	80	80	147	706	524	230	2,080	386	176	105	44	16
4	60	80	110	410	886	304	886	320	163	122	48	19
5	68	95	110	281	1,340	838	676	274	145	127	43	25
6	64	95	110	216	1,220	2,330	588	720	151	100	38	85
7	64	95	116	264	742	4,010	524	1,750	151	139	122	90
8	60	85	160	618	566	4,410	462	462	145	116	90	55
9	50	80	134	2,610	462	5,260	442	352	151	145	51	38
10	68	100	174	3,530	423	5,760	1,190	289	145	116	48	25
11	56	128	298	3,570	386	2,580	1,220	336	163	100	37	24
12	76	134	298	3,890	369	698	910	1,370	163	67	35	22
13	76	110	188	3,810	386	588	766	1,820	163	59	31	21
14	68	154	174	720	442	524	588	1,850	244	51	32	16
15	72	95	167	566	369	462	482	742	216	59	30	18
16	80	110	154	482	320	423	442	545	202	55	29	17
17	72	122	140	404	320	404	404	423	189	44	28	17
18	68	100	128	369	320	386	386	1,340	216	40	23	16
19	76	134	122	336	320	369	352	1,530	189	51	24	17
20	76	134	122	320	289	352	336	742	163	41	25	17
21	76	140	128	289	274	352	320	503	151	44	20	17
22	72	100	248	289	304	423	320	404	151	38	22	17
23	76	154	936	274	386	886	304	352	133	63	21	17
24	72	128	750	259	386	936	289	320	133	40	22	16
25	68	134	450	259	320	566	289	289	116	48	20	25
26	64	100	281	244	289	442	320	336	100	38	28	80
27	76	105	202	259	289	404	369	230	105	72	24	55
28	80	110	188	336	274	2,330	369	216	163	67	17	38
29	76	105	188	352	289	3,090	304	259	244	51	17	43
30	80	110	181	442	------	3,410	274	320	289	40	16	25
31	80	------	181	862	------	4,010	------	289	------	40	16	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	90	50	71.7	0.096	0.11
November	154	80	110	148	.17
December	936	110	221	.297	.34
January	3,890	216	911	1.22	1.41
February	1,340	274	478	.642	.69
March	5,760	230	1,530	2.05	2.36
April	4,130	274	744	1.00	1.12
May	1,850	216	625	.839	.97
June	289	100	170	22.8	.25
July	230	38	79.3	.106	.12
August	122	16	36.1	.048	.06
September	90	15	30.0	.040	.04
The year	5,760	15	418	.561	7.64

APPOMATTOX RIVER NEAR PETERSBURG, VA.

LOCATION.—Water-stage recorder 1½ miles above Wallace Creek, 2½ miles above dam of Virginia Electric & Power Co., and 7 miles west of Petersburg, Dinwiddie County. Prior to Sept. 22, 1931, station was 1 mile downstream.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—September 1931 to September 1932. May 1927 to September 1931 at site 1 mile downstream.

EXTREMES.—Maximum discharge during year, 8,010 second-feet Mar. 8 (gage height, 10.40 feet); minimum, 19 second-feet Sept. 21–27.

1927–32: Maximum discharge, 8,710 second-feet Apr. 30, 1928 (gage height, 9.53 feet, old datum); minimum, that of Sept. 21–27, 1932.

REMARKS.—Records good. Discharge estimated Dec. 6-8.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	159	141	189	468	1,550	670	5,340	518	376	376	76	20
2	139	131	195	1,180	1,180	586	5,230	678	320	289	79	20
3	127	136	192	1,500	1,100	517	3,690	702	293	199	67	20
4	124	144	195	996	1,360	751	2,220	648	272	154	58	21
5	109	136	195	635	1,900	1,550	1,370	546	256	149	48	24
6	101	139	200	492	2,050	3,870	1,120	985	241	171	46	33
7	99	141	200	454	1,650	7,410	1,000	3,440	226	189	46	99
8	99	144	230	955	1,180	7,890	894	2,390	230	209	117	86
9	97	149	249	4,310	988	7,770	886	1,120	212	192	95	70
10	93	144	325	6,220	868	6,810	1,250	722	216	189	79	52
11	95	156	479	6,690	798	6,330	2,120	642	212	162	55	40
12	105	157	511	6,220	735	4,480	1,920	1,220	199	139	49	32
13	97	162	420	5,120	760	1,240	1,620	2,550	281	107	43	27
14	103	162	330	2,930	805	1,040	1,270	2,550	370	88	36	25
15	103	174	302	1,180	782	910	1,020	1,780	431	79	32	27
16	158	168	285	980	678	790	870	1,050	370	69	32	24
17	162	165	260	844	632	734	782	820	335	69	31	21
18	159	168	241	745	649	710	718	2,150	330	64	30	20
19	136	168	241	678	635	686	670	2,400	325	58	31	20
20	122	171	230	614	600	632	632	1,790	302	56	30	20
21	115	180	216	565	544	581	602	1,100	285	65	26	19
22	118	189	260	524	600	648	574	820	260	53	26	19
23	113	183	711	504	805	1,050	553	700	245	52	25	19
24	111	180	1,280	498	828	1,520	532	614	209	56	24	19
25	115	183	900	485	730	1,180	512	530	186	70	26	19
26	113	177	579	479	628	870	595	466	165	51	33	19
27	111	174	397	472	592	806	774	420	152	74	31	19
28	113	177	320	565	572	3,760	750	397	154	91	26	48
29	115	180	293	700	642	5,780	640	386	243	75	24	48
30	124	183	302	1,040	------	5,780	518	425	335	70	23	36
31	127	------	302	1,360	------	5,230	------	454	------	52	21	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	162	93	118	0.088	0.10
November	189	131	162	.121	.14
December	1,280	189	356	.266	.31
January	6,690	454	1,630	1.22	1.41
February	2,050	544	926	.691	.75
March	7,890	517	2,660	1.99	2.29
April	5,340	512	1,360	1.01	1.13
May	3,440	386	1,130	.843	.97
June	431	152	268	.200	.22
July	376	51	120	.090	.10
August	117	21	44.0	.033	.04
September	99	19	32.2	.024	.03
The year	7,890	19	735	.549	7.49

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 1932.

EXTREMES.—Maximum gage height during year, 5.25 feet June 15–19, 28; minimum, 2.65 feet Dec. 10, 11.

1926–32: Maximum gage height, 6.09 feet Oct. 7, 1929; minimum, 0.10 foot Dec. 9, 1926.

REMARKS.—Records good.

Gage height, in feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.10	4.82	3.95	3.08	3.02	3.20	3.20	3.82	5.10	5.12	4.40	3.82
2	5.10	4.80	3.80	3.00	3.00	3.15	3.12	3.88	5.12	5.10	4.35	3.80
3	5.12	4.78	3.72	3.00	3.05	3.15	3.15	3.95	5.12	5.12	4.30	3.75
4	5.10	4.75	3.62	3.00	3.02	3.22	3.12	4.00	5.05	5.02	4.32	3.72
5	5.12	4.70	3.25	3.00	2.98	2.98	3.12	4.05	5.05	5.00	4.32	3.70
6	5.10	4.70	3.08	3.00	2.98	3.12	3.12	4.20	5.12	5.05	4.32	3.65
7	5.10	4.70	2.98	3.05	2.95	3.15	3.15	5.35	5.18	4.98	4.35	3.68
8	5.05	4.68	2.78	3.02	3.00	3.02	3.15	4.40	5.10	5.00	4.28	3.65
9	5.05	4.65	2.75	3.10	3.02	3.08	3.20	4.45	5.08	4.98	4.25	3.62
10	5.08	4.65	2.68	3.00	3.05	3.02	3.25	4.52	5.02	4.90	4.22	3.58
11	5.05	4.62	2.72	3.02	3.08	3.08	3.25	4.60	5.02	4.88	4.20	3.48
12	5.05	4.65	2.85	3.00	3.08	3.12	3.20	4.70	5.08	4.80	4.25	3.45
13	5.05	4.62	2.95	3.00	3.12	3.20	3.12	4.72	5.12	4.82	4.20	3.48
14	5.05	4.62	2.92	2.90	3.20	3.22	3.08	4.75	5.18	4.80	4.20	3.42
15	5.02	4.60	2.95	2.92	3.18	3.18	3.18	4.80	5.22	4.78	4.15	3.42
16	5.00	4.60	2.90	2.95	3.15	3.18	3.22	4.85	5.25	4.85	4.12	3.58
17	5.02	4.60	2.92	2.95	3.20	3.22	3.28	4.90	5.25	4.82	4.08	3.58
18	5.00	4.60	2.90	2.95	3.15	3.15	3.28	4.92	5.22	4.82	4.05	3.52
19	4.95	4.60	2.95	2.90	3.15	3.15	3.35	4.95	5.22	4.72	4.12	3.48
20	4.98	4.55	2.92	2.92	3.10	3.15	3.35	5.00	5.20	4.72	4.28	3.42
21	4.95	4.52	2.90	2.95	3.10	3.12	3.38	5.02	5.20	4.72	4.15	3.38
22	4.92	4.50	2.90	3.00	3.15	3.25	3.42	5.05	5.20	4.70	4.12	3.32
23	4.90	4.50	3.00	3.00	3.10	3.18	3.42	5.08	5.20	4.68	4.10	3.28
24	4.85	4.52	3.00	3.00	3.10	3.15	3.40	5.10	5.18	4.65	4.10	3.25
25	4.90	4.50	3.02	3.08	3.12	3.12	3.45	5.10	5.18	4.58	4.05	3.22
26	4.85	4.52	2.98	3.08	3.15	3.15	3.65	5.10	5.15	4.50	3.98	3.18
27	4.82	4.45	2.95	3.08	3.18	3.15	3.65	5.15	5.12	4.52	3.95	3.15
28	4.85	4.40	2.95	3.00	3.20	3.22	3.68	5.15	5.20	4.52	3.95	3.15
29	4.85	4.28	2.92	3.02	3.20	3.15	3.70	5.20	5.12	4.48	3.92	3.15
30	4.80	4.10	2.95	3.08	-------	3.28	3.70	5.12	5.18	4.50	3.90	3.10
31	4.82	-------	2.90	3.10	-------	3.25	-------	5.12	-------	4.48	3.85	-------

CHOWAN RIVER BASIN

NOTTOWAY RIVER NEAR STONY CREEK, VA.

LOCATION.—Chain gage at bridge on Petersburg-Emporia Highway 2 miles above Island Swamp Creek and 3½ miles south of Stony Creek, Sussex County.
DRAINAGE AREA.—586 square miles.
RECORDS AVAILABLE.—March 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 4,470 second-feet Mar. 7, 9 (gage height, 15.66 feet); minimum, 5 second-feet Sept. 2, 5 (gage height, 0.62 foot).

1930–32: Maximum discharge, that of Mar. 7, 9, 1932; minimum, that of Sept. 2, 5, 1932.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	59	95	170	574	368	1,660	286	120	50	25	6
2	53	59	95	697	456	306	1,450	502	114	53	22	5
3	53	62	90	598	598	266	985	411	107	50	15	6
4	53	62	84	326	877	286	672	306	90	47	15	6
5	53	62	79	228	1,300	574	550	266	74	50	20	6
6	50	62	84	193	1,010	1,210	502	1,420	74	56	26	12
7	47	50	84	193	550	4,360	456	1,100	70	154	30	10
8	44	59	84	502	526	4,260	411	550	70	162	41	8
9	44	59	107	2,530	456	4,420	411	347	74	120	36	7
10	44	59	210	3,530	411	1,660	526	286	70	74	32	7
11	47	70	389	3,490	389	697	672	266	70	53	27	12
12	44	66	247	2,980	368	598	825	306	70	47	25	20
13	34	66	162	747	479	550	722	433	70	44	22	17
14	44	70	140	574	456	502	526	347	219	36	20	12
15	41	74	133	479	389	456	433	266	433	41	20	9
16	90	70	133	411	347	411	389	228	228	27	16	9
17	306	74	114	347	306	389	368	193	133	28	14	8
18	185	79	107	326	326	389	347	326	133	31	18	8
19	101	79	101	306	306	389	326	479	107	26	35	8
20	74	74	101	266	286	347	306	347	107	17	26	7
21	56	84	95	247	286	326	286	247	140	26	20	7
22	50	101	107	238	306	389	286	219	120	27	14	6
23	56	84	193	238	456	550	266	202	101	22	10	6
24	56	84	411	238	389	526	266	177	84	20	10	9
25	56	84	306	247	306	411	266	162	70	17	15	7
26	50	79	162	247	286	347	347	140	62	17	19	7
27	50	79	133	247	266	326	526	126	56	44	13	7
28	50	79	120	306	266	1,420	411	120	56	47	10	10
29	53	79	120	306	368	2,140	326	266	56	34	8	29
30	62	79	133	574	------	2,110	266	266	56	24	7	20
31	59	------	126	747	------	1,100	------	162	------	18	6	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	306	34	66.6	0.114	0.13
November	101	50	71.6	.122	.14
December	411	79	147	.251	.29
January	3,530	170	727	1.24	1.43
February	1,300	266	460	.785	.85
March	4,420	266	1,030	1.76	2.03
April	1,660	266	526	.898	1.00
May	1,420	120	347	.592	.68
June	433	56	108	.184	.21
July	162	17	47.2	.081	.09
August	41	6	19.9	.034	.04
September	20	5	9.4	.016	.02
The year	4,420	5	297	.507	6.91

MEHERRIN RIVER NEAR LAWRENCEVILLE, VA.

LOCATION.—Water-stage recorder at Gholson Bridge, 3 miles southeast of Lawrenceville, Brunswick County, since Nov. 16, 1931. Prior to that date chain gage at same site was used.

DRAINAGE AREA.—553 square miles.

RECORDS AVAILABLE.—December 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 7,590 second-feet Mar. 7 (gage height, 23.42 feet); minimum, 5 second-feet Sept. 23, 24 (gage height, 0.72 foot). 1928–32: Maximum discharge, that of Mar. 7, 1932; minimum, that of Sept. 23, 24, 1932.

REMARKS.—Records good for Oct. 1 to Nov. 15. Records excellent thereafter except those for high stages and those estimated, which are fair. Flow regulated during low water by small dam and mill just above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	35	58	150	458	192	2,000	272	108	54	20	6
2	51	45	52	e 800	346	179	1,180	341	98	51	22	35
3	43	32	52	e 600	650	178	637	297	94	31	25	52
4	36	60	60	e 240	1,530	203	491	250	87	43	23	27
5	42	42	66	e 180	1,730	514	400	232	89	40	848	24
6	30	44	48	e 160	839	2,720	360	205	73	50	176	24
7	24	61	129	e 160	501	7,050	330	176	78	69	100	24
8	16	37	198	418	396	5,340	304	168	68	80	62	12
9	22	51	135	2,890	360	766	291	153	64	69	57	8
10	18	52	e 200	5,280	334	546	967	152	82	56	61	13
11	17	60	276	4,860	297	455	673	151	78	48	47	7
12	17	34	e 180	562	301	414	647	168	74	36	27	10
13	12	44	e 110	461	388	376	657	182	78	48	24	7
14	21	38	e 100	e 400	395	351	430	188	754	28	25	9
15	15	44	e 90	335	290	320	364	170	377	25	17	6
16	49	30	e 90	e 300	257	298	324	148	162	20	17	6
17	376	33	e 80	e 260	249	294	290	138	150	15	27	10
18	162	58	73	e 220	240	289	270	627	110	24	20	6
19	86	55	e 70	196	224	278	255	447	110	27	40	6
20	56	52	e 70	186	208	272	239	244	90	17	41	6
21	54	48	e 65	172	194	268	228	178	98	18	25	6
22	49	50	e 70	164	257	318	222	158	84	14	27	8
23	53	44	e 150	160	306	538	207	137	82	38	18	9
24	30	47	e 400	167	266	410	204	139	73	34	18	5
25	32	51	217	164	215	296	284	128	74	50	17	6
26	16	48	e 110	160	203	269	466	117	74	15	15	19
27	11	48	e 90	174	198	260	507	106	65	41	11	11
28	25	62	e 80	194	202	1,800	338	110	64	150	9	9
29	45	37	e 80	247	219	3,190	254	166	84	61	13	14
30	88	66	e 90	729	------	831	219	149	57	52	8	11
31	58	------	e 80	852	------	625	------	111	------	23	11	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	376	11	52.1	0.094	0.11
November	66	30	46.9	.085	.09
December	400	48	115	.208	.24
January	5,280	150	705	1.27	1.46
February	1,730	194	416	.752	.81
March	7,050	178	963	1.74	2.01
April	2,000	204	468	.846	.94
May	627	106	200	.362	.42
June	754	57	119	.215	.24
July	150	14	42.8	.077	.09
August	848	9	59.7	.108	.12
September	52	5	13.2	.024	.03
The year	7,050	5	267	.483	6.56

e Estimated.

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 1932.
EXTREMES.—Maximum discharge during year, 1,900 second-feet Feb. 3 (gage height, 3.88 feet); minimum, 30 second-feet Aug. 30, 31.
1896–1932: 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.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	66	40	570	545	169	590	a 400	159	73	42	32
2	50	60	40	520	520	162	590	1,170	198	68	51	32
3	50	40	40	376	1,900	162	a 490	590	198	68	53	40
4	50	40	40	290	1,030	213	385	483	133	a 67	139	48
5	50	43	38	198	675	213	385	a 400	118	66	91	46
6	56	43	38	216	433	1,420	362	a 340	102	86	66	43
7	53	43	38	332	562	895	339	a 290	169	89	51	62
8	56	43	44	520	458	675	339	253	104	68	48	43
9	53	53	79	1,430	409	562	a 600	245	91	71	40	38
10	50	50	75	1,260	317	483	1,600	270	79	55	36	35
11	50	50	60	675	317	458	1,100	270	89	55	35	43
12	53	48	48	470	339	433	1,030	a 400	112	57	43	45
13	56	50	50	399	295	409	830	765	121	51	40	57
14	50	50	48	332	278	535	765	645	385	48	40	57
15	50	48	43	311	253	509	645	590	169	50	36	48
16	50	43	38	290	278	535	458	535	287	51	38	40
17	50	40	40	231	266	535	433	433	221	46	39	42
18	56	38	36	212	237	618	362	270	152	46	43	40
19	53	38	38	198	237	509	339	270	124	45	50	38
20	50	38	60	173	261	433	274	245	142	40	62	40
21	43	40	46	144	191	385	229	213	142	40	51	50
22	43	40	50	144	317	960	229	213	107	35	39	48
23	40	38	311	132	278	798	229	a 240	99	32	35	53
24	38	38	201	126	270	618	253	a 200	86	40	35	62
25	40	40	150	126	270	509	a 240	a 200	77	40	33	46
26	38	40	123	126	278	433	a 260	a 190	66	36	35	53
27	43	38	104	144	237	765	a 240	a 190	91	36	33	50
28	88	40	104	138	221	765	a 220	295	91	40	36	60
29	79	38	104	160	198	618	a 200	213	84	59	36	68
30	75	38	98	422	------	562	a 220	176	77	40	32	59
31	66	------	98	850	------	535	------	169	------	42	30	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	88	38	52.5	0.135	0.16
November	66	38	43.8	.113	.13
December	311	36	74.9	.193	.22
January	1,430	126	371	.956	1.10
February	1,900	191	409	1.05	1.13
March	1,420	162	544	1.40	1.61
April	1,600	200	475	1.22	1.36
May	1,170	169	360	.928	1.07
June	385	66	136	.351	.39
July	89	32	52.9	.136	.16
August	139	30	46.4	.120	.14
September	68	32	47.3	.122	.14
The year	900	30	217	.559	7.61

a Estimated.

ROANOKE RIVER AT NIAGARA, VA.

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

DRAINAGE AREA.—511 square miles.

RECORDS AVAILABLE.—July 1926 to September 1932.

EXTREMES.—Maximum discharge during year, 4,150 second-feet Mar. 6 (gage height, 7.99 feet); minimum, 27 second-feet Oct. 24 (gage height, 0.70 foot).

1926–32: 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 except for those estimated periods, which are fair. Flow regulated at dam and water-power plant located 200 feet above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	e 120	e 100	e 120	876	722	262	985	e 600	228	164	106	92
2	e 110	e 95	e 125	739	590	296	906	e1,800	236	144	102	82
3	105	e 95	e 120	474	1,230	272	780	e1,100	228	120	126	74
4	104	e 90	e 120	374	2,170	378	688	638	214	126	214	130
5	105	e 80	e 120	301	1,350	538	576	615	192	186	180	125
6	108	e 40	e 120	320	981	2,190	470	501	206	210	124	85
7	112	e 110	e 125	422	780	1,800	504	448	214	172	122	86
8	162	e 100	124	890	682	1,200	512	426	196	150	104	94
9	102	e 100	174	1,800	559	1,030	1,350	358	184	128	104	84
10	84	e 100	159	1,510	480	871	1,740	419	172	118	101	78
11	125	e 120	153	892	462	734	1,740	515	189	118	87	76
12	124	e 115	167	670	502	692	1,520	e 900	210	122	94	77
13	106	e 100	e 165	611	596	640	1,160	e1,100	352	114	94	88
14	103	e 115	e 175	475	466	584	930	e 900	402	120	98	112
15	108	e 110	e 160	437	476	543	795	e 800	490	202	97	93
16	106	e 100	172	384	422	508	664	e 660	498	208	82	82
17	90	e 110	158	337	424	553	604	e 600	364	140	85	74
18	112	e 110	e 150	351	422	1,090	557	553	282	122	132	71
19	93	e 110	e 140	302	361	966	509	466	255	101	131	72
20	96	e 110	e 140	302	390	840	483	436	257	94	86	70
21	96	e 110	e 140	264	314	690	454	372	254	94	88	106
22	98	e 110	332	280	389	1,720	415	342	232	98	95	85
23	68	e 120	520	270	426	1,710	429	360	183	117	96	82
24	86	e 100	269	234	354	1,130	380	295	164	106	99	106
25	97	e 100	230	264	382	912	378	295	169	100	84	90
26	101	e 100	210	208	370	729	406	293	160	98	84	85
27	105	e 100	178	246	310	679	368	294	146	100	82	92
28	127	e 100	170	222	358	1,280	e 340	448	171	100	81	120
29	e 180	e 100	148	171	344	1,120	e 330	314	180	136	80	91
30	e 120	e 100	130	750	------	925	e 320	262	168	138	79	90
31	e 100	------	e 160	1,100	------	886	------	262	------	110	79	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	180	68	108	0.211	0.24
November	120	40	102	.200	.22
December	520	120	173	.339	.39
January	1,800	208	535	1.05	1.21
February	2,170	310	597	1.17	1.26
March	2,190	262	895	1.75	2.02
April	1,740	320	713	1.40	1.56
May	1,800	262	560	1.10	1.27
June	498	146	238	.466	.52
July	210	94	131	.256	.30
August	214	79	103	.202	.23
September	130	70	89.7	.176	.20
The year	2,190	40	353	.691	9.42

e Estimated.

ROANOKE RIVER NEAR TOSHES, VA.

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

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—September 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 7,850 second-feet Mar. 6 (gage height, 8.60 feet); minimum, 93 second-feet Sept. 19, 20 (gage height, 0.96 foot).

1925–32: Maximum discharge, 25,600 second-feet Oct. 2, 1929; minimum, that of Sept. 19, 20, 1932.

REMARKS.—Records excellent. Discharge estimated Feb. 9, 10.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	228	256	237	988	1,280	557	1,780	1,060	442	294	177	107
2	228	228	237	1,510	951	468	1,690	2,800	393	305	181	151
3	228	228	242	917	1,470	508	1,400	1,600	393	260	186	161
4	211	224	251	683	2,000	543	1,200	1,240	381	237	260	271
5	202	219	256	550	2,370	754	1,040	976	364	242	364	662
6	202	211	246	550	1,690	4,410	1,000	851	342	449	276	224
7	202	145	242	876	1,380	4,940	917	738	350	336	206	141
8	206	185	237	1,160	1,080	2,420	851	683	364	289	219	137
9	246	215	284	3,020	960	1,960	1,570	660	331	265	177	137
10	224	219	418	2,920	840	1,690	3,220	637	315	233	165	134
11	198	215	387	1,820	730	1,460	2,720	843	305	211	161	122
12	202	228	325	1,280	770	1,280	2,820	1,200	393	206	185	115
13	251	237	325	796	743	1,240	2,180	1,960	508	206	161	107
14	215	219	331	926	802	1,200	1,740	1,600	1,720	206	161	104
15	219	219	353	754	699	1,080	1,510	1,280	851	256	149	130
16	219	224	331	675	683	1,020	1,240	1,020	924	384	145	130
17	215	219	325	645	660	1,000	1,100	876	1,090	347	137	115
18	206	224	310	557	652	1,110	1,030	835	728	269	130	104
19	198	224	284	557	637	1,600	959	884	508	228	240	96
20	202	228	265	501	543	1,420	876	722	501	194	265	96
21	202	228	265	488	593	1,240	843	683	468	177	169	100
22	202	228	469	449	608	2,730	786	615	449	181	149	126
23	202	228	810	449	675	3,220	738	571	424	177	145	173
24	198	237	660	455	660	2,180	746	564	342	185	145	157
25	153	246	430	387	585	1,690	699	501	310	181	134	157
26	198	224	370	412	593	1,420	714	495	305	165	126	153
27	202	224	342	412	593	1,200	722	501	320	198	118	149
28	202	228	320	412	550	3,740	660	571	300	206	118	173
29	274	228	315	418	550	2,620	557	654	315	194	115	206
30	359	228	284	1,180	------	1,960	578	495	315	215	111	173
31	336	------	265	1,820	------	1,690	------	449	------	206	107	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	359	153	220	0.216	0.25
November	256	145	222	.218	.24
December	810	237	336	.329	.38
January	3,020	387	927	.909	1.05
February	2,370	543	912	.894	.96
March	4,940	468	1,750	1.72	1.98
April	3,220	557	1,260	1.24	1.38
May	2,800	449	921	.903	1.04
June	1,720	300	492	.482	.54
July	449	165	242	.237	.27
August	364	107	174	.171	.20
September	662	96	160	.157	.18
The year	4,940	96	635	.623	8.47

ROANOKE RIVER AT ALTAVISTA, VA.

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

DRAINAGE AREA.—1,800 square miles.

RECORDS AVAILABLE.—August 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 18,000 second-feet Mar. 7 (gage height, 19.36 feet); minimum, 151 second-feet Sept. 1 (gage height, 1.82 feet). 1930–32: Maximum discharge, that of Mar. 7, 1932; minimum, that of Sept. 1, 1932.

REMARKS.—Records excellent except those for estimated periods, which are fair. Discharge estimated Dec. 21, 22, July 23–29, Sept. 16–30.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	302	459	407	807	2,270	735	3,210	1,120	812	504	359	159
2	302	379	415	2,590	1,590	710	2,710	3,280	758	475	343	264
3	299	367	407	1,590	1,979	650	2,390	2,480	705	491	359	478
4	299	379	407	1,020	4,070	760	2,070	1,910	655	427	510	402
5	274	395	451	788	3,800	1,100	1,870	1,550	630	419	634	2,130
6	278	383	463	735	2,590	8,100	1,710	1,440	608	479	536	680
7	271	352	451	1,760	1,990	12,400	1,630	1,230	587	680	423	395
8	268	292	423	2,290	1,630	4,830	1,480	1,090	558	483	395	292
9	264	371	467	6,070	1,440	3,480	2,170	1,060	572	479	383	261
10	324	391	660	5,840	1,240	2,870	4,800	990	576	415	327	257
11	274	387	735	3,260	1,130	2,390	4,080	1,260	522	367	296	227
12	271	391	516	2,110	1,130	2,070	4,180	1,550	535	355	395	204
13	320	415	480	1,590	1,270	1,990	3,360	2,290	812	351	343	204
14	306	403	488	1,440	1,200	1,830	2,710	2,200	1,630	343	304	204
15	324	391	542	1,240	990	1,630	2,310	1,830	1,990	395	269	211
16	359	387	511	1,130	960	1,480	2,020	1,590	1,080	495	265	220
17	359	395	459	960	930	1,440	1,830	1,370	1,730	689	246	200
18	341	383	431	900	960	1,590	1,670	1,300	1,540	627	230	170
19	306	387	423	842	900	2,310	1,550	1,300	1,030	463	242	160
20	320	391	403	760	842	2,030	1,440	1,230	812	395	446	170
21	327	399	400	735	788	1,790	1,370	1,090	812	347	347	190
22	334	403	650	710	870	3,740	1,340	990	730	331	276	230
23	338	395	1,130	685	990	5,480	1,260	990	730	350	238	310
24	334	395	1,100	685	960	3,390	1,260	930	630	450	238	270
25	324	415	735	685	870	2,550	1,160	812	540	360	234	280
26	292	407	560	615	870	2,150	1,200	785	513	330	208	290
27	327	383	502	630	788	1,830	1,260	785	532	310	200	280
28	330	375	451	710	788	8,600	1,120	1,140	572	600	189	350
29	399	383	451	655	788	5,010	1,020	1,200	531	500	174	380
30	542	375	435	1,540	-------	3,120	960	990	540	403	174	320
31	552	-------	403	3,080	-------	2,790	-------	870	-------	379	162	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	552	264	328	0.182	0.21
November	459	292	388	.216	.24
December	1,130	400	528	.293	.34
January	6,070	615	1,560	.867	1.00
February	4,070	788	1,400	.778	.84
March	12,400	650	3,060	1.70	1.96
April	4,800	960	2,040	1.13	1.26
May	3,280	785	1,380	.767	.88
June	1,920	506	809	.449	.50
July	689	310	442	.246	.28
August	634	162	314	.174	.20
September	2,130	159	340	.189	.21
The year	12,400	159	1,050	.583	7.92

ROANOKE RIVER AT BROOKNEAL, VA.

LOCATION.—Water-stage recorder 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 1932.

EXTREMES.—Maximum discharge during year, 22,400 second-feet Mar. 7 (gage height, 24.12 feet); minimum discharge (estimated), 191 second-feet Sept. 2.

1923–32: Maximum discharge, 39,000 second-feet Aug. 12, 1928 (gage height, 37.15 feet); minimum, that of Sept. 2, 1932.

REMARKS.—Records good. Discharge estimated for Aug. 25–30, Sept. 1, 2, 12–14, 17–20, 22.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	525	660	545	910	3,150	1,060	4,820	1,510	945	655	406	198
2	505	575	560	2,540	2,320	1,030	3,890	2,860	890	582	402	191
3	500	520	540	2,540	2,630	945	3,260	3,380	835	541	389	352
4	490	515	540	1,690	4,440	1,180	2,810	2,320	835	545	820	558
5	480	515	570	1,300	5,330	1,400	2,480	2,000	780	513	1,000	1,480
6	455	520	595	1,160	3,600	7,870	2,240	1,760	780	513	755	1,470
7	460	505	580	2,090	2,720	19,700	2,080	1,620	755	630	601	606
8	455	470	570	3,910	2,320	7,080	1,930	1,440	755	705	504	381
9	450	440	595	7,440	1,930	4,370	2,400	1,370	730	536	450	298
10	455	510	710	8,620	1,720	3,530	4,820	1,340	705	527	402	278
11	505	530	970	4,930	1,580	2,810	5,170	1,480	655	455	364	263
12	465	530	910	3,120	1,580	2,480	4,870	2,160	680	406	347	255
13	450	525	735	2,400	1,650	2,320	4,170	2,400	918	389	408	240
14	505	545	760	1,930	1,620	2,160	3,440	2,720	1,300	394	356	218
15	480	535	760	1,680	1,440	2,000	2,900	2,240	2,440	411	318	211
16	485	520	790	1,480	1,340	1,790	2,560	1,930	1,480	506	286	211
17	490	520	735	1,370	1,340	1,760	2,240	1,720	1,560	625	278	220
18	475	525	685	1,270	1,340	1,860	2,080	1,650	1,840	835	267	230
19	455	525	685	1,180	1,270	2,320	2,000	1,580	1,340	601	267	230
20	435	540	645	1,120	1,210	2,320	1,860	1,580	1,060	486	326	210
21	445	545	630	1,030	1,120	2,080	1,760	1,400	972	420	452	204
22	450	545	1,120	1,000	1,240	3,120	1,720	1,340	918	402	368	204
23	460	535	1,900	972	1,340	6,560	1,650	1,240	862	420	302	252
24	460	535	1,750	972	1,340	4,370	1,580	1,210	835	548	255	314
25	460	535	1,360	945	1,240	3,170	1,580	1,150	680	398	244	356
26	445	545	970	890	1,150	2,640	1,620	1,030	630	356	223	306
27	420	525	790	918	1,150	2,320	1,620	1,180	655	347	228	318
28	435	510	760	945	1,120	7,480	1,540	1,370	705	400	218	377
29	470	500	735	1,000	1,090	7,780	1,440	1,400	705	765	211	381
30	570	525	735	1,480	-------	4,170	1,300	1,240	680	554	204	437
31	735	-------	710	3,790	-------	3,790	-------	1,060	-------	442	204	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	735	420	480	0.198	0.23
November	660	440	528	.218	.24
December	1,900	540	805	.333	.38
January	8,620	890	2,150	.888	1.02
February	5,330	1,090	1,910	.789	.85
March	19,700	945	3,790	1.57	1.81
April	5,170	1,300	2,590	1.07	1.19
May	3,380	1,030	1,700	.702	.81
June	2,440	630	964	.398	.44
July	835	347	513	.212	.24
August	1,000	204	384	.159	.18
September	1,480	191	375	.155	.17
The year	19,700	191	1,350	.558	7.56

ROANOKE RIVER NEAR CLOVER, VA.

LOCATION.—Water-stage recorder 3½ miles below mouth of Roanoke Creek and 6 miles east of Clover, Halifax County.
DRAINAGE AREA.—3,230 square miles.
RECORDS AVAILABLE.—August 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 27,600 second-feet Mar. 8 (gage height, 18.24 feet); minimum, 204 second-feet Sept. 3 (gage height, 0.50 foot).
1929–32: Maximum discharge, 52,300 second-feet (revised) Oct. 4, 1929 (gage height, 22.90 feet); minimum, that of Sept. 3, 1932.
REMARKS.—Records excellent except those estimated, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	720	855	e 620	e1,300	4,340	1,510	7,390	1,650	1,280	848	518	213
2	606	783	e 660	e3,400	3,350	1,420	6,190	2,250	1,160	805	471	216
3	587	679	e 660	3,570	3,900	1,420	4,780	3,900	1,080	734	495	284
4	574	625	e 660	e2,600	5,340	1,650	3,790	3,020	1,040	699	600	632
5	568	619	e 660	e1,900	7,150	2,350	3,240	2,450	1,040	741	1,330	907
6	549	612	706	e1,700	5,420	8,100	2,910	2,150	977	686	1,080	1,280
7	531	606	e 720	e2,600	3,930	21,900	2,700	2,000	1,080	706	841	1,600
8	524	574	e 720	4,260	3,130	25,000	2,500	1,800	992	885	706	e1,000
9	512	e 560	e 720	9,000	2,800	9,340	2,700	1,650	945	812	580	e 540
10	518	e 540	e 840	13,200	2,450	5,110	4,010	1,560	930	665	524	e 380
11	537	e 620	e 1,200	9,450	2,200	4,230	6,070	1,750	892	632	471	306
12	587	e 640	e 1,120	5,340	2,250	3,570	5,470	2,600	945	549	460	287
13	537	e 640	1,160	3,620	2,500	3,240	5,110	3,350	1,160	495	427	272
14	524	e 640	e 920	3,800	2,350	3,020	4,120	3,350	1,460	477	477	251
15	600	638	e 920	2,600	2,150	2,800	3,460	2,910	2,100	518	416	241
16	645	e 640	e 890	2,300	1,950	2,600	3,130	2,500	2,500	562	360	244
17	606	e 620	e 890	2,100	1,850	2,400	2,800	2,200	1,700	645	319	248
18	574	e 620	e 890	1,900	1,850	2,350	2,600	2,250	2,000	783	306	265
19	537	e 620	e 890	1,800	1,800	2,400	2,400	2,000	2,000	922	306	272
20	524	e 620	885	1,650	1,700	2,910	2,300	1,900	1,510	692	306	244
21	500	e 640	e 800	1,560	1,650	2,700	2,200	1,800	1,240	549	380	222
22	518	e 640	e 1,400	1,460	1,700	3,130	2,100	1,650	1,200	489	537	225
23	531	e 640	e 2,500	1,460	1,950	6,770	2,650	1,560	1,120	477	411	241
24	543	e 640	e 2,400	1,420	1,900	6,430	1,950	1,510	1,080	500	328	602
25	543	e 640	e 1,800	1,420	1,800	4,340	1,900	1,460	992	625	287	500
26	537	e 640	e 1,400	1,380	1,650	3,460	2,000	1,330	868	449	276	422
27	506	e 660	1,160	1,380	1,600	3,020	2,150	1,280	812	427	272	355
28	471	e 640	e 1,000	1,460	1,560	7,470	2,050	2,200	855	466	254	405
29	512	638	e 1,000	1,460	1,560	14,500	1,900	1,850	961	619	244	512
30	574	e 600	e 1,000	1,980	-------	7,750	1,700	1,700	968	892	234	483
31	720	-------	e 1,000	3,820	-------	5,110	-------	1,420	-------	645	222	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	720	471	559	0.173	0.20
November	855	540	638	.198	.22
December	2,500	620	1,040	.322	.37
January	13,200	1,300	3,130	.969	1.12
February	7,150	1,560	2,680	.830	.90
March	25,000	1,420	5,550	1.72	1.98
April	7,390	1,700	3,260	1.01	1.13
May	3,900	1,280	2,100	.650	.75
June	2,500	812	1,230	.381	.43
July	922	427	645	.200	.23
August	1,330	222	466	.144	.17
September	1,600	213	455	.141	.16
The year	25,000	213	1,810	.560	7.66

e Estimated.

ROANOKE RIVER AT OLD GASTON, N.C.

LOCATION.—Chain gage at bridge of Roanoke Railroad Co. at Old Gaston, Northampton County, three quarters of a mile below Indian Creek. Water-stage recorder at same location Oct. 1 to Apr. 7.

DRAINAGE AREA.—8,350 square miles.

RECORDS AVAILABLE.—December 1911 to December 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 100,000 second-feet Oct. 21, 1932 (gage height, 12.45 feet); minimum, 485 second-feet Sept. 21 (gage height, 0.40 foot).

1911–32: Maximum discharge, 210,000 second-feet Mar. 18, 1912 (gage height, 16.6 feet); minimum, that of Sept. 21, 1932.

REMARKS.—Records good. Slight diurnal fluctuation caused by operation of power plant several miles above. No record obtained Apr. 8 to Aug. 23; daily discharge Apr. 8–30, Aug. 1–23 estimated. Monthly discharge and run-off May to July obtained at Roanoke Rapids, N.C.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2,300	1,210	1,590	3,370	10,300	4,100	15,600	2,500	658	1,230	5,100	7,750
2	1,920	1,360	1,760	5,100	11,600	3,800	19,300	2,200	723	1,900	17,400	6,480
3	1,590	1,990	1,530	7,970	10,800	3,800	16,200	1,900	734	1,610	21,600	5,870
4	1,360	1,810	1,590	8,650	15,100	3,770	11,800	1,400	734	1,090	21,200	5,480
5	1,340	1,360	1,680	6,480	19,900	3,950	9,590	2,600	1,590	956	10,100	5,100
6	1,360	1,230	1,780	4,920	19,900	17,600	8,200	2,000	1,590	1,130	7,100	4,580
7	1,380	1,360	1,920	4,100	14,000	67,400	7,320	3,000	1,630	2,180	7,100	4,260
8	1,300	1,400	2,300	8,690	9,830	66,100	7,000	2,500	3,000	3,800	17,400	4,100
9	1,230	1,440	2,420	38,500	8,420	70,200	6,500	2,300	2,180	3,740	18,000	4,100
10	1,200	1,360	2,400	50,100	7,530	33,600	8,200	3,500	1,590	3,290	16,800	3,950
11	1,180	1,530	3,180	47,900	6,680	14,500	12,000	2,700	1,040	2,370	24,500	3,800
12	1,160	1,210	2,920	30,600	5,870	10,300	15,000	1,900	910	2,230	25,200	4,100
13	1,200	1,300	3,450	16,200	6,270	8,650	14,000	1,700	778	1,610	13,200	7,320
14	1,300	1,420	3,430	10,600	7,530	7,750	13,000	1,500	680	1,300	9,350	9,830
15	1,200	1,510	2,840	7,750	7,970	7,320	11,000	1,600	669	1,080	7,530	17,400
16	1,250	1,420	2,670	6,890	6,480	6,680	9,400	1,300	658	1,160	6,890	18,600
17	1,340	1,550	2,770	6,270	5,680	6,070	8,400	1,200	648	1,660	5,870	16,200
18	1,510	1,630	2,900	5,480	5,100	5,680	7,400	1,000	585	23,300	5,680	9,590
19	1,380	1,360	2,570	4,920	5,100	5,680	6,700	1,000	585	50,100	5,480	7,100
20	1,300	1,550	2,450	4,740	4,920	5,290	6,500	1,000	545	80,600	11,800	6,680
21	1,250	1,610	2,400	4,260	4,580	5,680	5,800	900	505	89,000	19,300	7,530
22	1,210	1,660	2,400	4,100	4,740	6,070	5,400	800	535	17,400	17,400	8,880
23	1,180	1,680	3,610	3,800	5,680	7,100	5,400	800	505	11,300	10,600	10,600
24	1,180	1,680	9,830	3,800	6,270	13,400	5,000	1,130	515	6,270	8,420	12,400
25	1,200	1,700	9,120	3,800	5,870	13,400	4,800	922	525	4,740	6,890	23,800
26	1,210	1,440	5,870	3,450	5,100	9,590	5,400	800	575	4,420	5,870	32,600
27	1,200	1,530	4,420	3,770	4,580	7,750	6,500	800	1,320	4,100	7,750	35,100
28	1,340	1,530	3,600	3,800	4,260	11,100	7,100	701	1,020	3,950	13,200	40,600
29	1,210	1,570	3,050	4,260	4,260	21,800	6,200	690	888	5,100	10,100	43,600
30	1,300	1,760	3,050	4,920	-------	28,700	5,300	680	1,000	6,890	8,200	54,900
31	1,230	-------	2,840	8,420	-------	16,200	-------	649	-------	5,480	-------	62,200

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1931–32					
October	2,300	1,160	1,330	0.159	0.18
November	1,990	1,210	1,510	.181	.20
December	9,830	1,530	3,170	.380	.44
January	50,100	3,370	10,600	1.27	1.46
February	19,900	4,260	8,080	.968	1.04
March	70,200	3,770	15,900	1.90	2.19
April	19,300	4,800	9,000	1.08	1.20
May	9,650	3,160	5,280	.628	.72
June	14,800	2,140	4,290	.510	.57
July	3,260	1,240	1,900	.226	.26
August	3,500	648	1,540	.184	.21
September	3,000	505	964	.115	.13
The year	70,200	505	5,290	.634	8.60
1932					
October	89,000	956	11,100	1.33	1.53
November	32,600	5,100	12,500	1.50	1.67
December	62,200	3,800	15,600	1.87	2.16

ROANOKE RIVER AT ROANOKE RAPIDS, N.C.

LOCATION.—Water-stage recorder 1½ miles below State highway bridge at Roanoke Rapids, Halifax County.

DRAINAGE AREA.—8,410 square miles.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 75,200 second-feet Mar. 9 (gage height, 18.43 feet); minimum, 458 second-feet Sept. 21 (gage height, 1.25 feet).

1930–32: Maximum discharge, that of Mar. 9, 1932; minimum, that of Sept. 21, 1932.

REMARKS.—Records good except those estimated Mar. 23-29, 31, Apr. 1-7, Aug. 28 to Sept. 2, Sept. 15, which are fair. Flow regulated from power operations above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,540	1,140	1,550	3,160	9,730	4,260	16,000	4,810	3,950	2,450	2,540	700
2	1,930	1,320	1,730	4,470	11,800	4,050	20,000	4,810	3,160	2,800	2,220	700
3	1,670	1,800	1,550	7,550	10,700	4,050	17,000	5,560	2,980	2,450	1,860	869
4	1,430	1,930	1,550	9,090	14,000	3,850	13,000	7,550	2,620	2,290	1,430	718
5	1,320	1,470	1,670	7,100	19,000	3,850	10,000	7,550	2,540	2,310	2,590	955
6	1,340	1,250	1,670	5,300	20,400	10,200	8,600	5,970	2,450	2,290	2,000	2,000
7	1,430	1,290	1,800	4,360	14,400	58,000	7,600	4,930	2,260	1,670	2,980	1,730
8	1,270	1,420	2,070	5,860	10,400	69,600	6,950	4,470	2,450	1,800	2,540	3,070
9	1,160	1,420	2,370	28,800	8,770	73,300	6,530	3,850	2,260	1,930	2,290	2,540
10	1,100	1,430	2,370	51,000	7,850	51,900	8,180	3,650	2,220	1,930	3,520	1,930
11	1,070	1,510	2,800	52,200	6,810	17,500	11,700	3,650	2,140	2,290	2,730	1,420
12	1,090	1,290	2,980	38,800	6,250	11,100	14,800	3,850	2,260	1,930	1,860	1,020
13	1,090	1,320	3,160	17,600	6,110	9,410	14,400	4,580	5,520	1,730	1,670	848
14	1,280	1,400	3,550	11,400	7,550	8,150	13,600	7,250	11,200	1,670	1,480	768
15	1,200	1,500	2,980	8,150	8,450	7,550	10,700	7,100	14,800	1,540	1,610	720
16	1,260	1,490	2,710	6,950	7,100	7,400	9,410	6,670	12,200	1,240	1,290	668
17	1,280	1,460	2,710	6,250	6,110	6,810	8,450	5,430	8,450	1,280	1,170	678
18	1,530	1,670	2,980	5,430	5,300	5,970	7,400	4,470	5,970	1,530	951	610
19	1,420	1,400	2,710	4,810	5,300	5,970	6,670	6,370	4,360	1,610	1,000	534
20	1,360	1,480	2,450	4,580	5,180	5,830	6,530	6,810	4,580	3,260	1,040	593
21	1,290	1,600	2,370	4,150	4,810	5,830	5,830	5,560	4,470	2,890	920	472
22	1,160	1,610	2,290	4,050	4,930	6,530	5,430	4,470	3,650	2,000	818	505
23	1,100	1,610	2,710	3,850	5,560	7,000	5,430	4,150	3,450	1,670	798	528
24	1,120	1,610	9,050	3,650	6,390	12,000	5,050	4,050	3,160	1,430	1,130	481
25	1,130	1,730	10,000	3,750	6,110	15,000	4,810	3,450	3,160	1,390	1,080	534
26	1,200	1,480	6,810	3,350	5,560	10,000	5,430	3,350	2,800	1,240	910	575
27	1,230	1,490	4,810	3,650	4,930	8,000	6,530	3,260	2,450	1,420	828	1,210
28	1,320	1,540	3,950	3,750	4,580	10,000	7,100	3,160	2,300	1,610	800	1,260
29	1,290	1,510	3,260	4,050	4,470	20,000	6,250	9,650	2,710	1,410	700	962
30	1,350	1,730	2,980	4,700	-------	27,500	5,300	7,840	2,220	2,000	700	1,020
31	1,270	-------	2,980	7,850	-------	17,000	-------	5,300	-------	1,930	650	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,540	1,070	1,330	0.158	0.18
November	1,930	1,140	1,500	.178	.20
December	10,000	1,550	3,180	.378	.44
January	52,200	3,160	10,600	1.26	1.45
February	20,400	4,470	8,230	.979	1.06
March	73,300	3,850	16,400	1.95	2.25
April	20,000	4,810	9,160	1.09	1.22
May	9,650	3,160	5,280	.628	.72
June	14,800	2,140	4,290	.510	.57
July	3,260	1,240	1,900	.226	.26
August	3,520	650	1,550	.184	.21
September	3,070	472	1,020	.121	.14
The year	73,300	472	5,370	.639	8.70

BLACKWATER RIVER NEAR UNION HALL, VA.

LOCATION.—Water-stage recorder at highway bridge at Kemps Ford, 1½ miles above Gills Creek and 4 miles north of Union Hall, Franklin County.
DRAINAGE AREA.—208 square miles.
RECORDS AVAILABLE.—March 1925 to September 1932.
EXTREMES.—Maximum discharge during year, 2,560 second-feet Mar. 6 (gage height, 6.22 feet); minimum, 13 second-feet Sept. 20 (gage height, 1.42 feet).
1925–32: Maximum discharge, 10,800 second-feet Aug. 11, 1928; minimum, that of Sept. 20, 1932.
REMARKS.—Records excellent. Discharge estimated Oct. 1-5.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	55	47	296	166	102	259	330	103	83	32	17
2	50	51	49	260	150	98	200	276	103	83	35	16
3	50	51	47	136	268	95	185	167	98	76	40	14
4	45	49	51	102	478	108	170	150	96	73	90	16
5	45	49	53	86	294	139	153	143	93	83	80	27
6	45	49	53	105	222	1,120	153	136	93	172	49	27
7	45	47	51	201	189	892	150	127	90	85	62	27
8	43	45	49	262	170	352	139	121	93	78	49	30
9	43	47	70	594	162	264	424	118	83	71	42	21
10	47	49	105	442	143	212	540	150	80	65	35	18
11	49	49	92	243	132	185	460	189	83	58	40	17
12	49	49	70	173	136	167	414	208	106	56	37	17
13	47	47	57	150	136	167	319	189	183	54	34	16
14	47	47	60	158	121	156	264	170	661	58	30	16
15	49	47	80	143	114	139	233	153	212	62	29	17
16	51	47	73	128	111	133	208	146	163	69	27	18
17	51	47	57	114	111	139	189	136	479	67	24	18
18	45	47	53	111	118	174	178	143	237	65	27	17
19	43	45	51	108	108	170	167	167	170	53	112	16
20	45	47	51	98	105	156	160	143	153	47	58	13
21	49	47	51	95	102	146	153	133	133	42	40	16
22	47	47	124	92	121	791	146	130	124	42	34	20
23	47	49	200	89	132	382	143	127	112	38	30	30
24	47	49	92	86	114	255	136	124	106	37	27	44
25	47	49	78	86	108	212	136	121	98	34	26	30
26	47	49	65	83	108	185	136	121	90	34	24	27
27	45	47	57	92	105	214	133	118	98	38	21	32
28	45	45	57	95	105	995	124	130	101	58	20	40
29	57	45	57	92	105	319	121	121	96	49	18	47
30	89	45	55	298	------	225	118	106	96	42	20	40
31	67	------	55	271	------	225	------	106	------	32	17	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	89	43	49.2	0.237	0.27
November	55	45	47.9	.230	.26
December	200	47	68.1	.327	.38
January	594	83	171	.822	.95
February	478	102	153	.736	.79
March	1,120	95	288	1.38	1.59
April	540	118	210	1.01	1.13
May	330	106	152	.731	.84
June	661	80	148	.712	.79
July	172	32	61.4	.295	.34
August	112	17	39.0	.187	.22
September	47	13	23.5	.113	.13
The year	1,120	13	117	.562	7.69

PIGG RIVER NEAR TOSHES, VA.

LOCATION.—Water-stage recorder 0.4 mile below Fryingpan Creek and 1.7 miles northwest of Toshes, Pittsylvania County.
DRAINAGE AREA.—394 square miles.
RECORDS AVAILABLE.—August 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 4,980 second-feet Mar. 6 (gage height, 13.57 feet); minimum, 22 second-feet Aug 31 (gage height, 2.32 feet).
1930–32: Maximum discharge, that of Mar. 6, 1932; minimum, that of Aug. 31, 1932.
REMARKS.—Records excellent.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	91	117	537	334	167	633	305	141	130	82	37
2	84	88	112	494	295	165	474	396	145	116	98	45
3	83	99	102	285	481	169	399	258	159	114	111	103
4	78	104	122	208	742	256	348	221	134	114	111	102
5	79	97	145	186	498	305	323	209	153	126	96	318
6	78	91	124	222	376	2,760	310	207	137	137	86	76
7	80	97	113	876	303	2,140	276	204	139	130	88	65
8	79	97	108	1,200	274	709	271	189	155	119	100	56
9	76	105	143	2,000	246	548	710	187	123	100	82	55
10	78	97	232	1,090	230	405	911	216	143	92	68	42
11	80	107	197	488	218	362	675	240	141	88	83	33
12	83	107	167	348	251	345	638	294	238	96	112	37
13	80	102	147	285	266	305	459	286	230	82	72	41
14	86	99	161	264	225	292	414	243	492	86	58	43
15	91	97	165	237	220	266	370	221	284	195	58	46
16	90	107	145	222	213	242	323	236	255	116	54	47
17	87	105	131	201	222	256	302	209	497	310	52	41
18	73	102	127	201	227	246	284	209	313	145	51	35
19	73	107	125	193	218	232	271	209	212	109	55	30
20	87	102	127	184	215	220	271	207	209	92	65	35
21	87	115	127	171	210	204	266	198	192	83	62	41
22	87	100	525	178	266	1,030	250	198	159	152	49	49
23	83	104	376	178	254	856	245	224	147	242	51	62
24	79	105	234	171	213	390	240	155	137	88	49	54
25	83	108	178	165	197	316	245	139	134	79	40	67
26	76	97	149	161	193	269	258	178	126	83	44	72
27	83	107	149	186	188	251	236	310	194	90	43	72
28	87	105	151	186	182	2,840	226	369	153	318	35	90
29	104	105	151	182	178	959	219	209	147	130	39	89
30	134	118	143	664	-------	538	214	219	123	106	31	81
31	113	-------	141	622	-------	536	-------	151	-------	85	27	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	134	73	85.3	0.216	0.25
November	118	88	102	.259	.29
December	525	102	166	.421	.49
January	2,000	161	406	1.03	1.19
February	742	178	274	.695	.75
March	2,840	165	599	1.52	1.75
April	911	214	369	.937	1.05
May	396	139	229	.581	.67
June	487	123	193	.490	.55
July	318	79	128	.325	.37
August	112	27	66.2	.168	.19
September	318	30	65.5	.166	.19
The year	2,840	27	224	.569	7.74

GOOSE CREEK NEAR HUDDLESTON, VA.

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

DRAINAGE AREA.—187 square miles.

RECORDS AVAILABLE.—September 1930 to September 1932. March 1925 to September 1927 (gage heights only) at a site a quarter of a mile downstream.

EXTREMES.—Maximum stage during year, 10.22 feet Mar. 6 (discharge not determined); minimum discharge, 3 second-feet Aug. 31 (gage height, 0.74 foot).

1930–32: Maximum stage, that of Mar. 6, 1932; minimum discharge, that of Aug. 31, 1932.

REMARKS.—Records good except those for high stages, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	24	41	178	149	61	374	291	53	32	16	11
2	28	33	41	141	144	59	272	175	52	38	22	114
3	26	31	32	91	282	61	222	131	50	28	36	125
4	21	28	38	69	258	85	180	113	50	26	186	257
5	26	31	42	60	216	94	154	101	45	39	65	355
6	26	31	32	93	175	1,370	139	96	48	32	32	62
7	22	30	36	190	149	831	128	89	45	29	29	36
8	21	27	32	356	131	550	118	82	41	34	26	30
9	23	35	47	419	116	425	440	80	39	28	20	24
10	26	32	86	453	103	338	420	85	41	19	17	24
11	23	31	52	239	96	272	359	103	40	24	14	19
12	28	30	42	164	103	225	278	128	56	18	18	26
13	23	32	58	133	108	205	216	103	111	19	14	23
14	26	33	62	126	92	183	175	92	126	17	12	23
15	30	31	62	110	80	151	154	82	63	21	14	26
16	31	36	46	101	80	149	136	78	70	25	10	23
17	27	36	46	92	80	149	123	76	64	68	10	22
18	19	35	44	87	80	233	118	85	49	33	11	16
19	31	33	42	80	72	200	110	89	46	20	26	21
20	26	35	38	76	70	162	106	76	47	18	22	24
21	26	36	44	76	70	141	101	74	45	16	11	23
22	24	32	170	72	89	750	98	72	48	32	14	33
23	27	38	121	70	85	396	94	70	44	22	10	42
24	27	33	67	70	74	264	92	67	35	14	10	30
25	21	38	52	67	72	200	94	65	32	17	9	24
26	30	32	44	63	72	159	98	61	28	18	12	29
27	26	38	42	74	70	141	92	61	40	56	10	28
28	24	33	46	70	69	1,170	85	82	38	57	6	42
29	60	33	46	80	65	425	82	63	40	30	10	47
30	54	39	42	366	-------	303	82	56	36	30	10	32
31	35	-------	41	214	-------	371	-------	56	-------	16	9	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	60	19	27.9	0.149	0.17
November	39	24	32.9	.176	.20
December	170	32	52.7	.282	.33
January	453	60	145	.775	.89
February	282	65	112	.599	.65
March	1,370	59	327	1.75	2.02
April	440	82	171	.914	1.02
May	291	56	93.0	.497	.57
June	126	28	50.7	.271	.30
July	68	14	28.3	.151	.17
August	186	6	22.9	.122	.14
September	355	11	53.0	.283	.32
The year	1,370	6	93.1	.498	6.78

OTTER RIVER NEAR ALTAVISTA, VA.

LOCATION.—Water-stage recorder 1¼ miles below Flat Creek and 6 miles north of Altavista, Campbell County.
DRAINAGE AREA.—372 square miles.
RECORDS AVAILABLE.—August 1929 to September 1932.
EXTREMES.—Maximum discharge during year, about 6,130 second-feet Mar. 6 (gage height, 18.90 feet); minimum, 9 second-feet Sept. 1 (gage height, 1.71 feet).
1929–32: Maximum discharge, about 7,140 second-feet Oct. 2, 1929 (gage height, 21.20 feet); minimum, that of Sept. 1, 1932.
REMARKS.—Records good. Discharge estimated Oct. 19 to Nov. 1, Dec. 7–13, Mar. 9–21, July 24–27.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	60	76	250	323	128	950	326	100	64	34	10
2	50	52	69	261	319	122	678	324	95	64	39	20
3	48	56	59	175	614	121	526	238	91	56	171	53
4	48	56	64	136	674	174	437	214	87	54	789	86
5	47	56	70	125	566	216	360	201	85	65	140	257
6	46	56	68	172	405	2,680	322	190	80	68	79	64
7	45	54	68	652	329	2,770	291	180	80	68	126	37
8	43	56	65	742	285	827	267	170	79	63	56	26
9	45	56	90	1,710	249	650	513	162	73	57	49	23
10	50	59	135	1,040	226	450	598	175	72	50	43	21
11	53	60	120	580	210	400	555	259	70	45	38	19
12	49	59	100	405	212	350	492	429	10[illegible]	41	37	19
13	49	58	85	341	214	310	417	268	133	39	37	19
14	48	57	93	317	178	280	360	217	242	39	32	20
15	55	56	114	274	164	250	339	190	133	59	26	21
16	54	56	87	249	159	220	308	173	12[illegible]	130	25	20
17	49	58	74	220	166	250	298	158	136	87	23	19
18	47	59	71	202	170	240	278	170	95	56	23	16
19	47	63	66	187	150	220	268	183	89	46	90	13
20	48	61	65	171	142	200	257	158	89	36	46	15
21	52	61	63	163	137	180	250	152	92	35	32	16
22	50	61	220	158	175	1,070	244	146	85	74	26	21
23	50	59	262	153	186	653	234	142	7[illegible]	53	24	30
24	50	60	134	145	153	440	227	138	7[illegible]	35	21	38
25	50	61	107	137	143	348	225	134	6[illegible]	30	18	25
26	50	59	83	126	137	298	232	124	6[illegible]	30	16	21
27	48	58	77	143	138	262	219	124	6[illegible]	50	15	25
28	50	61	82	142	134	2,180	203	141	8[illegible]	212	15	41
29	65	62	90	138	131	809	198	128	10[illegible]	68	13	46
30	100	64	85	616	------	546	194	106	8[illegible]	54	11	34
31	75	------	83	575	------	809	------	103	------	39	11	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	100	43	52.0	0.140	0.16
November	64	52	58.5	.157	.18
December	262	59	94.4	.254	.29
January	1,710	125	345	.927	1.07
February	674	131	244	.656	.71
March	2,770	121	595	1.60	1.84
April	950	194	358	.962	1.07
May	429	103	188	.505	.58
June	242	62	94.8	.255	.28
July	212	30	60.2	.162	.19
August	789	11	67.9	.183	.21
September	257	10	35.8	.096	.11
The year	2,770	10	183	.492	6.69

FALLING RIVER NEAR NARUNA, VA.

LOCATION.—Chain gage at highway bridge 2 miles above mouth of Little Falling River and 2½ miles northeast of Naruna, Campbell County.
DRAINAGE AREA.—172 square miles.
RECORDS AVAILABLE.—July 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 3,920 second-feet Mar. 6 (gage height, 13.48 feet); minimum, 4 second-feet Sept. 27 (gage height, 2.20 feet)
1929–32: Maximum discharge, that of Mar. 6, 1932; minimum, that of Sept 27, 1932.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	30	38	43	272	99	64	392	258	50	33	21	9
2	25	35	36	110	188	55	215	110	47	38	23	31
3	27	34	34	64	287	61	188	86	46	33	34	123
4	32	32	42	55	302	97	142	86	46	38	140	16
5	34	32	44	58	243	108	116	77	44	38	33	22
6	29	36	41	175	243	3,120	116	79	46	44	34	17
7	31	40	36	483	123	700	110	72	64	67	27	10
8	32	41	39	700	114	302	101	64	49	39	24	12
9	35	43	61	952	99	202	272	75	50	32	25	8
10	42	43	93	452	99	86	188	132	43	31	20	23
11	37	35	59	202	89	82	215	175	42	25	17	14
12	37	41	59	152	132	126	188	669	65	23	19	8
13	37	34	44	114	110	101	152	188	84	25	27	16
14	38	31	58	97	97	99	126	137	119	30	26	13
15	32	38	50	77	82	89	114	104	54	58	16	12
16	44	43	43	89	77	89	108	88	49	29	14	12
17	36	42	42	72	91	91	101	82	65	39	14	18
18	32	40	39	58	84	88	97	88	54	39	14	16
19	30	42	42	64	70	80	91	80	46	26	34	8
20	38	50	39	65	65	79	88	72	54	27	23	8
21	37	36	42	70	70	77	89	69	51	22	18	8
22	34	38	302	58	112	452	86	69	46	22	14	8
23	33	37	72	62	95	162	80	64	40	31	22	175
24	32	39	67	61	86	116	82	64	40	27	11	82
25	37	42	41	54	80	82	86	61	42	20	14	23
26	37	37	49	45	70	80	106	61	33	21	11	9
27	38	45	46	80	72	202	86	142	52	23	15	5
28	38	46	64	62	67	1,750	80	93	54	67	22	35
29	45	39	52	93	69	258	77	58	114	25	9	23
30	45	44	47	243	------	175	73	58	40	25	10	12
31	36	------	39	160	------	607	------	55	------	19	10	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	45	25	35.2	0.205	0.24
November	50	31	39.1	.227	.25
December	302	34	56.9	.331	.38
January	952	45	171	.994	1.15
February	302	65	118	.686	.74
March	3,120	55	312	1.81	2.09
April	392	73	132	.767	.86
May	669	55	113	.657	.76
June	119	33	54.3	.316	.35
July	67	19	32.8	.191	.22
August	140	9	23.9	.139	.16
September	175	5	25.9	.151	.17
The year	3,120	5	93.1	.541	7.37

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 mouth.
DRAINAGE AREA.—43 square miles.
RECORDS AVAILABLE.—July 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 1,820 second-feet Mar. 6 (gage height, 15.12 feet); minimum, 1 second-foot July 30, 31, Aug. 1, Sept. 23.
1929–32: Maximum discharge, that of Mar. 6, 1932; minimum, 1 second-foot several times in 1930 and 1932.
REMARKS.—Records poor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	a 15	8	60	27	17	122	a 90	23	20	1	a 2
2	8	14	6	27	67	17	56	35	17	11	10	a 3
3	8	6	8	a 20	122	17	a 46	20	13	a 15	a 15	a 3
4	a 8	6	8	17	118	87	36	17	16	27	a 6	a 3
5	8	6	8	24	56	38	29	22	a 16	12	4	a 3
6	8	6	a 7	20	45	1,820	25	20	43	8	63	4
7	11	6	6	95	a 42	a 300	29	24	17	38	a 10	3
8	6	a 15	6	304	38	142	27	a 20	13	17	4	a 4
9	8	17	14	291	31	63	91	17	14	10	5	4
10	8	6	24	a 120	27	41	a 50	19	16	a 8	2	4
11	a 8	8	14	48	24	56	60	29	12	a 6	5	a 4
12	8	6	8	27	56	38	48	152	a 12	4	5	a 3
13	6	8	a 11	34	34	a 35	34	56	26	3	10	25
14	6	6	8	27	a 29	32	27	30	26	4	a 8	2
15	6	a 6	8	27	24	31	25	a 28	20	3	a 3	4
16	6	6	8	24	24	29	31	27	17	6	2	4
17	6	6	8	a 24	27	24	a 29	20	16	a 6	2	a 4
18	a 6	14	8	24	34	27	27	26	18	6	3	a 3
19	6	6	8	17	27	27	27	26	a 18	19	4	2
20	6	20	a 8	14	20	a 26	25	20	17	4	4	4
21	6	8	8	24	a 22	34	20	22	17	3	a 6	a 4
22	20	a 9	173	14	48	39	22	a 19	13	12	8	4
23	17	6	34	17	34	39	20	16	12	6	a 6	1
24	14	8	20	a 16	24	31	a 20	17	8	a 5	a 3	7
25	a 17	6	a 15	14	20	24	20	14	13	a 4	a 4	a 4
26	17	6	11	20	20	28	41	16	a 13	3	a 3	2
27	6	6	a 13	38	20	a 100	17	173	13	4	a 4	4
28	8	6	17	17	a 18	508	16	37	13	11	a 5	11
29	6	a 9	14	34	17	71	25	a 25	23	2	a 3	7
30	6	8	14	173	------	46	27	17	10	1	a 2	a 4
31	6	------	14	a 80	------	184	------	19	------	a 1	a 2	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20	6	8.6	0.200	0.23
November	20	6	8.5	.198	.22
December	173	6	16.7	.388	.45
January	304	14	54.5	1.27	1.46
February	122	17	37.8	.879	.95
March	1,820	17	128	2.98	3.44
April	122	16	35.7	.830	.93
May	173	14	34.6	.805	.93
June	43	8	16.8	.391	.44
July	38	1	9.0	.209	.24
August	63	1	6.8	.158	.18
September	25	1	4.5	.105	.12
The year	1,820	1	30.3	.705	9.59

a Estimated.

DAN RIVER NEAR FRANCISCO, N.C.

LOCATION.—Water-stage recorder 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 1932.

EXTREMES.—Maximum discharge during year, 2,300 second-feet Mar. 6 (gage height, 4.60 feet); minimum, 7.1 second-feet Sept. 8 (gage height, 0.43 foot). 1924–32: Maximum discharge (estimated), 8,700 second-feet Dec. 8, 1924 (gage height, 10.0 feet); minimum, that of Sept. 8, 1932.

REMARKS.—Records good below and fair above 1,500 second-feet. Slight diurnal fluctuation from operation of gristmills up stream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	59	71	209	156	94	345	290	100	116	59	32
2	56	59	68	171	164	92	257	197	96	90	168	33
3	50	56	68	117	292	96	218	158	94	77	129	35
4	50	59	109	98	313	153	197	151	92	77	109	121
5	50	56	115	88	215	143	186	146	86	84	78	125
6	48	54	84	152	180	817	174	138	84	80	116	51
7	50	58	75	420	164	298	166	131	84	75	96	42
8	51	59	66	364	156	209	277	129	86	73	73	36
9	48	61	100	510	148	194	548	136	82	75	66	35
10	56	58	153	295	134	153	389	161	77	61	59	35
11	54	64	117	200	131	138	538	197	100	61	61	33
12	54	61	94	166	151	153	342	188	180	58	56	42
13	53	61	94	186	153	136	274	161	202	56	54	38
14	50	61	148	200	129	126	264	141	250	53	51	38
15	51	59	126	158	126	117	231	134	138	53	50	39
16	51	64	98	143	124	122	209	126	111	80	45	36
17	48	62	90	131	126	138	200	131	120	204	50	32
18	44	68	92	124	124	169	186	136	124	94	71	30
19	47	66	86	115	115	146	177	131	171	68	75	32
20	47	64	82	106	111	141	171	122	149	59	61	30
21	50	66	94	104	113	143	166	122	189	58	54	38
22	48	66	323	102	141	490	169	122	120	72	50	35
23	48	66	186	100	124	281	161	117	113	82	45	61
24	48	64	122	98	113	212	156	111	98	58	43	68
25	45	68	100	94	109	180	161	106	88	61	42	47
26	48	66	88	94	106	166	171	104	88	58	39	43
27	45	66	80	122	104	296	151	130	189	80	39	54
28	51	66	82	106	104	544	143	129	129	122	35	210
29	135	66	80	109	100	257	138	104	104	77	42	77
30	96	69	77	338	-------	209	141	100	90	61	36	58
31	66	-------	82	218	-------	367	-------	100	-------	56	35	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	135	44	54.6	0.459	0.53
November	69	54	62.4	.524	.58
December	323	66	105	.882	1.02
January	510	88	175	1.47	1.70
February	313	100	146	1.23	1.33
March	817	92	219	1.84	2.12
April	548	138	230	1.93	2.15
May	290	100	140	1.18	1.36
June	250	77	121	1.02	1.14
July	204	53	76.7	.645	.74
August	168	35	64.1	.539	.62
September	210	30	52.9	.445	.50
The year	817	30	120	1.01	13.79

DAN RIVER AT LEAKSVILLE, N.C.

LOCATION.—Water-stage recorder at covered wagon bridge at Leaksville, Rockingham County, half a mile above Smith River.
DRAINAGE AREA.—1,150 square miles.
RECORDS AVAILABLE.—July 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 15,000 second-feet Mar. 7 (gage height, 16.74 feet); minimum, 84 second-feet Sept. 12 (gage height, 0.25 foot).
1929–32: Maximum discharge, 18,500 second-feet Oct. 2, 1929 (gage height, 21.4 feet); minimum, that of Sept. 12, 1932.
REMARKS.—Records good except those estimated Jan. 2, 3, Aug. 28–30, which are fair. Diurnal regulation caused by operation of power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	335	350	370	1,240	1,310	667	3,330	895	506	501	350	188
2	322	317	345	1,920	1,050	616	2,170	1,280	522	644	435	223
3	304	335	234	1,280	1,840	567	1,640	1,080	512	655	805	435
4	299	335	490	835	3,600	644	1,370	835	501	420	655	304
5	277	308	644	685	2,100	1,080	1,210	805	435	545	446	241
6	290	326	501	709	1,440	8,380	1,080	757	468	506	561	685
7	265	326	446	5,450	1,140	12,700	1,020	715	534	616	1,940	312
8	248	308	410	6,210	1,020	3,160	955	745	468	644	685	226
9	248	326	395	12,000	925	2,170	2,360	805	468	457	474	177
10	248	345	715	5,860	895	1,680	2,830	985	594	365	385	164
11	277	326	763	2,330	805	1,340	3,250	1,210	739	345	330	169
12	299	335	606	1,580	1,040	1,210	3,290	1,440	3,330	350	308	114
13	286	330	528	1,290	1,810	1,110	2,030	1,280	2,410	326	299	179
14	290	335	606	1,180	1,140	1,080	1,720	955	3,970	299	269	156
15	299	416	805	1,110	925	925	1,580	835	1,610	496	282	169
16	290	335	661	985	895	895	1,370	763	1,050	628	273	164
17	335	345	578	895	835	865	1,240	775	955	1,600	230	179
18	248	345	496	835	835	865	1,180	1,210	955	835	290	156
19	241	317	512	775	775	835	1,050	955	865	534	360	144
20	248	322	452	727	715	835	1,020	775	805	390	335	144
21	265	350	420	703	745	805	985	715	895	330	290	156
22	282	340	2,120	673	365	1,530	925	703	925	299	290	177
23	277	350	2,910	644	1,020	2,760	895	667	733	350	248	286
24	282	345	1,250	655	865	1,610	835	685	594	385	212	326
25	265	345	865	667	775	1,280	835	611	529	345	200	317
26	273	335	691	616	757	1,050	955	589	479	345	197	304
27	277	326	622	655	697	985	1,110	644	479	330	188	290
28	248	330	567	739	703	6,890	985	985	685	753		624
29	286	326	622	703	600	3,140	835	835	893	650	190	1,230
30	446	345	534	1,470	------	1,750	769	633	703	540		524
31	474	------	512	2,460	------	1,700	------	572	------	360	197	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	474	241	291	0.253	0.29
November	416	308	336	.292	.33
December	2,910	234	699	.608	.70
January	12,000	616	1,870	1.63	1.88
February	3,600	600	1,110	.965	1.04
March	12,700	467	2,100	1.83	2.11
April	3,330	769	1,490	1.30	1.45
May	1,440	572	863	.750	.86
June	3,970	435	954	.830	.93
July	1,600	299	511	.444	.51
August	1,940	188	390	.339	.39
September	1,230	114	292	.254	.28
The year	12,700	114	909	.790	10.77

DAN RIVER AT SOUTH BOSTON, VA.

LOCATION.—Water-stage recorder at Norfolk & Western Railway bridge at South Boston, Halifax County, 6 miles above Banister River.
DRAINAGE AREA.—2,730 square miles.
RECORDS AVAILABLE.—August 1900 to May 1907; April 1923 to September 1932.
EXTREMES.—Maximum discharge during year, 28,700 second-feet Mar. 8 (gage height, 24.48 feet); minimum, 161 second-feet Sept. 20 (gage height, 3.11 feet).
1900–1907, 1923–32: Maximum discharge, 52,600 second-feet Dec. 31, 1901 (gage height, 25.2 feet, old datum); minimum, that of Sept. 20, 1932.
REMARKS.—Records excellent. Discharge estimated for May 26, May 31 to June 8. Water supply for South Boston diverted just above gage. Dams and mills at Danville regulate low-water flow to some extent.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	728	869	546	1,790	4,560	1,480	6,690	1,370	1,600	1,240	936	272
2	590	912	595	4,150	2,840	1,320	7,460	1,570	1,500	1,220	531	248
3	579	454	567	4,230	3,540	1,360	4,540	2,030	1,400	1,280	660	1,290
4	625	486	712	2,520	6,090	1,340	3,480	2,030	1,300	1,090	740	856
5	587	570	740	1,860	8,530	1,680	2,840	1,750	1,200	681	1,200	501
6	466	618	1,050	1,570	4,850	12,000	2,520	1,510	1,050	935	949	644
7	414	624	1,080	1,760	2,970	23,700	2,300	1,310	1,150	964	1,170	602
8	448	518	740	11,900	2,540	27,800	2,140	1,280	1,050	812	2,110	816
9	485	724	873	25,800	2,340	15,200	3,300	1,510	934	1,270	2,020	526
10	494	484	1,180	27,200	2,080	4,740	5,630	1,510	844	1,040	941	362
11	553	474	1,230	8,200	1,890	3,530	5,680	1,780	2,480	1,000	841	320
12	592	618	1,500	5,850	1,900	2,840	6,680	2,300	4,380	650	760	373
13	434	632	1,310	3,480	2,790	2,500	6,250	2,870	8,080	614	608	268
14	428	600	1,130	2,800	3,610	2,370	4,100	2,620	11,400	539	622	254
15	479	653	1,150	2,460	2,270	2,140	3,540	2,330	8,740	701	412	208
16	471	728	1,380	2,280	2,040	1,860	2,980	1,620	3,840	748	347	260
17	568	494	1,260	1,910	1,880	1,820	2,560	1,590	2,420	1,020	387	226
18	532	641	1,010	1,820	1,760	2,070	2,470	3,980	1,780	2,060	469	220
19	540	698	966	1,690	1,750	1,950	2,200	2,960	2,040	1,910	400	219
20	447	661	925	1,510	1,640	1,900	2,040	2,220	1,550	1,130	438	211
21	404	700	974	1,420	1,520	1,870	2,100	1,700	1,580	814	615	250
22	426	696	1,490	1,280	1,750	2,130	2,100	1,860	1,470	804	468	270
23	491	698	6,510	1,310	2,200	3,660	1,890	1,460	1,650	786	374	292
24	506	530	5,080	1,170	2,180	5,510	1,510	1,360	1,470	560	328	339
25	488	614	2,400	1,250	1,880	2,950	1,510	1,480	1,050	726	325	862
26	663	570	1,720	1,360	1,700	2,250	1,630	1,400	1,040	478	336	339
27	406	554	1,400	1,280	1,520	1,820	2,030	1,340	1,080	620	354	513
28	413	792	1,220	1,380	1,440	3,840	1,960	4,560	815	641	313	556
29	408	617	1,280	1,400	1,470	9,510	1,630	2,690	963	828	304	1,070
30	470	706	1,220	1,940	-------	7,220	1,370	1,590	1,440	1,200	274	1,650
31	526	-------	1,110	3,120	-------	4,140	-------	1,500	-------	1,150	304	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	728	404	505	0.185	0.21
November	912	454	631	.231	.26
December	6,510	546	1,430	.524	.60
January	27,200	1,170	4,570	1.67	1.92
February	8,530	1,440	2,670	.978	1.05
March	27,800	1,320	5,110	1.87	2.16
April	7,460	1,370	3,240	1.19	1.33
May	4,560	1,280	1,970	.722	.83
June	11,400	815	2,380	.872	.97
July	2,060	539	952	.349	.40
August	2,110	274	662	.242	.28
September	1,650	208	494	.181	.20
The year	27,800	208	2,050	.751	10.21

MAYO RIVER NEAR PRICE, N.C.

LOCATION.—Water-stage recorder just below Anglins Bridge, three quarters of mile below State line, and 4 miles west of Price, Rockingham County.
DRAINAGE AREA.—260 square miles.
RECORDS AVAILABLE.—July 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 7,300 second-feet Mar. 6 (gage height, 7.01 feet); minimum, 41 second-feet Sept. 19 (gage height, 0.52 foot). 1929–32: Maximum discharge (estimated), 15,900 second-feet Oct. 2, 1929 (gage height, 10.2 feet); minimum, that of Sept. 19, 1932.
REMARKS.—Records good except those estimated Nov. 22–26, 28–30, Dec. 27–31, Jan. 2–4, 6–13, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	108	90	609	232	153	620	292	138	148	88	57
2	90	101	92	272	236	148	450	263	132	169	207	54
3	88	92	95	207	426	148	375	221	129	129	181	56
4	84	90	133	186	510	370	332	207	129	125	132	73
5	81	88	141	172	360	288	305	200	121	121	114	216
6	74	90	116	350	292	3,500	288	197	118	121	538	94
7	84	93	106	1,280	259	1,120	267	190	118	132	568	77
8	75	90	95	775	244	609	297	181	114	155	160	57
9	75	93	144	1,320	228	510	1,140	200	112	110	129	58
10	85	97	203	761	214	400	570	280	112	102	118	49
11	82	92	155	428	207	341	1,200	221	136	96	94	59
12	85	97	137	280	232	323	650	236	450	94	98	49
13	81	90	130	255	247	301	482	224	292	91	91	59
14	82	90	190	247	210	271	444	197	695	94	89	49
15	90	102	160	224	204	244	380	187	276	106	83	59
16	80	93	135	210	200	240	336	178	207	126	81	51
17	75	87	128	193	197	236	318	178	230	344	83	61
18	73	106	130	187	193	228	297	193	280	136	102	52
19	69	90	124	178	175	210	284	190	214	110	116	44
20	87	95	124	166	160	204	271	175	204	98	89	53
21	80	106	120	163	160	204	263	169	433	86	88	52
22	80	102	714	158	224	652	259	172	204	91	80	66
23	82	102	327	155	190	460	247	163	184	114	78	64
24	81	101	210	153	172	336	244	155	153	94	71	89
25	81	101	178	148	163	288	244	150	138	98	68	78
26	77	99	158	143	160	263	259	146	132	84	66	60
27	73	99	153	175	160	452	244	247	252	123	59	86
28	81	97	148	160	158	2,110	224	279	175	366	59	223
29	129	95	137	155	153	554	221	160	155	136	59	110
30	126	92	133	473	------	390	214	143	136	125	61	91
31	106	------	167	323	------	556	------	138	------	98	58	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	129	69	84.5	0.325	0.37
November	108	87	95.9	.369	.41
December	714	90	164	.631	.73
January	1,320	143	339	1.30	1.50
February	510	153	226	.869	.94
March	3,500	148	520	2.00	2.31
April	1,200	214	391	1.50	1.67
May	292	138	198	.762	.88
June	450	112	206	.792	.88
July	366	84	130	.500	.58
August	568	58	126	.485	.56
September	223	44	74.9	.288	.32
The year	3,500	44	213	.819	11.15

NORTH MAYO RIVER NEAR SPENCER, VA.

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

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—October 1928 to September 1932.

EXTREMES.—Maximum discharge during year, about 2,140 second-feet Mar. 6 (gage height, 6.43 feet); minimum, 20 second-feet Sept. 19 (gage height, 2.07 feet).

1928–32: Maximum discharge, about 3,700 second-feet Oct. 2, 1929 (gage height, 8.08 feet); minimum, 19 second-feet Sept. 2–5, 1930.

REMARKS.—Records good except those for July, August, and September and those above 700 second-feet, which are fair. Discharge estimated July 16, 17, 20–27, July 29 to Aug. 2, Aug. 6.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	28	35	509	108	66	186	71	71	122	49	27
2	45	28	35	156	119	60	148	68	68	98	35	27
3	46	26	38	110	155	55	143	68	68	71	138	25
4	40	26	53	88	158	145	128	63	68	64	94	27
5	36	26	53	88	119	106	115	64	63	61	79	94
6	30	29	53	126	102	1,050	106	71	60	52	60	64
7	30	29	51	578	92	423	96	71	56	49	138	55
8	28	33	53	700	92	403	90	86	55	47	94	42
9	28	30	65	930	92	288	578	100	55	47	49	27
10	28	30	95	270	88	254	169	126	58	46	44	26
11	27	30	98	145	88	145	364	122	108	46	39	26
12	28	30	86	126	106	133	197	108	206	44	35	24
13	28	33	88	115	88	126	150	98	115	44	34	22
14	26	33	105	100	84	119	161	98	128	46	35	22
15	26	32	92	88	96	111	143	102	104	41	33	21
16	33	30	88	80	92	106	119	98	106	35	34	22
17	28	33	88	77	92	94	102	96	113	60	34	22
18	30	46	88	75	88	86	98	119	102	98	34	20
19	33	50	86	77	88	86	98	102	133	94	50	20
20	28	44	88	73	80	82	100	98	122	60	49	22
21	28	39	92	68	96	79	98	94	254	40	42	24
22	28	35	383	63	119	237	98	96	164	40	35	24
23	28	38	306	60	104	288	94	94	136	35	32	24
24	25	35	156	60	92	143	90	86	111	35	31	27
25	25	35	105	60	88	100	86	82	102	35	30	31
26	22	36	80	60	75	86	90	75	102	35	28	30
27	23	38	84	86	70	86	82	197	138	60	27	32
28	24	38	73	77	66	930	77	164	102	138	29	102
29	30	38	75	88	66	364	71	133	92	90	27	94
30	36	35	92	169	-------	237	71	94	96	60	27	86
31	30	-------	92	128	-------	169	-------	79	-------	50	27	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	46	22	30.4	0.281	0.32
November	50	26	33.8	.313	.35
December	383	35	96.0	.889	1.02
January	930	60	175	1.62	1.87
February	158	66	96.7	.895	.97
March	1,050	55	215	1.99	2.29
April	578	71	138	1.28	1.43
May	197	63	97.5	.903	1.04
June	254	55	105	.972	1.08
July	138	35	59.5	.551	.64
August	138	27	47.9	.444	.51
September	102	20	37.0	.343	.38
The year	1,050	20	94.5	.875	11.90

SMITH RIVER AT MARTINSVILLE, VA.

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

DRAINAGE AREA.—374 square miles.

RECORDS AVAILABLE.—August 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 5,660 second-feet Mar. 6 (gage height, 6.60 feet); minimum, 9 second-feet Nov. 29, 30 (gage height, 1.33 feet).

1929–32: Maximum discharge, about 15,200 second-feet Oct. 2, 1929 (gage height, 12.27 feet); minimum, 7 second-feet Aug. 27, 1930, Feb. 17, Sept. 15, 1931.

REMARKS.—Records excellent except those estimated Feb. 9–15, Feb. 15 to Mar. 5, Apr. 13, 14, which are fair. Flow regulated by dam and power plant 1,000 feet upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	112	116	959	567	270	858	534	222	230	115	70
2	93	95	132	556	428	260	601	456	185	192	122	65
3	114	106	112	284	462	250	509	296	150	100	158	69
4	85	134	142	256	696	240	438	118	152	92	194	89
5	110	104	158	224	638	350	395	92	123	132	153	138
6	90	115	146	282	474	2,290	374	150	196	146	138	162
7	94	110	131	1,100	416	1,460	354	248	202	206	253	137
8	102	112	136	1,240	400	703	344	206	153	220	196	106
9	98	106	144	1,740	350	574	884	251	168	202	186	100
10	110	128	374	878	300	433	1,080	313	122	149	132	77
11	104	116	258	510	280	389	1,170	249	140	134	120	30
12	108	114	185	406	270	359	1,120	328	33[illegible]	152	112	75
13	94	116	176	340	310	339	870	398	50[illegible]	123	122	76
14	111	116	250	348	502	312	620	292	1,120	152	42	72
15	103	98	204	306	450	282	359	180	692	126	110	72
16	116	114	163	288	350	277	431	218	296	132	112	75
17	115	114	132	268	320	303	320	251	306	155	102	60
18	94	118	154	244	290	349	352	392	292	208	90	29
19	96	112	112	225	270	339	396	320	286	202	92	70
20	94	93	160	206	240	359	416	269	241	134	102	70
21	94	122	164	214	400	369	246	206	316	122	27	73
22	98	125	598	208	350	1,050	208	212	266	116	94	70
23	102	111	436	200	330	1,020	290	268	225	118	89	72
24	104	123	234	228	310	534	260	226	226	100	85	74
25	91	118	206	216	290	427	276	232	212	124	80	27
26	114	120	146	235	280	369	338	241	155	118	80	78
27	110	110	150	296	270	344	264	227	348	130	72	100
28	90	124	176	342	260	2,610	220	180	279	194	27	159
29	147	116	141	349	260	922	259	177	242	199	77	118
30	174	90	141	416	-------	581	276	218	224	180	77	81
31	136	-------	147	616	-------	609	-------	213	-------	142	73	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	174	85	107	0.286	0.33
November	134	90	113	.302	.34
December	598	112	191	.511	.59
January	1,740	200	451	1.21	1.40
February	696	240	371	.992	1.07
March	2,610	240	612	1.64	1.89
April	1,170	208	484	1.29	1.44
May	534	92	257	.687	.79
June	1,120	122	280	.749	.84
July	230	92	153	.409	.47
August	253	27	111	.297	.34
September	162	27	83.1	.222	.25
The year	2,610	27	267	.714	9.751

LEATHERWOOD CREEK NEAR OLD LIBERTY, VA.

LOCATION.—Chain gage at 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 1932.
EXTREMES.—Maximum discharge during year (estimated), 500 second-feet Mar. 6; minimum, 1 second-foot numerous days in September.
1925–32: Maximum discharge, 2,970 second-feet Aug. 11, 1928 (gage height, 14.37 feet); minimum, that of September 1932.
REMARKS.—Records poor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	a 8	15	a 250	48	33	172	a 50	19	12	7	2
2	5	9	14	84	48	33	80	36	17	11	15	6
3	5	9	14	a 40	114	33	a 50	29	15	a 11	28	2
4	a 5	9	29	31	180	202	40	29	15	a 11	12	a 2
5	5	9	22	29	100	100	38	29	a 14	11	8	a 20
6	4	9	a 18	46	66	a 500	38	29	14	11	8	9
7	4	9	16	426	a 50	279	36	26	14	11	a 8	3
8	4	a 10	15	409	46	74	36	a 24	13	11	7	1
9	5	11	15	494	44	69	128	23	14	9	7	1
10	8	11	42	a 150	41	35	a 70	31	14	a 8	6	1
11	a 7	11	30	87	39	34	114	33	14	8	6	a 1
12	6	11	23	64	61	33	87	42	a 50	7	6	1
13	5	11	a 23	50	66	a 29	62	54	34	6	6	1
14	6	11	52	43	a 50	25	69	31	55	6	a 5	1
15	6	a 12	28	38	44	19	57	a 29	26	25	4	2
16	6	12	22	35	44	19	44	27	25	9	3	3
17	7	12	22	a 34	44	24	a 40	25	22	a 40	3	1
18	a 6	12	22	33	42	22	38	107	20	24	3	a 1
19	6	14	20	28	38	21	36	37	a 20	16	7	a 1
20	7	14	a 19	25	36	a 20	35	29	20	11	5	a 1
21	7	14	18	25	a 40	20	35	27	18	11	a 4	2
22	7	a 14	247	25	a 45	142	34	a 26	16	11	4	5
23	7	14	61	25	42	61	32	25	12	17	3	6
24	7	14	22	a 24	38	35	a 32	21	10	a 12	4	22
25	a 6	14	a 24	24	36	27	32	21	12	11	4	a 8
26	6	a 13	25	24	35	25	42	20	a 12	10	4	6
27	6	12	a 25	38	36	a 25	34	19	19	10	3	11
28	8	14	25	28	a 34	477	28	38	16	25	a 3	17
29	15	a 14	23	29	33	107	28	a 25	15	11	3	11
30	11	15	22	172	------	62	30	a 20	14	10	2	8
31	8	------	21	a 100	------	100	------	19	------	a 8	2	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15	4	6.5	0.096	0.11
November	15	8	11.7	.172	.19
December	247	14	31.4	.462	.53
January	494	24	93.9	1.38	1.59
February	180	33	53.1	.781	.84
March	500	19	86.6	1.27	1.46
April	172	28	53.2	.782	.87
May	107	19	31.6	.465	.54
June	55	10	19.3	.284	.32
July	40	6	12.7	.187	.22
August	28	2	6.1	.090	.10
September	22	1	5.2	.076	.08
The year	500	1	34.3	.504	6.85

a Estimated.

SANDY RIVER NEAR DANVILLE, VA.

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

DRAINAGE AREA.—113 square miles.

RECORDS AVAILABLE.—November 1929 to September 1932.

EXTREMES.—Maximum discharge during year, about 3,570 second-feet Mar. 6 (gage height, 8.69 feet); minimum, 7 second-feet Sept. 1 (gage height, 0.42 foot).

1929–32: Maximum discharge, about 6,280 second-feet Aug. 22, 1931 (gage height, 9.45 feet); minimum, 3 second-feet Sept. 29, 1930 (gage height, 0.40 foot).

REMARKS.—Records good except those for high stages and those estimated, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	28	34	124	59	34	212	98	a 50	27	a 20	8
2	20	32	32	61	66	32	124	73	a 50	33	a 50	8
3	20	30	30	39	248	30	100	64	47	29	35	20
4	17	30	41	32	182	134	95	64	a 45	27	25	12
5	18	32	41	28	108	79	86	62	a 40	29	22	88
6	20	34	34	43	71	2,040	89	57	a 40	29	36	49
7	20	30	32	305	59	657	81	55	a 40	27	27	19
8	18	30	39	1,100	54	214	81	a 60	a 35	25	19	15
9	20	34	71	a1,600	52	128	124	a 75	a 35	22	18	13
10	24	32	64	a 400	45	78	92	a 90	30	19	16	13
11	21	32	43	a 200	41	78	103	a 100	34	21	16	13
12	23	32	32	a 150	98	81	103	a 75	28	19	16	12
13	23	34	32	a 90	89	95	92	a 70	87	19	17	13
14	21	34	71	a 100	66	98	110	a 65	109	18	15	11
15	21	34	45	a 70	59	92	95	60	49	32	13	13
16	26	35	34	a 60	52	76	84	a 65	118	22	13	13
17	23	34	30	a 55	50	84	78	a 75	53	85	11	13
18	20	32	30	52	48	84	78	a 100	45	32	13	11
19	21	32	28	a 45	41	69	73	a 70	43	22	17	10
20	21	34	26	a 40	41	57	71	a 60	43	21	15	11
21	21	34	35	35	41	53	71	a 55	37	19	16	13
22	21	32	387	34	66	221	71	60	35	17	10	15
23	20	35	68	32	45	128	69	a 80	35	19	12	19
24	20	34	35	32	41	92	69	a 60	34	17	10	25
25	20	34	30	34	39	84	69	a 55	32	17	10	17
26	24	32	26	32	37	81	95	a 50	29	a 17	10	16
27	24	30	23	39	35	76	71	a 45	35	a 50	9	18
28	24	32	23	34	35	275	66	a 40	33	a 30	10	52
29	43	28	21	32	32	120	64	60	32	22	8	27
30	39	30	20	143	------	89	64	a 50	33	a 20	9	18
31	28	------	21	82	------	131	------	a 60	------	a 20	8	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	43	17	22.6	0.200	0.23
November	35	28	32.2	.285	.32
December	387	20	47.7	.422	.49
January	1,600	28	165	1.46	1.68
February	248	32	65.5	.580	.63
March	2,040	30	180	1.59	1.83
April	212	64	89.3	.790	.88
May	100	40	66.2	.586	.68
June	116	29	47.1	.417	.47
July	85	17	26.0	.230	.27
August	50	8	17.0	.150	.17
September	88	8	19.5	.173	.19
The year	2,040	8	65.1	.576	7.84

a Estimated.

BANISTER RIVER AT HALIFAX, VA.

LOCATION.—Water-stage recorder 1 mile north of Halifax, Halifax County, and 10 miles above mouth.
DRAINAGE AREA.—552 square miles.
RECORDS AVAILABLE.—December 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 6,600 second-feet Mar. 7 (gage height, 21.89 feet); minimum, 6 second-feet numerous days in August and September.
1928–32: Maximum discharge, 7,510 second-feet Oct. 3, 1929 (gage height, 24.02 feet); minimum, that of August and September 1932.
REMARKS.—Records excellent. Discharge estimated Jan. 15, Apr. 5–10. Flow regulated except for high stages by power plant half a mile upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	99	79	489	611	232	1,230	318	228	98	84	34
2	60	48	74	515	479	250	994	447	173	129	176	7
3	64	40	114	176	608	206	608	474	137	130	55	453
4	58	74	86	204	1,270	480	530	330	224	28	180	354
5	104	93	130	174	1,310	749	480	220	130	20	57	581
6	74	38	98	198	790	3,130	420	231	155	110	72	662
7	72	110	141	532	424	6,340	380	236	235	80	10	622
8	48	82	79	1,200	587	5,000	350	104	127	101	218	252
9	20	32	306	3,530	414	1,610	500	218	114	60	161	52
10	20	112	112	3,660	381	843	700	242	65	68	180	89
11	88	82	226	1,920	279	656	799	253	230	48	56	50
12	42	71	234	841	485	444	788	352	404	21	320	30
13	48	111	78	648	596	383	614	486	545	54	186	66
14	77	77	201	224	440	618	528	395	650	46	9	96
15	78	84	92	250	593	443	516	202	392	182	57	66
16	126	62	168	285	240	262	460	230	228	148	83	84
17	86	102	94	264	288	376	411	244	240	24	154	7
18	18	118	158	278	364	392	446	606	228	101	8	18
19	17	92	208	212	272	205	390	532	72	80	7	7
20	18	110	22	242	234	272	280	446	244	84	50	7
21	78	80	150	207	309	316	334	141	205	26	60	54
22	42	70	691	185	306	520	248	196	122	118	29	60
23	82	100	939	300	430	802	314	246	124	70	37	51
24	38	125	726	104	368	598	268	227	38	89	34	39
25	81	70	240	204	197	512	348	118	207	44	44	31
26	48	78	218	186	232	490	386	221	42	46	35	37
27	54	109	130	268	260	215	408	247	46	298	48	48
28	100	86	196	263	204	1,560	404	1,660	246	540	26	10
29	47	82	120	268	222	1,630	223	833	35	396	8	30
30	90	146	174	489	------	806	254	486	78	394	6	30
31	62	------	168	692	------	702	------	153	------	108	7	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	126	17	60.8	0.110	0.13
November	146	32	86.1	.156	.17
December	939	22	208	.377	.43
January	3,660	104	613	1.11	1.28
February	1,310	197	455	.824	.89
March	6,340	205	1,000	1.81	2.09
April	1,230	228	487	.882	.98
May	1,660	104	358	.649	.75
June	650	35	199	.361	.40
July	540	20	121	.219	.25
August	320	6	79.5	.144	.17
September	662	7	131	.237	.26
The year	6,340	6	317	.574	7.80

HYCO RIVER NEAR DENNISTON, VA.

LOCATION.—Chain gage at highway bridge 2 miles east of Denniston, Halifax County, and 8 miles south of South Boston.
DRAINAGE AREA.—219 square miles.
RECORDS AVAILABLE.—July 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 3,190 second-feet Mar. 8 (gage height, 18.58 feet); minimum, 0.004 second-foot Sept. 14 (gage height, 3.58 feet) from discharge measurement.
1929–32: Maximum discharge, that of Mar. 8, 1932; minimum, that of Sept. 14, 1932.
REMARKS.—Records good except those estimated July 10, 11, Aug. 27, Sept. 1–25, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	5.7	9.4	180	316	112	616	102	35	38	3.2	
2	11	4.8	10	486	240	92	500	128	32	24	5.2	
3	13	7.3	13	368	600	83	368	112	31	58	2.8	
4	15	4.1	17	145	962	102	303	88	33	88	5.0	
5	9.7	3.2	17	66	1,400	107	180	78	28	54	3.5	
6	8.1	3.3	22	58	812	2,290	145	70	18	16	29	
7	7.3	6.2	16	102	355	2,810	140	66	70	18	39	
8	5.7	4.6	16	1,160	264	3,190	123	54	74	14	54	
9	7.8	4.8	20	2,010	240	2,580	316	58	22	13	33	
10	11	4.4	16	2,660	216	446	277	48	18	10	18	
11	10	4.6	97	2,730	168	368	252	54	156	6	12	
12	7.5	7.0	37	1,840	180	277	216	54	459	1.6	15	
13	3.9	6.2	11	433	228	252	277	62	1,910	3.3	3.2	0.1
14	5.7	5.7	17	303	433	216	228	92	2,130	2.3	3.0	
15	8.1	5.7	13	252	394	168	168	62	570	2.6	2.3	
16	4.2	5.7	10	204	316	145	145	44	145	16	1.5	
17	7.3	5.0	19	145	192	145	128	48	78	11	1.5	
18	18	6.2	15	128	156	145	112	97	51	6.0	2.6	
19	5.7	5.5	15	128	140	134	102	66	44	3.5	3.3	
20	5.0	7.0	16	112	134	123	74	48	37	1.9	3.9	
21	3.5	14	13	102	128	123	92	43	43	2.8	1.8	
22	3.0	16	54	83	252	145	88	43	35	2.1	1.6	
23	2.8	6.2	216	92	368	290	83	38	27	1.7	.8	
24	2.6	12	180	88	240	303	83	34	26	1.5	.8	
25	1.9	10	134	78	216	145	107	40	21	4.4	.3	
26	2.4	14	92	92	145	134	168	25	20	3.2	.3	10
27	2.9	19	36	83	134	134	168	134	14	2.8	.2	6.0
28	3.0	36	24	145	140	329	134	874	11	5.7	.2	10
29	3.7	20	42	128	128	355	92	97	27	13	.1	38
30	7.8	7.8	40	228	-------	264	78	62	123	10	.1	35
31	6.8	-------	34	290	-------	290	-------	44	-------	15	.1	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18	1.9	6.98	0.032	0.04
November	36	3.2	8.73	.040	.04
December	216	9.4	41.0	.187	.22
January	2,730	58	481	2.20	2.54
February	1,400	128	327	1.49	1.61
March	3,190	83	526	2.40	2.77
April	616	74	192	.877	.98
May	874	25	92.4	.422	.49
June	1,910	11	176	.804	.90
July	88	1.5	14.5	.066	.08
August	54	.1	7.98	.036	.04
September	38	----------	3.38	.015	.02
The year	3,190	----------	156	.712	9.73

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 1932.
EXTREMES.—Maximum discharge during year, 7,240 second-feet Mar. 10 (gage height, 13.49 feet); minimum, 10 second-feet Sept. 20 (gage height, 1.50 feet).
1928–32: Maximum discharge, 13,200 second-feet Oct. 6, 1929 (gage height, 16.98 feet); minimum, that of Sept. 20, 1932.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	111	120	324	1,300	360	980	378	178	341	25	32
2	107	107	109	514	755	341	1,540	434	175	222	27	25
3	105	130	123	755	800	360	1,160	620	160	166	35	22
4	98	143	360	493	1,300	360	800	453	143	141	33	22
5	105	113	473	360	1,840	378	620	360	120	107	35	27
6	123	123	415	324	1,580	1,340	576	324	128	105	514	18
7	120	123	271	288	980	3,160	514	306	118	98	238	24
8	96	133	187	620	755	4,430	473	288	118	100	280	31
9	79	116	200	1,940	665	5,470	493	271	113	100	307	25
10	77	116	534	3,480	576	6,980	473	254	123	87	172	32
11	83	128	620	4,290	514	3,680	755	254	116	37	125	34
12	90	100	453	4,850	493	980	800	254	133	65	100	27
13	98	118	187	3,740	1,160	845	845	271	254	60	87	16
14	90	105	271	890	1,070	755	845	271	324	25	83	16
15	83	90	306	755	845	665	620	238	288	59	43	18
16	178	77	324	665	665	620	534	238	222	67	50	21
17	206	120	288	576	620	576	473	238	206	46	45	19
18	222	116	254	514	534	620	453	206	254	25	43	35
19	163	111	271	453	514	620	415	194	324	25	33	21
20	141	113	254	453	473	534	396	200	254	54	47	11
21	125	136	238	396	434	514	396	206	238	58	53	14
22	141	123	254	360	576	710	378	222	271	48	32	12
23	128	67	534	341	665	710	360	238	203	44	43	19
24	149	96	620	360	845	890	341	222	133	37	46	27
25	125	79	434	396	620	620	341	203	133	28	43	28
26	90	111	341	378	493	493	341	194	102	18	35	21
27	96	105	271	434	434	434	493	178	100	25	29	21
28	109	123	324	514	434	1,020	845	238	92	25	33	32
29	100	118	341	665	378	1,580	534	254	136	25	33	36
30	113	136	324	800	------	2,220	396	238	755	25	13	42
31	116	------	324	1,200	------	1,070	------	197	------	27	23	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	222	77	119	0.201	0.23
November	143	67	113	.191	.21
December	620	109	323	.545	.63
January	4,850	288	1,040	1.75	2.02
February	1,840	378	770	1.30	1.40
March	6,980	341	1,400	2.36	2.72
April	1,540	341	606	1.02	1.14
May	620	178	272	.459	.53
June	755	92	197	.332	.37
July	341	18	73.9	.125	.14
August	514	18	88.1	.149	.17
September	42	11	24.3	.041	.05
The year	6,980	11	418	.705	9.61

TAR RIVER AT TARBORO, N.C.

LOCATION.—Water-stage recorder at highway bridge at Tarboro, Edgecombe County, since Dec. 9, 1931, and United States Weather Bureau chain gage at same site prior thereto. Datum of recorder about 1 foot lower than that of chain gage.

DRAINAGE AREA.—2,100 square miles (revised).

RECORDS AVAILABLE.—July 1896 to December 1900; October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 14,900 second-feet Mar. 12 (gage height, 20.24 feet); minimum, 37 second-feet Sept. 29 (gage height, 0.47 foot).

1896–1900, 1931–32: Maximum discharge, 19,800 second-feet Feb. 11, 1899 (gage height, 25.0 feet, old datum); minimum, that of Sept. 29, 1932.

Maximum stage known, 34.2 feet (present datum) July 27, 1919 (discharge, estimated, 32,000 second-feet).

REMARKS.—Records fair through Dec. 8 and good thereafter.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	675	325	271	990	2,930	1,340	3,490	1,030	45[illegible]	1,280	148	72
2	573	297	271	1,030	3,240	1,260	2,750	1,100	35[illegible]	1,140	150	72
3	507	297	475	1,100	2,640	1,180	3,310	1,260	331	692	132	68
4	443	325	507	1,380	2,690	1,100	3,180	1,420	347	491	119	68
5	413	353	918	1,220	3,380	1,100	2,420	1,340	328	428	117	93
6	443	353	990	990	4,060	1,800	2,010	1,060	30[illegible]	380	167	85
7	413	325	954	883	4,130	4,790	1,730	954	347	350	326	100
8	383	353	918	918	3,180	7,190	1,550	830	311	308	883	132
9	383	325	692	1,530	2,420	8,960	1,460	760	263	281	709	117
10	353	297	796	3,560	2,060	10,800	1,420	778	24[illegible]	266	726	102
11	353	353	1,030	5,470	1,860	13,000	1,510	658	23[illegible]	250	556	99
12	325	353	1,180	6,860	1,680	14,600	1,860	675	26[illegible]	289	398	87
13	297	325	1,140	7,950	1,980	13,600	2,060	641	644	258	305	108
14	245	325	954	8,750	2,960	9,960	2,110	692	74[illegible]	189	248	87
15	297	325	848	7,100	3,310	5,460	2,010	692	67[illegible]	160	215	79
16	413	297	813	3,530	2,930	3,000	1,680	641	76[illegible]	203	240	73
17	383	297	813	2,420	2,360	2,310	1,510	675	76[illegible]	169	201	67
18	573	353	778	2,010	2,160	2,110	1,380	540	607	130	184	61
19	641	245	709	1,730	2,010	2,060	1,300	556	507	117	150	73
20	709	325	658	1,510	1,860	1,960	1,180	507	55[illegible]	148	184	72
21	540	325	658	1,340	1,640	1,820	1,100	443	573	158	173	50
22	507	325	641	1,220	1,590	1,680	990	475	507	138	138	48
23	443	297	692	1,140	1,820	1,770	990	491	413	109	126	47
24	443	297	883	1,060	2,060	2,060	918	524	413	121	108	49
25	383	383	1,100	1,060	2,160	2,310	883	491	365	144	95	47
26	325	297	1,030	1,100	1,820	1,960	918	443	328	106	146	43
27	325	297	866	1,140	1,590	1,680	883	383	303	100	152	39
28	383	443	813	1,300	1,460	1,680	990	428	281	144	138	38
29	297	325	883	1,590	1,420	2,460	1,420	475	311	124	111	38
30	325	325	918	2,160	-------	3,500	1,220	443	486	109	90	39
31	325	-------	883	2,470	-------	4,370	-------	507	-------	95	74	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	709	245	423	0.201	0.23
November	443	245	325	.155	.17
December	1,180	271	809	.385	.44
January	8,750	883	2,470	1.18	1.36
February	4,130	1,420	2,390	1.14	1.23
March	14,600	1,100	4,290	2.04	2.35
April	3,490	883	1,670	.795	.89
May	1,420	383	707	.337	.39
June	760	238	434	.207	.23
July	1,280	95	286	.136	.16
August	883	74	242	.115	.13
September	132	38	71.7	.034	.04
The year	14,600	38	1,180	.562	7.62

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 1932.

EXTREMES.—Maximum discharge during year, 4,430 second-feet Mar. 9 (gage height, 14.64 feet); minimum, 12 second-feet Sept. 23, 27 (gage height, 0.18 foot).

1923–32: Maximum discharge, 12,300 second-feet Oct. 1, 2, 1924 (gage height, 17.3 feet); minimum, that of Sept. 23, 27, 1932.

REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	62	78	152	803	308	786	250	120	420	78	26
2	67	62	88	310	658	257	594	375	111	187	54	22
3	62	62	88	400	498	243	578	466	110	132	50	22
4	62	62	100	282	738	229	466	338	106	99	45	46
5	62	60	128	254	820	229	390	308	84	100	45	80
6	58	62	164	164	738	603	345	271	76	108	498	67
7	53	62	152	152	594	2,830	345	215	75	106	345	68
8	52	72	122	241	466	3,700	352	187	71	97	271	65
9	51	78	105	1,120	390	4,160	368	174	61	91	236	59
10	47	83	152	1,650	352	3,330	390	174	56	76	135	56
11	45	72	296	2,220	338	1,240	466	168	62	73	75	63
12	44	72	385	1,920	322	973	482	174	53	62	76	39
13	42	67	215	1,100	610	690	530	201	65	54	64	26
14	42	67	164	658	738	498	450	187	180	54	64	26
15	43	72	164	482	610	450	345	180	208	54	64	26
16	110	67	152	420	405	420	338	168	215	54	64	26
17	116	67	134	352	360	390	322	158	174	54	54	17
18	83	67	128	308	375	405	308	154	127	50	54	14
19	67	62	116	300	360	435	278	145	104	45	54	13
20	83	62	105	292	322	420	271	136	94	45	45	13
21	78	62	105	243	300	352	264	135	90	45	45	13
22	78	62	110	236	360	375	257	135	97	45	45	15
23	72	62	134	229	626	642	236	134	94	45	45	13
24	67	62	268	243	514	610	229	127	93	45	33	16
25	72	62	296	250	390	610	229	131	86	45	34	15
26	72	62	282	292	360	594	236	125	83	45	36	14
27	67	62	282	315	330	482	405	123	80	45	35	12
28	67	62	254	482	300	405	466	122	76	45	34	14
29	62	62	282	466	292	871	330	122	435	45	31	17
30	62	67	282	690	------	905	271	125	888	82	30	16
31	62	------	296	939	------	578	------	123	------	114	28	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	116	42	65.0	0.141	0.16
November	83	60	65.5	.142	.16
December	385	78	182	.394	.45
January	2,220	152	554	1.20	1.38
February	820	292	482	1.04	1.12
March	4,160	229	911	1.97	2.27
April	786	229	378	.818	.91
May	466	122	188	.407	.47
June	888	53	139	.301	.34
July	420	45	82.6	179	.21
August	498	28	89.3	.193	.22
September	80	12	30.6	.066	.07
The year	4,160	12	264	.571	7.76

NEUSE RIVER BASIN

ENO RIVER AT HILLSBORO, N.C.

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

DRAINAGE AREA.—66.5 square miles.

RECORDS AVAILABLE.—November 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 3,140 second-feet Mar. 6 (gage height, 14.6 feet); minimum, 1.2 second-feet Sept. 24-26 (gage height, 0.50 foot).

1927–32: Maximum discharge, 4,650 second-feet Oct. 2, 1929 (gage height, estimated, 18.0 feet); minimum, that of Sept. 24–26, 1932.

REMARKS.—Records good below 500 second-feet from January through August; others fair. Slight diurnal regulation owing to operation of cotton mills.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.9	5.0	3.8	277	44	34	239	30	13.0	14.0	19.0	5.2
2	6.9	4.5	3.5	165	51	33	86	31	12.6	13.5	18.0	3.0
3	6.6	3.8	3.2	103	46	31	69	33	12.2	12.6	16.0	5.0
4	6.6	4.8	18.0	35	36	30	56	32	11.7	11.7	15.0	6.6
5	6.2	4.8	17.0	20	189	30	52	31	12.2	12.2	13.0	5.8
6	6.2	4.2	16.5	25	146	1,820	47	30	10.8	11.7	13.0	6.6
7	6.2	4.0	15.5	30	121	1,350	45	33	9.9	10.8	24	10.8
8	6.2	3.8	14.0	978	103	883	44	28	9.9	12.2	13.5	9.4
9	5.5	3.2	21	740	74	670	46	23	9.0	11.2	9.4	8.6
10	5.5	3.8	18.5	413	49	473	46	22	8.6	9.9	8.0	6.9
11	5.5	4.0	16.5	214	38	239	44	22	9.0	9.0	7.2	6.2
12	5.5	3.8	12.2	91	74	39	46	23	33	8.3	6.6	4.8
13	5.5	4.5	11.2	80	74	37	53	23	51	8.3	6.2	2.7
14	5.5	5.2	12.2	66	61	39	49	22	57	7.6	5.5	2.7
15	5.2	4.8	13.0	52	57	41	46	22	54	7.6	5.0	3.2
16	6.9	4.2	11.7	40	53	43	44	23	80	7.6	4.5	4.8
17	5.2	3.8	10.8	40	49	42	44	22	74	8.0	4.0	4.8
18	4.8	4.5	9.4	37	44	43	44	21	69	7.6	3.5	4.8
19	4.5	5.0	8.0	33	38	41	42	21	58	6.9	2.7	4.8
20	4.5	5.0	7.6	31	37	41	37	19.6	46	6.6	2.6	4.8
21	4.5	4.8	9.0	30	103	39	35	21	33	6.2	2.4	4.8
22	4.5	4.5	23	28	134	39	31	19.0	24	8.3	2.6	5.5
23	4.5	4.2	23	27	86	37	30	17.5	23	8.0	2.7	4.0
24	4.5	4.0	21	25	48	38	30	17.5	20	7.6	2.7	1.3
25	4.2	3.8	18.5	24	42	38	30	17.0	17.5	7.6	2.7	1.2
26	4.2	3.5	16.0	23	38	37	30	16.5	17.5	4.5	2.4	1.2
27	4.2	3.2	13.5	23	37	36	30	17.0	17.0	4.2	2.4	1.6
28	4.2	4.8	12.2	22	36	34	28	19.6	16.5	4.0	2.4	1.3
29	6.6	4.5	11.2	48	34	33	28	15.5	52	14.0	2.7	1.4
30	6.6	4.2	10.4	103	-------	33	30	14.0	25	21	2.7	1.6
31	7.2	-------	12.6	74	-------	264	-------	13.5	-------	20	2.7	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7.2	4.2	5.52	0.083	0.10
November	5.2	3.2	4.27	.064	.07
December	23	3.2	13.4	.202	.23
January	978	20	126	1.89	2.18
February	189	34	67.0	1.01	1.09
March	1,820	30	212	3.19	3.68
April	239	28	49.4	743	.83
May	33	13.5	22.6	.340	.39
June	80	8.6	29.5	.444	.50
July	21	4.0	9.76	.147	.17
August	24	2.4	7.26	.109	.13
September	10.8	1.2	4.51	.068	.08
The year	1,820	1.2	46.1	.693	9.45

NEUSE RIVER NEAR NORTHSIDE, N.C.

LOCATION.—Water-stage recorder at Fish Dam Bridge, 1½ miles below Seaboard Air Line Railway bridge and 2 miles south of Northside, Granville County. Zero of gage is 226.32 feet above mean sea level.

DRAINAGE AREA.—574 square miles.

RECORDS AVAILABLE.—July 1927 to September 1932.

EXTREMES.—Maximum discharge during year (estimated), 9,300 second-feet Mar. 7 (gage height, 21.71 feet); minimum, 3.1 second-feet Sept. 20 (gage height, 0.87 foot).

1927–32: Maximum discharge, 26,600 second-feet Oct. 3, 1929 (gage height, 28.64 feet); minimum, that of Sept. 20, 1932.

REMARKS.—Records good to 1,000 second-feet, fair to 2,000 second-feet, and poor beyond and for estimated periods, Aug. 26, 28, Sept. 4–9. Flow regulated by storage in Durham Reservoir.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	29	17	309	580	206	1,280	268	103	87	61	12
2	67	15	23	636	484	196	956	388	105	54	34	11
3	62	14	28	340	691	186	644	236	108	58	27	9.8
4	55	22	46	220	1,270	186	548	212	89	95	26	9.0
5	36	30	68	182	1,350	185	516	193	78	87	26	9.0
6	22	25	60	175	862	1,760	500	178	86	64	23	10
7	24	22	44	167	612	7,320	468	148	140	54	57	10
8	26	22	68	1,140	548	5,120	452	134	121	54	151	8.0
9	24	19	79	3,930	516	2,420	468	140	110	68	58	6.0
10	20	18	180	6,420	484	1,350	596	150	102	65	54	5.5
11	17	20	228	3,780	484	750	548	142	105	51	42	3.8
12	15	26	148	1,790	500	596	724	143	158	54	31	3.4
13	15	27	126	936	692	548	644	142	122	51	27	3.6
14	19	28	116	663	564	516	516	145	220	32	24	3.8
15	21	29	127	580	484	516	484	130	193	39	44	3.8
16	24	29	132	548	516	484	420	127	170	30	23	4.6
17	23	26	129	468	516	484	340	134	220	21	20	4.6
18	19	27	122	452	500	516	308	126	134	44	21	4.2
19	15	37	90	468	452	468	404	119	185	26	20	3.8
20	15	34	94	468	388	404	404	105	532	21	20	3.1
21	25	33	81	404	356	404	404	106	220	20	17	3.4
22	24	29	292	372	538	516	388	118	146	26	15	3.4
23	21	23	468	380	660	644	228	113	110	29	14	3.8
24	42	20	268	364	452	548	182	129	94	21	14	4.2
25	68	29	174	364	420	452	180	118	94	18	14	4.2
26	89	34	158	372	404	404	316	114	76	16	13	32
27	95	22	119	404	388	436	484	100	51	16	12	18
28	98	20	116	484	332	1,110	284	284	92	20	10	9.2
29	94	20	158	484	220	1,460	212	284	372	21	28	8.6
30	94	18	154	692	-------	687	193	137	220	27	15	8.0
31	53	-------	124	868	-------	644	-------	127	-------	51	13	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	98	15	40.4	0.070	0.08
November	37	14	24.9	.043	.05
December	468	17	130	.226	.26
January	6,420	167	931	1.62	1.87
February	1,350	220	561	.977	1.05
March	7,320	185	1,020	1.78	2.05
April	1,280	180	470	.819	.91
May	388	100	161	.280	.32
June	532	51	152	.265	.30
July	95	16	42.6	.074	.09
August	151	----------	30.8	.054	.06
September	32	3.1	7.46	.013	.01
The year	7,320	3.1	297	.517	7.05

NEUSE RIVER NEAR CLAYTON, N.C.

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

DRAINAGE AREA.—1,180 square miles.

RECORDS AVAILABLE.—July 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 9,900 second-feet Mar. 8 (gage height, 13.04 feet); minimum, 44 second-feet Sept. 15 (gage height, 0.28 foot). 1927–32: Maximum discharge, 28,100 second-feet Oct. 3, 1929 (gage height, 21.62 feet); minimum, that of Sept. 15, 1932.

REMARKS.—Records good except those estimated Apr. 3–11, Aug. 31 to Sept. 14, which are poor.

Discharge, in second-feet, 1931–32

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	178	211	211	635	1,740	692	1,530	540	419	692	106	75
2	190	175	182	832	1,340	620	2,090	752	372	407	110	70
3	182	215	142	1,010	1,430	590	2,090	860	326	275	137	70
4	209	177	761	778	2,460	585	1,560	650	326	215	137	75
5	217	138	896	575	2,780	585	1,200	550	312	249	566	65
6	242	135	409	504	2,780	2,150	1,040	505	266	287	330	65
7	202	135	315	514	2,160	8,080	1,010	464	411	249	338	70
8	166	169	315	1,930	1,460	9,350	1,140	427	344	296	464	65
9	164	142	382	5,100	1,240	7,400	1,670	379	330	249	333	60
10	164	194	920	6,500	1,110	7,200	1,500	419	305	171	260	55
11	166	180	645	6,300	1,010	7,100	1,400	645	383	169	157	45
12	138	140	545	6,200	1,010	4,960	1,300	710	455	221	146	50
13	159	146	448	6,400	2,090	1,700	1,400	590	890	176	130	60
14	162	153	416	5,400	1,810	1,340	1,340	535	1,040	126	120	55
15	159	182	540	2,020	1,400	1,140	1,040	455	625	137	103	48
16	220	140	496	1,270	1,200	1,080	920	407	535	146	132	81
17	271	190	420	1,110	1,170	1,040	860	379	443	129	117	77
18	178	178	452	980	1,170	1,040	770	387	443	128	101	68
19	134	146	420	890	1,080	1,080	674	407	455	114	106	54
20	162	143	386	860	1,010	1,080	758	372	515	116	118	46
21	162	166	346	830	890	1,010	770	364	710	110	130	53
22	145	194	530	800	1,040	1,110	758	368	575	101	101	91
23	146	145	1,010	800	1,300	1,240	746	361	415	101	99	120
24	169	211	920	800	1,400	1,200	635	350	340	102	95	80
25	168	192	695	800	1,080	1,140	510	333	275	102	92	72
26	125	148	527	716	950	1,010	555	322	263	103	102	65
27	182	142	440	890	890	890	662	319	246	103	93	60
28	217	186	480	950	860	1,670	860	2,690	238	104	79	79
29	229	202	492	1,080	830	2,160	692	1,730	1,450	114	77	147
30	280	148	456	1,740	------	2,700	560	860	1,500	126	74	128
31	250	------	448	1,780	------	1,880	------	500	------	132	70	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	280	125	185	0.157	0.18
November	215	135	167	.142	.16
December	1,010	142	505	.428	.49
January	6,500	504	1,970	1.67	1.92
February	2,780	830	1,400	1.19	1.28
March	9,350	585	2,410	2.04	2.35
April	2,090	510	1,070	.907	1.01
May	2,690	319	601	.509	.59
June	1,500	238	507	.430	.48
July	692	101	185	.157	.18
August	566	70	162	.137	.16
September	147	45	71.6	.061	.07
The year	9,350	45	770	.653	8.87

NEUSE RIVER NEAR GOLDSBORO, N.C.

LOCATION.—Water-stage recorder a quarter of a mile above highway bridge on State highway 40, 2½ miles above Stony Creek, and 3 miles south of Goldsboro, Wayne County.

DRAINAGE AREA.—2,380 square miles.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 10,900 second-feet Mar. 14 (gage height, 17.24 feet); minimum, 85 second-feet Sept. 14 (gage height, 1.03 feet).

1930–32: Maximum discharge, 11,400 second-feet Aug. 18, 1931 (gage height, 17.50 feet); minimum, that of Sept. 14, 1932.

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

REMARKS.—Records good except those estimated, May 10–12, 14, 15, 18, 19, 21–26, 28–31, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	468	376	326	1,520	3,150	1,620	4,110	1,190	1,920	2,260	197	142
2	420	376	326	1,520	3,090	1,520	3,570	1,190	1,100	2,040	197	138
3	390	334	311	1,880	2,860	1,320	3,270	1,320	742	1,520	184	136
4	376	326	633	2,040	2,750	1,240	3,390	1,580	625	785	174	140
5	356	331	1,230	2,040	3,390	1,190	2,970	1,480	554	536	187	124
6	390	331	2,490	1,720	4,050	1,520	2,310	1,190	519	452	210	126
7	405	286	2,700	1,420	4,420	2,690	1,920	965	519	452	554	130
8	390	270	2,040	1,320	4,420	4,520	1,780	808	485	436	519	122
9	390	259	1,520	1,860	3,750	5,400	1,620	662	572	405	898	115
10	342	270	1,320	3,630	2,860	6,310	1,720	625	519	436	785	122
11	316	303	1,520	4,680	2,420	7,390	2,260	742	485	376	554	117
12	303	298	1,920	5,260	2,200	8,950	2,580	965	502	318	468	106
13	301	337	1,680	5,910	2,140	10,300	2,640	1,380	942	296	390	96
14	308	303	1,420	6,710	2,640	10,900	2,700	1,420	1,580	313	313	90
15	289	286	1,240	7,300	3,450	10,700	2,640	1,190	2,700	286	261	96
16	604	270	1,190	7,880	3,510	9,780	2,260	920	3,270	237	226	108
17	436	279	1,240	8,180	3,150	6,980	1,880	722	3,510	228	221	101
18	420	294	1,190	7,880	2,750	3,560	1,680	662	2,970	230	219	96
19	420	291	1,120	5,610	2,580	2,480	1,480	662	1,980	202	235	110
20	376	326	1,140	2,900	2,420	2,310	1,320	644	1,680	217	224	117
21	351	296	1,120	2,140	2,200	2,200	1,240	662	1,580	202	202	108
22	308	279	1,060	1,920	2,090	2,040	1,240	920	1,420	184	219	99
23	311	275	1,060	1,820	2,260	1,920	1,240	1,120	1,320	184	219	96
24	301	296	1,480	1,720	2,640	2,200	1,140	1,080	1,010	178	210	96
25	308	308	2,040	1,620	2,800	2,420	1,100	1,010	764	172	184	126
26	291	301	1,920	1,580	2,530	2,360	1,030	875	625	157	178	153
27	286	324	1,580	1,620	2,140	1,980	988	701	572	155	178	128
28	289	294	1,280	1,780	1,920	1,780	1,030	625	662	180	164	121
29	289	279	1,320	2,140	1,780	2,180	1,100	1,280	644	180	174	113
30	345	279	1,520	2,310	-------	3,150	1,190	2,860	898	187	153	104
31	348	-------	1,580	2,700	-------	3,870	-------	2,750	-------	187	142	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	604	286	359	0.151	0.17
November	376	259	303	.127	.14
December	2,700	311	1,170	.576	.66
January	8,180	1,320	3,310	1.39	1.60
February	4,420	1,780	2,840	1.19	1.28
March	10,900	1,190	4,090	1.72	1.98
April	4,110	988	1,980	.832	.93
May	2,860	625	1,100	.462	.53
June	3,510	485	1,220	.513	.57
July	2,260	155	451	.189	.22
August	898	142	292	.123	.14
September	153	90	116	.049	.05
The year	10,900	90	1,450	.609	8.27

NEUSE RIVER AT KINSTON, N.C.

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

DRAINAGE AREA.—2,700 square miles.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 12,000 second-feet Mar. 16 (gage height, 16.24 feet); minimum, 124 second-feet Sept. 26 (gage height, 1.29 feet).

1930–32: Maximum discharge, that of Mar. 16, 1932; minimum, that of Sept. 26, 1932.

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

REMARKS.—Records poor Oct. 1 to Apr. 9 and good thereafter.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jure	July	Aug.	Sept.
1	799	488	420	1,760			3,620	1,510	2,840	908	252	213
2	668			1,720			4,020	1,660	2,340	1,810	266	200
3	576	460			3,300	1,900	4,020	1,710	1,770	2,180	266	200
4	546						3,620	1,710	1,330	1,860	280	187
5	517			2,100			3,560	1,810	996	1,280	266	187
6	517		1,500		4,200	1,800	3,320	1,810	822	864	266	187
7	517						2,840	1,560	780	700	308	187
8	546	420					2,500	1,320	700	628	462	174
9	517				4,600	4,440	2,180	1,130	700	628	664	166
10	517				4,000	4,760	2,060	1,040	740	560	864	169
11				3,600		5,560	1,960	952	740	560	952	158
12	440					6,190	2,500	1,090	700	526	740	153
13			1,750			7,170	2,780	1,560	700	494	740	148
14						8,300	2,900	1,860	952	430	628	144
15		440		7,050	3,500	10,100	2,960	1,960	1,560	430	494	153
16	500			6,820		11,600	2,960	1,810	2,400	430	430	169
17			1,340	6,930		11,000	2,670	1,610	3,000	398	368	166
18			1,300	7,290		9,000	2,340	1,320	3,360	353	338	164
19	460		1,300	7,650		7,500	2,120	1,130	3,240	323	308	139
20	432		1,300	7,780		3,740	1,910	996	2,430	323	338	135
21	405	430	1,260	5,850	2,800	3,440	1,760	996	2,010	308	353	158
22	405		1,260	4,160		3,200	1,660	996	1,860	308	323	161
23	405		1,260	2,670		2,960	1,610	1,280	1,770	294	308	144
24	378		1,300	2,280		2,780	1,560	1,460	1,610	280	323	139
25	378			2,120		2,670	1,510	1,420	1,420	266	294	135
26	378			2,010		2,620	1,460	1,320	1,130	252	280	126
27	378		1,850	2,010	2,700	2,560	1,370	1,230	996	252	266	166
28	378	440		2,060		2,670	1,280	1,040	908	252	239	200
29	378			2,230		2,900	1,320	952	908	266	226	187
30	378			2,450		3,020	1,370	1,090	814	280	226	164
31	405		1,720	2,620		3,200		2,500		280	226	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October		378	472	0.175	0.20
November			437	.162	.18
December			1,510	.559	.64
January	7,780		3,650	1.35	1.56
February			3,360	1.24	1.34
March	11,600		4,390	1.63	1.88
April	4,020	1,280	2,390	.885	.99
May	1,960	952	1,410	.522	.60
June	3,380	700	1,520	.563	.63
July	2,180	252	604	.224	.26
August	952	226	397	.147	.17
September	213	126	166	.061	.07
The year	11,600	126	1,690	.626	8.52

FLAT RIVER AT BAHAMA, N.C.

LOCATION.—Water-stage recorder at head of Lake Michie, 1½ miles above Dial Creek and county highway bridge at Bahama, Durham County.
DRAINAGE AREA.—150 square miles.
RECORDS AVAILABLE.—July 1925 to September 1932.
EXTREMES.—Maximum discharge during year, 7,090 second-feet Mar. 6 (gage height, 8.65 feet); minimum, 0.37 second-foot Sept. 26, 27 (gage height, 0.23 foot).

1925–32: Maximum discharge, 12,500 second-feet Oct. 2, 1929 (gage height, 10.85 feet); minimum, that of Sept. 26, 27, 1932.

REMARKS.—Records good except those estimated Jan. 24–29, Apr. 17–21, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.3	10.4	4.60	286	147	62	556	58	21	38	5.0	1.40
2	8.6	8.6	6.0	142	140	56	221	73	18.7	30	5.0	1.25
3	8.6	8.0	6.4	68	514	54	168	71	17.5	19.5	4.70	1.11
4	8.0	7.2	9.8	48	498	55	132	55	22	21	4.60	1.01
5	8.0	7.2	17.9	42	293	62	105	50	14.3	14.7	4.45	.97
6	7.7	7.4	24	36	183	4,060	98	45	13.9	13.9	4.60	.97
7	9.2	7.4	20	102	149	1,680	92	42	13.9	13.9	5.5	.94
8	8.6	7.4	16.3	2,930	121	472	83	34	20	28	14.7	.91
9	7.2	6.9	24	2,490	107	300	168	41	12.8	14.7	19.1	.87
10	6.4	6.7	132	769	88	212	207	32	12.5	9.8	13.9	.87
11	6.7	6.4	49	282	87	166	147	42	13.2	8.3	11.1	.97
12	8.6	6.0	34	196	118	145	258	47	13.6	7.2	9.2	.81
13	9.2	5.5	15.5	161	371	127	149	44	17.9	6.0	7.7	.72
14	8.0	5.5	20	138	149	116	104	45	36	5.5	6.4	.60
15	6.9	5.5	18.3	114	112	101	98	35	57	4.70	5.7	.57
16	47	5.7	19.1	96	110	90	87	39	34	4.60	4.60	.60
17	47	34	20	79	110	92	82	22	52	4.45	4.15	.57
18	16.3	17.7	17.9	73	121	92	78	26	30	4.00	4.00	.49
19	15.5	8.9	17.9	66	89	86	74	29	24	3.75	3.90	.49
20	13.2	7.2	11.8	58	75	75	70	25	23	3.90	3.45	.47
21	10.4	5.7	15.1	56	68	70	66	30	28	7.4	3.15	.49
22	10.4	4.85	52	53	298	220	62	20	17.5	4.15	2.70	.49
23	9.8	4.30	98	50	193	168	60	27	15.9	2.61	2.43	.47
24	8.6	4.15	50	50	125	94	53	27	19.5	2.08	2.29	.44
25	7.7	3.60	93	64	94	78	54	26	14.3	2.03	2.2	.42
26	6.4	3.00	60	64	83	73	112	22	13.9	2.29	2.0	.39
27	5.7	3.00	36	102	77	261	112	22	13.9	2.47	1.9	.37
28	5.2	3.50	32	79	72	1,430	70	39	14.3	2.61	1.9	.39
29	6.0	3.60	44	215	66	268	54	42	529	2.70	1.87	.81
30	5.5	4.00	38	519	-------	170	55	34	65	2.75	1.7	1.70
31	8.6	-------	32	275	-------	431	-------	24	-------	3.60	1.55	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	47	5.2	11.1	0.074	0.09
November	34	3.00	7.31	.049	.05
December	132	4.60	33.4	.223	.26
January	2,930	36	313	2.09	2.41
February	514	66	161	1.07	1.15
March	4,060	54	367	2.45	2.82
April	556	53	122	.813	.91
May	73	20	37.7	.251	.29
June	529	12.5	40.0	.267	.30
July	38	2.03	9.37	.062	.07
August	19.1	1.55	5.35	.036	.04
September	1.70	.37	.752	.0050	.006
The year	4,060	.37	92.5	.617	8.40

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 1932.

EXTREMES.—Maximum discharge during year, 5,140 second-feet Mar. 7 (gage height, 12.54 feet); minimum, 0.7 second-foot Aug. 31 (gage height, 0.97 foot). 1927–32: Maximum discharge, 11,400 second-feet Oct. 2, 1929 (gage height, 16.72 feet); minimum, 0.4 second-foot Dec. 21–24, 1928 (gage height, 0.91 foot).

REMARKS.—Records excellent except those estimated Oct. 18–23, Jan. 10–15, and June 29 to July 1, which are fair. Flow regulated by storage reservoir. Diversion for Durham water supply above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	4.1	3.2	69	200	64	471	34	40	1.3	5.0	0.8
2	36	3.6	3.2	60	206	68	364	37	67	34	5.0	.8
3	36	4.1	3.2	56	209	62	261	61	73	66	5.0	1.1
4	18	3.6	3.2	68	209	61	265	74	48	59	4.1	1.1
5	1.3	4.1	3.2	72	236	61	266	77	42	30	2.0	.9
6	1.1	4.1	3.2	63	223	687	251	68	68	11	2.0	.9
7	1.3	4.1	29	75	199	2,240	256	58	93	12	2.8	1.1
8	2.0	4.1	12	109	253	588	246	52	85	36	2.0	1.1
9	2.4	4.1	21	1,620	258	406	251	61	80	36	1.6	1.3
10	2.8	4.1	56	1,300	251	309	193	59	85	25	3.2	.9
11	2.4	4.1	53	490	257	264	245	59	77	13	4.6	1.1
12	2.4	3.6	79	330	251	251	243	58	47	16	7.7	1.1
13	2.4	5.5	75	270	210	183	209	59	43	1.6	6.6	1.1
14	2.4	7.7	69	220	191	257	243	54	52	1.3	34	1.3
15	2.0	7.7	69	230	245	255	245	47	58	1.1	2.8	1.6
16	2.4	7.7	84	227	254	227	206	59	54	1.6	2.0	1.6
17	2.4	7.7	81	183	234	256	57	57	35	32	2.0	1.6
18	2.4	7.7	62	263	219	232	235	55	34	4.1	2.4	1.6
19	2.4	7.7	68	262	206	192	245	59	37	1.1	5.2	1.6
20	2.4	5.5	51	238	198	170	265	59	31	1.1	2.4	1.6
21	2.4	4.1	72	211	161	233	260	57	35	4.1	2.0	1.6
22	2.4	4.1	78	211	163	179	174	49	44	5.0	2.0	2.0
23	28	4.6	57	211	110	238	60	57	28	7.2	2.0	2.0
24	76	21	63	186	176	228	61	59	28	3.2	2.0	7.0
25	76	13	53	222	178	199	70	59	26	2.4	2.8	29
26	103	3.6	37	211	215	193	67	61	5.5	1.6	2.0	2.8
27	106	3.6	44	208	194	197	57	60	3.6	3.2	2.0	2.8
28	104	3.6	69	198	84	190	62	58	1.6	2.0	25	2.4
29	82	3.6	66	170	64	235	60	53	30	2.4	5.0	2.4
30	53	3.2	59	159	-------	242	62	58	16	2.0	3.6	1.6
31	17	-------	69	197	-------	251	-------	45	-------	33	.8	-------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	106	1.1	26.1	May	77	34	56.9
November	21	3.2	5.64	June	93	1.6	45.5
December	84	3.2	48.2	July	66	1.1	14.5
January	1,620	56	271	August	34	.8	4.89
February	258	64	202	September	29	.8	2.59
March	2,240	61	297				
April	471	57	198	The year	2,240	.8	97.5

DIAL CREEK NEAR BAHAMA, N.C.

LOCATION.—Water-stage recorder three eighths of a mile above 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 1932.

EXTREMES.—Maximum discharge during year, 228 second-feet Mar. 6 (gage height, 3.95 feet); practically no flow at times in October, July, August, and September.

1925–32: Maximum discharge, 575 second-feet Apr. 27, 1928 (gage height, 5.60 feet); practically no flow at times in 1926, 1930–32.

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

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0.01	0.02	0.09	5.5	2.16	1.59	6.9	4.76	0.37	0.05
2	.01	.02	.09	2.05	3.57	1.41	4.64	2.98	.30	.04
3	.01	.01	.09	1.28	9.6	1.41	3.79	2.16	.26	.02
4	.01	.01	1.04	.94	10.0	1.54	3.12	1.84	.26	.02
5	.01	.01	.58	.77	6.2	1.45	2.84	1.64	.26	.07
6	.01	.01	.25	.77	3.71	93	2.71	1.36	.20	.07
7	.01	.01	.18	2.72	2.91	17.5	2.46	1.24	.20	.02
8	.01	.02	.14	49	2.40	8.8	2.34	1.04	.15	.01
9	.01	.02	2.74	40	2.05	6.0	3.95	1.32	.13	0
10	0	.03	1.77	11.7	1.89	4.37	3.71	1.16	.12	0
11	0	.03	.63	5.0	1.84	3.64	4.46	1.24	.15	0
12	.01	.03	.43	3.26	2.34	3.26	4.92	1.36	.41	0
13	.01	.02	.35	2.98	2.65	3.19	3.05	1.24	.68	0
14	.01	.01	.46	2.46	1.79	2.84	2.71	1.04	1.08	0
15	.01	.01	.55	2.05	1.89	2.46	2.46	.84	.33	0
16	.02	.01	.37	1.69	1.84	2.46	2.22	.71	.25	0
17	.01	.01	.31	1.84	2.46	2.58	2.11	.66	.20	0
18	.01	.02	.35	1.50	2.11	2.65	2.00	.68	.20	0
19	.01	.03	.41	1.28	1.74	2.34	1.89	.80	.65	0
20	.01	.03	.35	1.12	1.59	2.22	1.79	.71	.43	0
21	.01	.03	.39	1.12	1.64	2.11	1.79	.84	.26	0
22	.01	.03	4.26	1.08	6.5	6.1	1.74	1.08	.26	0
23	.01	.04	1.62	1.08	3.05	3.12	1.69	.87	.25	0
24	.01	.04	.90	1.16	2.46	2.58	1.59	.66	.10	0
25	.01	.04	1.93	1.24	2.22	2.34	1.59	.55	.07	0
26	.01	.04	.80	1.01	2.11	2.16	9.1	.50	.06	0
27	.01	.04	.60	2.20	2.00	6.7	3.26	.72	.06	0
28	.01	.05	1.12	1.41	1.84	19.3	2.22	1.74	.05	0
29	.05	.06	.94	3.64	1.69	6.0	1.94	.66	.55	0
30	.02	.10	.68	6.8	------	4.12	1.79	.50	.10	0
31	.02	------	.66	3.19	------	10.3	------	.41	------	0

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	0.05	0	0.012	0.0024	0.003
November	.10	.01	.028	.0057	.007
December	4.26	.09	.809	.165	.19
January	49	.77	5.22	1.07	1.23
February	10.0	1.59	3.04	.620	.67
March	93	1.41	7.40	1.51	1.74
April	9.1	1.59	3.03	.618	.69
May	4.76	.41	1.20	.245	.28
June	1.08	.05	.280	.057	.06
July	.07	0	.010	.0020	.002
The year	93	0	1.76	.359	4.872

NOTE.—No flow during August and Septe mber.

LITTLE RIVER NEAR PRINCETON, N.C.

LOCATION.—Staff gage a quarter of a mile above county bridge, three quarters of a mile above Little Creek, and 3 miles north of Princeton, Johnston County.
DRAINAGE AREA.—221 square miles.
RECORDS AVAILABLE.—February 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 1,160 second-feet Mar. 10 (gage height, 6.30 feet); minimum, 1.0 second-foot several times in September (gage height, 0.30 foot).

1930–32: Maximum discharge, 2,380 second-feet Aug. 15, 1931 (gage height, 10.06 feet); minimum, that of September 1932.

Maximum known gage height, 14.90 feet September 1924.
REMARKS.—Records good. Daily regulation from operation of mill upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	16	29	162	281	145	366	100	12[illegible]	67	5.4	7.6
2	35	18	21	196	247	136	349	179	100	88	22	6.4
3	53	25	23	204	315	145	281	136	9[illegible]	62	7.6	11
4	20	27	111	196	518	136	264	128	80	53	14	5.7
5	57	30	366	170	604	145	213	111	44	66	5.4	5.4
6	44	31	349	162	478	332	188	95	77	61	11	4.8
7	42	34	213	145	402	837	162	69	6[illegible]	74	50	4.8
8	42	13	145	179	315	972	170	58	72	58	145	3.6
9	21	25	120	421	281	1,030	145	83	6[illegible]	41	162	3.6
10	33	30	162	678	264	1,160	162	76	53	32	95	4.5
11	20	23	213	783	213	810	196	69	4[illegible]	32	79	4.8
12	41	16	213	730	213	440	230	89	18[illegible]	36	66	3.0
13	56	15	179	604	298	332	230	128	26[illegible]	35	46	3.0
14	22	17	145	459	366	298	213	120	23[illegible]	30	14	2.6
15	35	17	111	349	421	264	179	111	40[illegible]	29	39	2.6
16	36	28	128	281	366	230	162	98	56[illegible]	30	40	2.8
17	34	29	109	247	315	213	145	73	33[illegible]	25	14	2.2
18	18	19	120	230	281	213	145	74	17[illegible]	22	8.4	1.4
19	19	17	128	204	230	213	128	72	12[illegible]	25	10	1.0
20	35	20	128	179	230	204	120	62	17[illegible]	10	25	1.4
21	34	28	128	162	188	196	111	105	15[illegible]	3.3	8.8	1.4
22	40	17	111	145	247	170	128	73	12[illegible]	5.4	7.6	1.0
23	40	20	179	145	315	170	101	95	9[illegible]	5.7	7.6	1.0
24	33	23	230	136	264	247	111	74	6[illegible]	4.2	25	1.4
25	18	15	230	145	213	230	120	74	6[illegible]	4.8	9.2	1.4
26	30	15	204	145	196	196	100	72	6[illegible]	5.4	15	1.4
27	36	33	145	179	170	162	120	70	7[illegible]	15	7.6	1.6
28	38	19	154	230	162	230	108	80	6[illegible]	14	9.2	1.8
29	29	14	204	230	154	366	111	315	10[illegible]	6.8	8.4	1.8
30	20	25	213	366	-------	518	136	349	13[illegible]	11	8.4	1.4
31	17	-------	179	349	-------	402	-------	204	-------	5.7	7.6	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	62	17	34.2	0.155	0.18
November	34	13	22.0	.100	.11
December	336	21	161	.729	.84
January	783	136	284	1.29	1.49
February	604	154	295	1.33	1.43
March	1,160	136	359	1.62	1.87
April	366	100	173	.783	.87
May	349	58	111	.502	.58
June	560	41	141	.638	.71
July	88	3.3	30.9	.140	.16
August	162	5.4	31.4	.142	.16
September	11	1.0	3.21	.014	.02
The year	1,160	1.0	137	.620	8.42

CONTENTNEA CREEK NEAR WILSON, N.C.

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

DRAINAGE AREA.—245 square miles.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 1,020 second-feet Mar. 9 (gage height, 4.98 feet); minimum, 0.6 second-foot Sept. 29, 30 (gage height 0.53 foot).

1930–32: Maximum discharge, 2,140 second-feet Aug. 15, 1931 (gage height, 7.97 feet); minimum, that of Sept. 29, 30, 1932.

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

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	7.6	48	162	410	119	495	43	9.4	4.2	1.8	4.7
2	37	44	3.8	198	283	161	383	155	96	37	1.7	4.7
3	55	4.5	26	159	246	128	286	172	16	38	1.7	4.7
4	46	2.4	245	224	466	120	269	123	45	32	1.7	4.7
5	37	26	438	190	614	193	199	47	33	4.7	1.7	4.7
6	5.2	62	495	166	644	272	151	43	59	4.7	1.7	4.7
7	49	4.7	438	162	524	766	98	113	10	4.7	135	4.7
8	4.7	4.4	335	201	383	891	161	43	7.6	38	103	4.7
9	86	4.4	143	280	342	987	115	14	35	4.7	105	4.7
10	5.8	4.4	229	520	224	955	108	47	40	4.7	114	2.8
11	5.8	4.4	269	651	224	644	241	44	6.4	4.7	2.6	1.6
12	5.8	4.4	303	809	212	410	239	120	114	4.7	2.6	1.6
13	37	52	184	704	328	357	182	143	357	4.7	2.6	1.6
14	4.7	46	182	466	322	280	181	120	357	4.7	2.6	1.4
15	4.7	5.8	119	383	383	229	151	36	342	4.7	2.6	1.3
16	136	5.8	110	331	438	216	192	49	350	4.7	32	1.3
17	5.2	5.8	205	105	410	167	29	49	269	4.7	4.7	1.2
18	5.2	5.8	77	260	342	205	98	108	149	3.6	4.7	1.2
19	173	5.8	206	140	257	254	50	12	40	3.2	4.7	1.1
20	5.8	35	66	188	239	112	123	47	71	3.2	4.7	1.0
21	37	56	209	168	142	224	51	104	100	3.2	4.7	1.0
22	5.8	4.2	104	162	254	172	101	12	147	3.2	4.7	1.0
23	58	4.2	199	200	283	151	98	25	36	2.6	4.7	.9
24	52	4.2	246	45	290	112	50	48	37	2.3	4.7	.9
25	4.7	44	213	161	298	296	82	48	70	2.0	4.7	.8
26	4.7	5.2	198	151	199	353	55	48	26	2.0	4.7	.7
27	4.7	5.2	93	199	229	84	126	49	47	1.9	4.7	.7
28	36	58	225	224	98	161	99	337	46	1.9	4.7	.7
29	5.8	5.8	235	268	178	256	50	466	43	1.9	4.7	.7
30	28	5.8	284	383	------	383	105	410	42	1.9	4.7	.6
31	7.6	------	217	438	------	495	------	299	------	1.8	4.7	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	173	4.7	30.9	0.126	0.15
November	62	2.4	17.6	.072	.08
December	495	3.8	205	.837	.96
January	809	45	281	1.15	1.33
February	644	98	319	1.30	1.40
March	987	84	328	1.34	1.54
April	495	29	152	.620	.69
May	466	12	109	.445	.51
June	357	6.4	100	.408	.46
July	38	1.8	7.75	.032	.04
August	135	1.7	18.8	.077	.09
September	4.7	.6	2.21	.0090	.01
The year	987	.6	131	.535	7.26

CONTENTNEA CREEK AT HOOKERTON, N.C.

LOCATION.—Staff gage just below the East Carolina Railway bridge at Hookerton, Greene County.

DRAINAGE AREA.—691 square miles.

RECORDS AVAILABLE.—November 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 1,720 second-feet Mar. 12 (gage height, 10.18 feet); minimum, 13 second-feet Sept 16, 17 (gage height, 1.17 feet).

1928–32: Maximum discharge, 11,100 second-feet Oct. 6, 1929 (gage height, 18.9 feet); minimum, that of Sept. 16, 17, 1932.

REMARKS.—Records poor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	765	87	105	570	910	826	443	251	311	142	35	30
2	646	82	125	589	994	765	426	461	327	136	37	29
3	392	74	147	589	1,020	685	426	479	327	130	43	27
4	296	69	171	608	1,040	589	426	461	337	125	43	25
5	281	61	183	608	1,060	515	409	392	311	125	38	24
6	237	82	183	589	1,060	497	392	359	313	120	35	22
7	196	92	209	551	1,080	533	375	343	375	120	32	22
8	183	96	223	515	1,100	627	359	327	392	115	38	20
9	171	96	251	479	1,140	785	359	311	409	115	53	20
10	147	96	281	479	1,190	973	343	327	409	110	65	18
11	136	92	327	479	1,210	1,140	296	327	426	110	87	18
12	183	92	375	497	1,240	1,640	266	343	443	100	120	16
13	171	87	392	497	1,270	1,460	281	359	443	96	136	15
14	159	82	359	515	1,240	1,210	281	359	431	92	96	14
15	147	105	343	533	1,210	1,100	296	359	479	78	87	14
16	136	125	311	533	1,190	994	311	343	497	69	74	13
17	120	153	281	570	1,140	889	327	343	515	61	65	13
18	171	159	237	608	1,120	765	343	327	533	50	61	16
19	251	153	209	608	1,100	685	327	311	515	43	46	20
20	251	147	237	627	1,100	646	296	311	497	39	327	26
21	237	142	296	646	1,080	608	296	296	479	36	589	29
22	209	125	375	665	1,080	589	281	281	431	34	409	30
23	183	110	409	665	1,060	570	266	266	443	32	281	28
24	159	100	426	570	1,060	533	251	266	426	29	159	29
25	142	87	443	589	1,040	533	251	251	359	28	57	30
26	130	78	461	646	1,020	515	237	251	237	26	53	31
27	147	82	479	685	1,020	497	237	237	159	25	46	33
28	142	74	515	705	973	497	223	237	147	26	43	35
29	130	78	551	725	889	479	209	251	147	28	36	31
30	100	87	551	745	------	461	209	266	142	30	33	32
31	100	------	570	765	------	461	------	281	------	33	32	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	765	100	217	0.314	0.36
November	159	61	99.8	.144	.16
December	570	105	323	.467	.54
January	765	479	595	.861	.99
February	1,270	889	1,090	1.58	1.70
March	1,640	461	744	1.08	1.24
April	443	209	315	.456	.51
May	479	237	322	.466	.54
June	533	142	378	.547	.61
July	142	25	74.3	.108	.12
August	589	32	105	.152	.18
September	35	13	23.7	.034	.04
The year	1,640	13	355	.514	6.99

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 upstream from county line, and 6 miles east of Benaja, Rockingham County.

DRAINAGE AREA.—168 square miles.

RECORDS AVAILABLE.—October 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 1,710 second-feet Mar. 7 (gage height, 7.87 feet); minimum, 6.3 second-feet Sept. 1 (gage height, 0.73 foot). 1928–32: Maximum discharge, 5,020 second-feet Oct. 3, 1929 (gage height, 13.54 feet); minimum, that of Sept. 1, 1932.

REMARKS.—Slight daily regulation owing to operation of gristmills. Records excellent except those estimated Sept. 2, 3, 5–10, 19, 20, 23, 24, 27–30, which are poor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	30	45	201	178	89	250	111	49	45	18.0	7.0
2	30	26	43	234	157	86	320	155	49	42	20	8
3	32	33	46	252	222	80	309	134	42	34	36	100
4	30	36	104	216	298	91	256	103	40	28	33	71
5	23	34	108	146	320	101	203	86	39	37	35	40
6	29	33	71	127	298	716	145	76	34	38	55	30
7	26	33	55	178	244	1,610	125	71	40	36	86	25
8	25	35	49	417	176	1,370	118	62	33	39	37	15
9	29	29	76	1,090	148	766	128	65	33	33	37	10
10	30	34	125	1,520	130	483	155	83	34	26	27	10
11	28	35	118	1,170	118	342	172	88	43	20	21	11.0
12	26	35	86	652	134	236	195	111	180	27	20	10.1
13	30	34	68	434	188	163	195	127	309	19.5	16.5	11.8
14	27	40	96	331	218	137	159	106	364	18.0	17.5	9.2
15	27	36	116	236	212	121	132	74	331	28	11.4	9.2
16	59	30	92	168	176	111	116	65	266	41	11.4	9.8
17	45	35	71	136	155	111	109	64	184	68	15.0	9.5
18	37	34	74	123	139	109	99	86	125	43	14.6	7.5
19	28	40	71	113	123	103	98	73	89	34	15.0	10
20	37	42	62	103	111	94	92	66	73	29	15.5	30
21	31	43	62	96	106	91	89	61	62	29	12.2	16.0
22	32	40	152	91	159	230	88	65	58	18.5	11.0	17.5
23	28	36	218	89	178	276	88	62	120	21	11.0	50
24	31	44	309	89	157	276	88	59	108	19.0	8.9	40
25	30	40	298	94	123	256	83	55	58	14.6	8.3	33
26	24	39	232	89	113	203	141	52	47	19.5	8.0	26
27	32	34	146	109	106	145	172	49	47	17.5	8.6	30
28	29	41	113	116	101	276	163	120	51	48	7.5	30
29	30	40	120	118	96	254	111	86	80	30	10.1	40
30	34	37	103	157	------	201	96	58	55	34	10.1	30
31	37	------	91	178	------	189	------	53	------	25	7.5	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	59	23	31.2	0.186	0.21
November	44	26	35.9	.214	.24
December	309	43	110	.655	.76
January	1,520	89	293	1.74	2.01
February	320	96	168	1.00	1.08
March	1,610	80	301	1.79	2.06
April	320	83	150	.893	1.00
May	155	49	81.5	.485	.56
June	364	33	101	.601	.76
July	68	14.6	31.0	.185	.21
August	86	7.5	20.8	.124	.14
September	100	7.0	24.9	.148	.17
The year	1,610	7.0	112	.667	9.11

HAW RIVER AT HAW RIVER, N.C.

LOCATION.—Water-stage recorder 400 feet below Southern Railway bridge at Haw River, Alamance County.
DRAINAGE AREA.—592 square miles.
RECORDS AVAILABLE.—October 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 14,800 second-feet Mar. 6 (gage height, 20.98 feet); minimum, 14 second-feet Sept. 21.
1928–32: Maximum discharge, 18,400 second-feet Feb. 28 1929 (gage height, 23.96 feet); minimum, 3 second-feet Sept. 5, 1930.
REMARKS.—Records excellent. Daily regulation present.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	32	51	1,380	504	299	1,370	272	159	124	47	33
2	82	111	142	919	504	355	910	349	216	105	52	35
3	80	123	120	641	1,340	285	792	340	144	96	45	844
4	54	87	130	504	1,860	264	659	359	179	77	50	482
5	39	38	270	367	1,370	283	498	349	191	76	60	159
6	32	36	205	410	910	8,360	464	312	84	93	90	120
7	33	38	180	846	641	7,080	352	194	79	100	838	94
8	29	39	137	4,940	488	3,780	327	155	77	98	197	59
9	32	111	211	6,580	425	2,010	630	162	70	82	122	45
10	36	113	352	4,720	472	1,190	533	200	72	76	86	45
11	52	90	321	2,900	440	850	481	184	178	58	91	41
12	105	38	246	1,620	649	678	734	210	1,390	67	96	39
13	115	38	200	1,080	1,080	569	641	321	1,770	69	62	33
14	114	39	239	811	641	447	551	309	1,710	53	45	33
15	69	44	262	659	538	365	464	293	1,010	43	40	48
16	28	143	239	538	571	410	321	275	696	52	33	31
17	20	138	191	472	623	321	278	184	533	70	30	27
18	19	127	246	410	588	312	264	175	413	81	31	23
19	96	50	304	313	521	290	258	162	355	96	28	24
20	122	29	229	285	388	267	241	140	275	84	28	81
21	119	42	210	280	321	249	246	144	159	64	33	20
22	45	99	453	267	747	773	238	153	140	53	32	24
23	29	158	659	234	641	1,010	229	140	130	81	25	126
24	32	143	538	244	472	830	224	134	229	62	24	144
25	34	135	659	277	382	734	229	105	159	46	24	120
26	100	66	554	259	335	587	388	93	114	37	23	79
27	111	44	394	410	352	498	569	114	179	42	23	84
28	48	45	410	456	410	1,630	481	168	179	40	22	84
29	26	75	410	440	358	1,040	306	180	138	42	20	138
30	38	134	391	691	-------	734	255	140	134	64	46	118
31	33	-------	294	753	-------	981	-------	114	-------	67	35	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	122	19	59.6	0.101	0.12
November	158	29	80.2	.135	.15
December	659	51	298	.503	.58
January	6,580	234	1,120	1.89	2.18
February	1,860	321	640	1.08	1.16
March	8,360	249	1,210	2.04	2.35
April	1,370	224	464	.784	.87
May	359	93	207	.350	.40
June	1,770	70	362	.611	.68
July	124	37	70.9	.120	.14
August	838	20	76.7	.130	.15
September	844	20	108	.182	.20
The year	8,360	19	392	.662	8.98

HAW RIVER NEAR PITTSBORO, N.C.

LOCATION.—Water-stage recorder 2 miles downstream from highway bridge on State Highway 90, about 100 feet above Robinsons Creek, and 5 miles east of Pittsboro, Chatham County. Zero of gage is 180.08 feet above mean sea level.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—November 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 29,700 second-feet Mar. 7 (gage height, 17.95 feet); minimum, 11 second-feet Oct. 26 (gage height, 1.37 feet).

1928–32: Maximum discharge, 47,300 second-feet Oct. 2, 1929 (gage height, 22.1 feet); minimum, 9 second-feet Oct. 13, 1930 (gage height, 1.32 feet).

Flood of August 1908 reached a stage of about 32.1 feet (discharge, estimated, 98,000 second-feet).

REMARKS.—Records excellent except those estimated Aug. 19–30, which are good. Daily regulation present.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	51	96	2,610	1,400	682	3,230	530	266	539	149	36
2	59	144	112	2,690	1,050	618	2,210	762	160	404	97	36
3	104	81	98	1,400	2,290	650	1,580	762	286	252	71	60
4	48	69	319	1,050	4,480	562	1,360	642	281	233	480	633
5	108	81	399	794	3,880	546	1,090	626	164	319	510	544
6	74	122	411	642	2,300	14,700	954	578	233	286	170	378
7	63	92	354	1,050	1,630	21,900	850	523	225	274	209	215
8	125	47	337	13,100	1,220	6,780	722	298	184	264	870	163
9	57	89	273	20,000	1,050	3,880	1,270	377	162	231	404	150
10	27	90	822	11,200	970	2,500	1,680	394	159	192	298	108
11	24	66	820	5,270	946	1,860	1,180	388	559	202	160	41
12	35	100	507	3,190	962	1,500	1,630	426	6,790	216	161	49
13	67	118	351	2,200	2,270	1,320	1,450	344	6,890	163	200	76
14	55	109	418	1,760	1,630	1,140	1,090	642	5,090	132	68	50
15	45	44	634	1,450	1,180	946	946	488	2,670	70	148	57
16	57	92	586	1,180	1,270	842	834	474	1,720	88	49	59
17	207	81	446	1,010	1,270	874	666	509	1,140	43	58	61
18	118	81	418	930	1,270	810	626	439	890	188	134	39
19	158	101	282	786	1,090	786	578	240	1,240	101	69	37
20	69	132	425	674	954	714	562	358	1,430	168	88	86
21	62	159	418	618	778	666	516	243	722	70	53	77
22	71	65	1,120	594	1,550	754	502	281	474	148	84	55
23	196	159	1,720	538	1,810	1,710	488	260	495	185	122	38
24	93	81	1,090	488	1,220	1,500	453	386	530	32	66	35
25	35	90	946	523	962	1,220	460	286	474	158	45	30
26	68	83	1,010	562	842	1,090	642	212	308	57	80	183
27	87	184	746	594	762	970	1,090	216	325	194	46	199
28	68	120	650	914	770	2,600	914	655	322	108	36	184
29	80	86	690	1,120	802	2,900	746	432	2,010	156	54	138
30	100	156	674	1,830	------	1,630	562	418	1,580	78	66	77
31	110	------	610	2,400	------	1,320	------	397	------	32	42	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	207	24	83.9	0.063	0.07
November	184	44	99.1	.074	.08
December	1,720	96	574	.428	.49
January	20,000	488	2,680	2.00	2.31
February	4,480	762	1,470	1.10	1.19
March	21,900	546	2,580	1.93	2.22
April	3,230	453	1,030	.769	.86
May	762	212	438	.327	.38
June	6,890	159	1,260	.940	1.05
July	538	32	180	.134	.15
August	870	36	164	.122	.14
September	633	30	130	.097	.11
The year	21,900	24	890	.664	9.05

CAPE FEAR RIVER AT LILLINGTON, N.C.

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

DRAINAGE AREA.—3,530 square miles.

RECORDS AVAILABLE.—December 1923 to September 1932.

EXTREMES.—Maximum discharge during year, 50,900 second-feet Mar. 7 (gage height, 18.74 feet); minimum, 47 second-feet Aug. 31 (gage height, 0.19 foot). 1923–32: Maximum discharge, 101,000 second-feet Oct. 2, 1929 (gage height, 27.55 feet); minimum, 8 second-feet Oct. 8, 1926 (gage height, 0.01 foot).

REMARKS.—Records good except those estimated Dec. 24 to Jan. 1, Jan. 3–7, 10–15, which are fair. Large diurnal fluctuation caused by operation of Buckhorn power plant 14 miles upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	306	86	239	4,500	4,710	1,860	5,020	1,370	1,110	1,860	168	210
2	240	83	434	8,250	3,500	1,680	6,010	1,860	558	1,750	192	164
3	312	213	121	4,800	3,480	1,680	4,250	2,600	527	930	314	304
4	96	106	2,470	3,100	8,900	1,810	3,350	2,160	739	536	184	1,380
5	82	96	8,130	2,500	8,530	1,430	2,780	1,550	572	617	4,100	1,790
6	216	216	3,950	2,200	6,180	14,400	2,500	1,350	392	754	2,620	960
7	336	414	2,220	2,100	4,550	47,700	2,360	1,230	494	576	1,290	762
8	91	112	1,140	17,200	3,420	34,500	1,370	1,090	716	464	1,330	419
9	155	195	1,370	44,000	2,850	23,000	2,260	854	572	462	1,420	360
10	365	344	1,560	40,100	2,640	9,070	3,170	716	454	588	634	239
11	93	110	3,310	25,400	2,500	5,600	2,980	1,340	400	431	1,140	67
12	75	86	2,540	13,500	2,450	4,250	3,250	1,090	9,430	436	450	141
13	73	183	1,700	7,000	7,050	3,650	3,790	1,980	17,600	226	346	236
14	73	329	1,270	4,500	6,530	3,280	3,070	1,940	17,600	189	240	68
15	168	110	1,520	3,800	4,250	2,920	2,490	1,490	8,600	408	348	166
16	278	203	2,820	3,420	3,950	2,570	2,210	993	5,450	222	472	297
17	234	400	2,420	2,990	4,400	2,500	1,720	934	3,830	63	256	185
18	301	116	1,630	2,710	3,800	2,190	1,580	1,160	3,170	157	78	55
19	200	93	1,330	2,500	3,280	2,500	1,570	1,060	1,600	276	58	51
20	328	210	1,300	2,360	2,710	1,880	1,490	638	2,910	186	154	175
21	116	390	1,540	1,780	2,710	2,360	1,420	996	1,830	406	276	304
22	178	124	1,680	1,780	3,200	2,040	1,340	1,240	1,310	200	158	162
23	131	206	5,540	1,470	6,180	4,250	1,190	2,080	1,330	150	74	238
24	232	412	4,490	1,540	4,550	3,800	1,020	1,410	1,310	308	52	85
25	98	129	3,000	1,660	3,280	3,060	1,100	1,020	970	152	71	156
26	200	206	2,500	1,450	2,710	2,570	1,310	925	834	223	196	412
27	348	365	2,200	1,890	2,300	1,910	2,080	602	634	69	224	400
28	98	232	2,100	2,110	2,150	5,360	2,920	1,770	639	178	66	357
29	306	579	2,100	2,640	2,130	7,260	2,430	3,980	2,830	325	51	294
30	308	411	2,300	4,300	-------	4,870	1,500	2,480	4,070	205	48	374
31	102	-------	2,200	5,670	-------	3,650	-------	1,440	-------	317	120	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	365	73	195	0.055	0.06
November	579	83	225	.064	.07
December	8,130	121	2,290	.649	.75
January	44,000	1,450	7,200	2.04	2.35
February	8,900	2,130	4,100	1.16	1.25
March	47,700	1,430	6,760	1.92	2.21
April	6,010	1,020	2,450	.694	.77
May	3,980	602	1,460	.414	.48
June	17,600	342	3,080	.873	.97
July	1,860	-------	441	.125	.14
August	4,100	48	553	.157	.18
September	1,790	51	360	.102	.11
The year	47,700	48	2,430	.688	9.34

CAPE FEAR RIVER AT FAYETTEVILLE, N.C.

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

DRAINAGE AREA.—4,290 square miles.

RECORDS AVAILABLE.—January 1889 to May 1903; September 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 46,500 second-feet Mar. 8 (gage height, 42.0 feet); minimum, 180 second-feet Sept. 13 (gage height, 0.73 foot).

1889–1903, 1928–32: Maximum discharge, 110,000 second-feet Oct. 4, 1929 (gage height, 63.43 feet); minimum, 73 second-feet Oct. 6, 1930.

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

REMARKS.—Records fair. Discharge estimated Oct. 1 to Dec. 3, Apr. 9, 21–26, May 1, 2, 6–11. Regulation during low-water periods from operation of Buckhorn Shoals power plant.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	380	320	528	2,980	6,380	2,740	4,800	2,020	2,680	3,280	528	208
2	475	290	395	9,210	5,220	2,500	7,200	1,670	2,020	2,270	434	264
3	410	290	425	7,870	4,450	2,320	5,800	2,620	1,470	2,070	324	247
4	475	410	1,680	5,370	7,700	2,380	4,660	2,860	1,320	1,420	440	245
5	342	355	9,600	4,310	10,500	2,220	3,820	2,440	1,370	1,000	1,300	1,340
6	310	320	8,650	3,340	8,700	6,770	3,220	2,170	1,080	1,040	3,340	1,470
7	300	320	5,820	2,980	6,300	39,400	2,860	2,070	1,000	1,120	2,170	1,000
8	425	380	4,080	9,060	4,700	43,000	2,380	1,920	1,120	960	1,620	780
9	320	330	3,100	35,900	4,100	33,500	2,020	1,770	1,520	820	1,470	510
10	290	310	2,980	44,400	3,680	15,500	3,280	1,420	1,220	780	1,420	419
11	380	410	3,470	38,800	3,400	10,700	3,960	1,270	1,080	840	860	355
12	310	330	4,240	25,400	3,220	8,800	4,170	2,020	7,700	760	1,080	229
13	290	290	3,400	13,100	5,580	6,480	5,010	2,170	17,900	720	720	190
14	260	290	2,620	10,600	8,720	5,080	4,870	2,800	22,600	562	580	280
15	250	380	2,170	8,100	6,500	4,730	4,100	2,560	14,300	410	528	256
16	320	320	2,800	5,900	5,300	4,240	3,470	2,220	10,400	580	528	250
17	440	310	3,400	4,700	5,500	3,820	2,980	1,720	7,800	545	598	389
18	342	475	3,040	4,240	5,500	3,470	2,320	1,520	5,900	458	475	258
19	458	380	2,560	3,890	4,870	3,400	2,270	1,720	3,850	352	318	210
20	380	342	2,270	3,610	4,170	3,160	2,220	1,570	3,340	440	398	202
21	475	300	2,220	3,160	3,540	2,920	2,120	1,470	3,280	395	332	199
22	368	395	2,320	2,860	3,320	2,860	2,120	3,470	2,740	528	475	370
23	342	342	3,630	2,620	6,880	3,800	2,020	4,800	2,120	401	401	294
24	330	342	6,540	2,380	6,750	4,730	1,870	5,080	2,070	270	310	362
25	355	425	5,290	2,500	5,080	4,240	1,720	3,680	1,920	350	248	264
26	310	355	3,820	2,440	4,240	3,340	1,770	2,620	1,520	264	234	220
27	300	320	3,220	2,620	3,340	3,040	2,120	2,020	1,370	350	250	401
28	440	425	2,920	3,040	3,040	3,300	2,980	1,670	1,320	380	330	510
29	355	368	2,800	3,540	2,860	8,660	2,980	4,050	1,220	410	241	475
30	310	510	3,040	4,380	------	7,200	2,440	4,730	4,980	632	224	401
31	425	------	3,160	5,900	------	5,280	------	3,610	------	510	217	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	475	250	360	0.084	0.10
November	510	290	354	.083	.09
December	9,600	395	3,430	.800	.92
January	44,400	2,380	9,010	2.10	2.42
February	10,500	2,860	5,310	1.24	1.34
March	43,000	2,220	8,180	1.91	2.20
April	7,200	1,720	3,250	.758	.85
May	5,080	1,270	2,510	.585	.67
June	22,600	1,000	4,410	1.03	1.15
July	3,280	264	804	.187	.22
August	3,340	217	723	.169	.19
September	1,470	190	420	.098	.11
The year	44,400	190	3,230	.753	10.26

REEDY FORK NEAR GIBSONVILLE, N.C.

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

DRAINAGE AREA.—133 square miles.

RECORDS AVAILABLE.—September 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 2,040 second-feet Mar. 6 (gage height, 7.70 feet); minimum, 0.8 second-foot Aug. 27 (gage height, 0.35 foot). 1928–32: Maximum discharge, 4,090 second-feet Oct. 3, 1929 (gage height, 12.65 feet); minimum, that of Aug. 27, 1932.

REMARKS.—Records fair except those estimated Jan. 31 to Feb. 16, May 28 to June 6, which are poor. Flow regulated at low stages by storage for Greensboro water supply, which is diverted at confluence of Horsepen Creek and Reedy Fork, 14 miles upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.8	11.6	27	154	60	112	216	35	30	17.5	13.1	10.1
2	11.2	22	20	117	100	98	164	46	25	17.7	9.8	144
3	9.4	13.2	21	146	170	38	200	96	20	10.9	8.7	123
4	9.8	17.4	53	76	240	38	134	154	20	14.3	9.2	24
5	17.0	18.4	52	100	260	31	124	168	18	15.8	12.0	29
6	14.7	18.6	27	181	240	1,090	111	98	18	17.5	12.1	23
7	15.9	19.1	33	185	200	1,080	50	32	15.7	10.6	16.2	22
8	16.2	8.6	28	340	150	1,030	44	25	14.0	9.7	21	20
9	14.3	21	43	765	100	497	46	25	12.1	14.4	22	18.0
10	17.9	19.0	57	1,050	80	287	48	26	11.7	4.8	60	17.6
11	9.2	17.7	39	692	60	220	68	27	18.9	13.6	23	8.0
12	14.5	16.4	25	382	50	205	177	32	220	9.5	12.4	26
13	12.8	19.4	17.8	266	60	189	194	32	239	9.1	11.5	14.4
14	12.1	18.8	39	214	70	82	187	92	274	11.8	5.2	12.1
15	12.9	13.0	32	174	90	117	122	154	266	10.5	10.8	20
16	18.0	22	23	187	124	119	46	93	196	9.5	6.5	17.7
17	16.3	22	56	172	185	56	38	30	179	4.5	9.9	17.4
18	10.2	15.5	150	65	185	52	38	24	164	11.3	7.4	4.5
19	18.5	18.6	156	40	168	43	33	21	148	17.2	9.0	11.1
20	10.9	23	49	34	59	37	32	22	45	14.0	9.8	4.2
21	16.0	20	38	32	41	39	30	21	27	11.5	4.8	28
22	12.0	15.4	66	31	91	198	30	18.6	24	9.7	10.7	39
23	17.6	20	82	28	70	295	30	22	23	10.2	7.0	27
24	15.9	22	54	30	47	303	29	19.8	21	4.5	9.8	48
25	15.8	20	134	32	43	253	32	18.6	15.8	9.9	5.8	29
26	19.0	14.3	89	92	43	205	102	16.3	16.2	7.1	2.0	39
27	14.1	21	136	174	140	185	189	15.3	21	9.0	5.4	28
28	11.2	23	172	174	162	265	122	20	17.4	8.9	3.6	34
29	24	10.9	168	89	54	187	38	40	19.8	11.4	10.7	35
30	26	30	132	92	------	203	32	60	20	15.0	6.5	34
31	18.5	------	44	61	------	248	------	50	------	5.0	8.0	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26	9.2	15.0	0.113	0.13
November	30	8.6	18.4	.138	.15
December	172	17.8	66.5	.500	.58
January	1,050	28	199	1.50	1.73
February	260	41	115	.865	.93
March	1,090	31	252	1.89	2.18
April	216	29	90.2	.678	.76
May	168	15.3	49.5	.372	.43
June	274	11.7	71.3	.536	.60
July	17.7	4.5	11.2	.084	.10
August	60	2.0	11.7	.088	.10
September	144	4.2	30.2	.227	.25
The year	1,090	2.0	77.6	.583	7.94

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 1932.

EXTREMES.—Maximum discharge during year, 1,340 second-feet Mar. 6 (gage height, 7.95 feet); minimum, 1.0 second-foot Aug. 13 (gage height, 1.13 feet).
1928–32: Maximum discharge, 1,540 second-feet Feb. 28, 1929 (gage height, 8.74 feet); minimum, 0.2 second-foot Oct. 2, 1930.

REMARKS.—Records fair above 10 second-feet; poor below and for estimated period, Sept. 19–22. Sewage from Greensboro enters just above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	1.9	5.0	160	30	13.2	139	23	3.3	2.6	1.4	1.3
2	2.6	2.2	4.8	82	37	12.6	44	27	3.3	2.6	1.6	39
3	2.8	2.2	4.8	22	90	11.9	26	14.8	3.0	2.2	1.9	199
4	3.0	2.6	6.7	14.4	177	14.6	20	11.9	2.8	2.2	2.5	19.8
5	3.3	2.4	14.4	11.7	93	14.2	16.9	10.0	2.8	17.6	2.5	7.0
6	3.0	2.4	8.1	21	43	648	16.6	8.8	2.9	3.8	8.4	6.0
7	2.6	2.2	6.2	116	30	517	14.2	9.8	3.0	2.5	17.7	4.8
8	2.7	2.3	5.6	318	27	97	13.7	8.4	2.7	2.2	3.5	3.8
9	2.8	2.6	30	621	27	40	15.1	10.4	2.6	1.9	2.2	3.5
10	3.0	8.0	33	303	23	22	15.3	19.8	2.6	1.5	1.6	3.3
11	2.9	2.9	10.8	63	21	17.5	31	24	42	1.5	1.3	3.6
12	2.8	3.0	7.2	39	57	15.1	40	28	310	1.6	1.2	3.8
13	3.0	3.5	6.6	34	98	14.4	19.5	38	323	1.5	1.2	3.6
14	3.6	3.4	19.7	32	34	12.3	14.4	11.9	147	1.2	1.2	3.7
15	4.6	3.1	18.6	27	40	10.2	13.9	7.9	31	2.0	1.1	3.8
16	5.5	3.5	10.2	22	48	10.0	11.7	6.4	13.9	1.9	1.2	4.2
17	3.2	4.1	9.0	19.8	41	10.6	11.2	5.8	8.6	4.0	1.4	4.1
18	2.2	4.5	10.8	18.0	34	12.3	10.8	5.2	6.2	2.4	1.6	3.4
19	2.1	6.7	10.2	15.8	25	9.2	10.4	5.0	5.0	1.6	2.3	3.1
20	2.6	5.5	8.1	14.6	21	8.6	9.6	5.2	5.2	1.3	1.9	3.6
21	2.4	4.6	12.9	13.5	22	8.3	9.2	5.1	4.8	1.2	1.6	19.2
22	2.7	3.6	90	13.5	77	66	9.2	7.0	4.2	1.2	1.3	16.4
23	1.9	3.9	62	13.2	40	54	8.4	6.0	3.9	1.2	1.6	11.9
24	1.9	3.8	24	14.2	25	19.5	8.3	5.1	3.3	1.2	1.4	6.4
25	1.9	4.0	58	15.1	20	14.6	8.4	4.3	3.0	2.7	1.3	5.4
26	1.9	3.9	18.6	12.8	18.0	12.6	58	4.1	3.1	2.1	1.2	4.1
27	2.2	4.0	11.5	33	16.4	14.4	34	4.0	3.2	1.8	1.2	13.9
28	2.3	4.6	18.0	24	15.8	196	15.3	4.7	3.6	3.8	1.2	11.7
29	2.5	4.8	17.5	29	14.4	80	13.0	3.9	11.0	2.7	1.1	7.7
30	3.1	4.8	11.5	62	-------	26	11.2	3.4	3.9	3.1	1.2	5.5
31	2.9	-------	13.4	68	-------	76	-------	3.3	-------	2.2	1.2	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5.5	1.9	2.80	0.085	0.10
November	6.7	1.9	3.53	.108	.12
December	90	4.8	18.3	.558	.64
January	621	11.7	72.7	2.22	2.56
February	177	14.4	42.9	1.31	1.41
March	648	8.3	67.0	2.04	2.35
April	139	8.3	22.3	.680	.76
May	38	3.3	10.7	.326	.38
June	323	2.6	32.2	.982	1.10
July	17.6	1.2	2.62	.080	.09
August	17.7	1.1	2.32	.071	.08
September	199	1.3	14.2	.433	.48
The year	648	1.1	24.3	.741	10.07

NORTH BUFFALO CREEK NEAR GREENSBORO, N.C.

LOCATION.—Water-stage recorder at county highway bridge 3 miles above junction with Buffalo Creek and 6 miles northwest of Greensboro, Guilford County.
DRAINAGE AREA.—36.4 square miles.
RECORDS AVAILABLE.—August 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 1,360 second-feet Mar. 6 (gage height, 9.8 feet); minimum, 1.6 second-feet Aug. 28.
1928–32: Maximum discharge, 1,620 second-feet Feb. 28, 1929; minimum, that of Aug. 28, 1932.
REMARKS.—Records good except those for June 12 to Aug. 31, which are fair. Sewage from Greensboro and Proximity Mills enters above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.4	6.3	11.0	183	28	21	86	32	11.4	11.7	5.0	9.6
2	15.2	7.7	11.0	38	57	19.7	41	22	11.7	14.8	6.3	64
3	6.3	9.1	12.3	24	163	19.7	32	18.8	8.2	9.1	7.4	387
4	5.6	9.7	55	19.3	104	22	28	17.6	6.3	7.7	6.8	20
5	6.8	9.1	14.5	18.8	44	19.3	28	16.7	6.8	32	6.6	66
6	9.1	9.1	8.4	32	32	862	29	14.5	8.0	16.0	9.1	32
7	9.7	6.3	8.2	115	26	397	26	10.7	9.7	14.1	13.4	14.5
8	9.7	5.0	11.7	520	28	75	24	11.0	10.4	12.3	6.8	13.0
9	9.1	6.8	67	508	24	49	26	22	13.4	7.7	10.7	12.0
10	6.6	9.4	23	113	24	37	21	24	9.7	5.0	10.7	8.8
11	5.6	8.5	17.6	47	25	32	48	28	147	6.0	11.0	7.1
12	5.8	10.0	12.0	37	142	28	42	48	610	9.1	9.1	7.4
13	9.1	10.0	10.4	35	70	26	28	39	250	8.2	8.0	10.0
14	9.7	6.8	34	34	34	24	26	19.3	100	9.1	4.8	10.7
15	9.7	5.6	25	28	46	24	24	14.5	40	14.1	4.8	10.7
16	12.3	7.7	16.7	24	40	24	19.7	13.4	34	5.0	8.8	10.4
17	6.6	10.4	16.0	21	43	24	17.6	16.0	25	23	9.7	8.0
18	5.3	10.4	22	21	34	25	18.4	16.3	17.6	9.7	11.0	6.0
19	6.3	13.0	13.7	21	28	19.7	22	16.0	14.5	9.7	9.4	6.6
20	9.4	10.4	10.4	19.3	24	18.4	19.7	15.2	17.1	10.4	5.8	9.4
21	9.1	8.0	13.0	19.3	27	18.8	21	12.0	18.4	9.7	3.8	56
22	9.7	7.4	97	18.8	90	185	19.7	12.7	18.0	8.0	4.6	28
23	9.1	8.8	35	16.0	38	48	17.6	11.4	17.6	6.6	7.7	13.7
24	6.3	11.0	24	16.0	30	33	22	12.3	12.0	6.0	8.2	11.4
25	5.3	11.0	37	16.3	26	28	18.0	12.3	8.2	8.5	10.0	9.7
26	7.4	8.5	16.3	17.6	24	23	93	11.4	6.8	11.7	8.8	8.2
27	10.0	9.6	13.4	39	22	24	28	9.7	13.0	14.5	6.8	31
28	9.7	11.6	27	24	20	264	21	12.0	18.8	19.3	3.4	25
29	13.7	7.4	23	40	19.3	47	19.3	7.4	36	9.1	4.8	19.3
30	9.7	8.2	20	101	------	36	18.0	8.2	15.2	11.7	8.8	12.0
31	6.8	------	23	40	------	148	------	10.7	------	7.7	10.0	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15.2	5.3	8.55	0.235	0.27
November	13.0	5.0	8.76	.241	.27
December	97	8.2	23.5	.646	.74
January	520	16.0	71.2	1.96	2.26
February	163	19.3	45.3	1.24	1.34
March	862	18.4	84.6	2.32	2.68
April	93	17.6	29.5	.810	.90
May	48	7.4	17.3	.475	.55
June	610	6.3	50.5	1.39	1.55
July	32	5.0	11.2	.308	.36
August	13.4	3.4	7.81	.215	.25
September	387	6.0	30.9	.849	.95
The year	862	3.4	32.4	.890	12.12

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.—27 square miles.

RECORDS AVAILABLE.—January 1923 to June 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 2,040 second-feet Mar. 6 (gage height, 12.20 feet); minimum mean daily discharge, 0.7 second-foot June 1. 1923–32: 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 above 100 second-feet, which are fair. Water diverted above station for water supply of Chapel Hill is included in tables of discharge.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	2.6	3.3	4.2	89	28	16.3	41	17.8	0.7
2	2.7	2.8	3.7	26	32	15.0	28	14.2	10.8
3	2.7	2.8	2.8	17.8	70	14.9	25	11.7	-------
4	2.7	2.8	45	14.6	72	14.5	21	10.5	-------
5	2.7	2.8	33	13.1	53	15.9	19.4	10.2	-------
6	2.6	2.8	17.8	12.0	35	796	18.2	10.0	-------
7	2.6	2.6	12.7	22	31	122	17.8	9.7	-------
8	2.6	2.8	9.1	612	29	66	17.0	9.2	-------
9	2.6	2.9	41	408	26	49	22	10.2	-------
10	2.2	2.9	17.8	136	24	37	19.0	10.2	-------
11	2.2	2.9	8.1	66	22	30	24	11.1	-------
12	2.1	3.0	6.7	41	50	28	28	10.0	-------
13	2.0	3.0	6.2	35	51	27	19.8	10.0	-------
14	2.2	2.9	13.4	31	31	24	17.0	8.4	-------
15	3.4	2.9	14.2	27	33	24	15.2	7.9	-------
16	4.4	2.8	8.5	24	32	22	14.2	7.7	-------
17	3.4	2.5	8.1	21	30	24	14.2	7.5	-------
18	2.2	1.5	8.3	19.8	26	24	13.2	7.7	-------
19	1.5	2.5	8.3	17.8	22	21	12.9	7.9	-------
20	2.0	2.8	8.3	16.3	19.8	19.8	12.3	5.5	-------
21	1.8	2.6	42	15.9	22	18.2	12.3	9.0	-------
22	1.6	2.4	98	15.2	50	31	12.0	12.0	-------
23	3.0	2.8	30	15.2	31	22	11.7	7.9	-------
24	2.6	2.4	17.4	15.4	25	19.0	11.7	7.1	-------
25	2.0	2.4	13.1	14.6	22	18.2	11.4	6.6	-------
26	2.3	2.4	10.8	13.5	20	17.0	39	6.4	-------
27	3.0	2.6	9.9	21	19.4	24	15.6	9.4	-------
28	3.5	3.0	12.4	15.2	19.8	58	12.9	35	-------
29	8.1	3.0	12.0	61	18.2	26	12.0	12.6	-------
30	7.1	3.5	9.9	31	-------	22	11.7	8.5	-------
31	5.7	-------	10.5	43	-------	48	-------	2.6	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8.1	1.5	2.97	0.110	0.13
November	3.5	1.5	2.75	.102	.11
December	98	2.8	17.5	.648	.75
January	612	12.0	63.2	2.34	2.70
February	72	18.2	32.6	1.21	1.30
March	796	14.5	54.6	2.02	2.33
April	41	11.4	18.3	.678	.76
May	35	2.6	10.1	.374	.43
June	10.8	.7	5.75	.213	.02

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

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

DRAINAGE AREA.—33 square miles.

RECORDS AVAILABLE.—June 1923 to September 1926; July 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 1,370 second-feet Mar. 6 (gage height, 11.3 feet); minimum, 0.3 second-foot Sept. 1.

1923–26, 1928–32: Maximum discharge (revised), 1,710 second-feet Feb. 28, 1929 (gage height, 12.35 feet); minimum, that of Sept. 1, 1932.

REMARKS.—Records good except those estimated Dec. 19 to Jan 12, which are poor. Flow slightly regulated by gristmill 4 miles above.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	4.0	6.3	100	21	17.6	61	51	6.5	6.5	3.8	0.6
2	3.5	4.2	5.8	30	36	17.2	34	16.8	6.5	6.0	7.8	1.3
3	3.3	4.4	6.8	19	120	17.6	28	13.0	6.3	5.1	6.8	8.4
4	3.5	4.8	22	16	67	18.8	23	12.1	5.8	11.0	6.0	2.9
5	3.3	4.6	8.3	14	34	18.0	21	11.2	6.0	22	12.2	3.1
6	3.1	4.6	6.5	35	25	752	19.6	10.8	6.0	7.3	17.2	2.7
7	2.9	4.8	6.0	110	22	158	18.0	9.9	5.1	6.0	11.1	1.9
8	2.9	5.3	6.0	350	22	56	17.6	9.6	5.1	6.3	4.8	1.6
9	3.3	5.6	28	300	20	36	19.6	13.4	5.3	5.3	4.4	1.9
10	4.0	4.8	16.8	70	18.8	28	18.0	27	4.8	4.2	3.3	1.3
11	3.6	5.1	9.3	45	18.0	26	27	38	36	4.6	2.9	1.6
12	3.6	5.3	7.5	35	118	24	22	28	195	4.2	2.7	2.0
13	3.5	5.3	7.5	29	45	22	17.2	20	70	4.0	2.7	1.4
14	3.1	5.3	19.6	26	27	20	16.4	14.4	57	52	2.3	1.4
15	3.5	5.1	9.9	22	28	19.2	15.3	12.1	20	21	2.6	2.1
16	3.6	5.3	7.3	19.6	25	18.4	14.7	11.2	27	7.3	2.3	1.4
17	2.7	5.3	7.3	17.6	28	18.8	14.4	10.2	15.0	6.8	2.1	1.2
18	2.7	5.6	9.3	16.4	24	18.4	14.0	10.2	9.9	5.3	2.4	.9
19	3.3	6.5	8	14.7	21	18.4	13.7	9.9	10.5	4.4	2.9	1.4
20	3.1	5.6	7	14.0	19.2	18.0	13.4	10.2	9.3	4.2	2.6	1.2
21	3.5	5.3	40	13.7	27	17.6	13.4	12.1	8.6	4.0	1.9	12.5
22	3.5	5.3	100	13.0	52	374	12.7	11.2	7.8	4.0	1.9	5.3
23	3.5	5.1	26	12.7	26	55	12.7	9.9	7.5	3.6	1.9	3.8
24	3.6	5.3	24	13.4	22	33	12.7	8.6	6.3	2.6	1.3	4.2
25	3.6	5.1	19	12.1	20	27	13.0	8.3	6.8	5.3	1.6	3.3
26	3.3	4.6	14	11.8	19.2	25	47	7.8	6.3	3.5	1.4	3.3
27	3.6	5.1	12	21	18.8	23	15.7	19.8	11.8	7.8	1.3	7.0
28	4.0	6.0	28	14.0	18.4	68	13.0	18.4	17.6	8.8	1.2	5.1
29	6.0	5.6	14	23	17.2	26	12.4	8.0	19.8	4.8	1.3	4.2
30	4.4	5.8	12	85	-------	24	11.8	7.3	7.3	5.6	.9	3.5
31	4.4	-------	45	30	-------	113	-------	7.0	-------	3.3	.9	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6.0	2.7	3.53	0.017	0.12
November	6.5	4.0	5.16	.156	.17
December	100	5.8	17.4	.527	.61
January	350	11.8	49.5	1.50	1.73
February	120	17.2	33.1	1.00	1.08
March	752	17.2	68.0	2.06	2.38
April	61	11.8	19.7	.597	.67
May	51	7.0	14.8	.448	.52
June	195	4.8	20.2	.612	.68
July	52	2.6	7.96	.241	.28
August	17.2	.9	3.82	.116	.13
September	12.5	.6	3.08	.093	.10
The year	752	.6	20.5	.621	8.47

DEEP RIVER NEAR RANDLEMAN, N.C.

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

DRAINAGE AREA.—124 square miles.

RECORDS AVAILABLE.—October 1928 to September 1932.

EXTREMES.—Maximum discharge during year occurred Mar. 6 (no record); minimum, 0.5 second-foot Nov. 28 (gage height, 1.41 feet).

1928–32: Maximum discharge, 5,790 second-feet Feb. 28, 1929 (gage height, 23.9 feet); minimum, that of Nov. 28, 1931.

REMARKS.—Records good except those estimated Feb. 20 to Mar. 7, Mar. 11 to Apr. 4, which are poor. Flow regulated by Coltrane's mill and by storage in High Point Reservoir.

Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	9.4	10.0	314	115	60	300	113	19.4	37	59	3.0
2	18.8	12.1	10.6	173	141	50	200	92	21	31	82	8.3
3	9.8	9.4	3.8	96	378	50	150	61	13.8	9.2	34	112
4	5.1	7.6	40	82	600	40	100	63	18.0	8.2	8.3	10.5
5	9.8	8.1	31	59	322	50	86	136	10.4	22	22	10.6
6	15.3	12.8	8.4	81	150	3,000	81	44	22	18.7	50	11.9
7	11.9	8.5	14.4	533	115	1,200	84	25	37	11.5	128	4.0
8	6.0	4.0	9.4	1,840	130	339	46	18.6	21	17.0	56	4.2
9	4.7	16.6	54	2,000	88	212	80	35	12.1	4.8	18.5	6.9
10	3.6	11.4	93	598	78	137	74	36	14.4	5.4	7.3	5.5
11	11.2	10.0	40	232	83	100	142	33	31	10.8	13.7	9.9
12	7.1	10.2	32	156	229	90	130	38	1,060	11.1	16.8	5.0
13	7.0	12.2	13.6	136	277	90	74	38	403	3.8	10.0	4.9
14	8.9	14.0	104	108	117	80	75	26	491	8.0	12.2	6.4
15	6.8	2.0	70	91	136	70	45	19.3	151	62	5.2	7.2
16	13.4	7.9	39	87	124	60	51	23	66	40	6.0	8.8
17	26.0	11.0	36	77	116	60	54	34	67	40	7.8	5.8
18	8.8	13.4	34	87	103	70	71	19.0	90	45	8.6	9.7
19	10.9	9.2	50	63	77	60	57	15.5	91	37	10.0	2.7
20	8.8	12.2	22	57	60	50	30	18.4	100	31	44	3.7
21	11.5	10.8	36	60	70	80	59	18.4	31	24	15.2	10.4
22	7.4	2.0	387	36	250	250	31	10.1	21	24	5.4	14.7
23	7.0	11.0	193	39	120	200	56	25	13.0	16.8	10.8	32
24	7.6	22	112	51	90	100	132	19.2	26	5.4	5.2	23
25	8.0	11.9	183	71	70	80	137	16.4	13.0	7.6	4.6	5.2
26	12.4	3.9	78	51	60	60	275	15.0	7.6	8.3	7.0	11.5
27	6.1	12.7	46	77	50	70	162	11.0	14.6	17.6	10.2	13.2
28	12.9	3.1	82	73	60	400	142	11.8	31	8.1	6.6	20
29	7.8	1.6	70	77	80	150	139	8.0	98	13.8	7.6	17.8
30	7.1	6.2	56	347	------	200	59	43	50	6.1	8.6	39
31	12.2	------	61	191	------	350	------	38	------	3.2	3.9	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	42	3.6	10.8	0.087	0.10
November	22	1.6	9.57	.077	.09
December	387	3.8	65.1	.525	.61
January	2,000	36	256	2.06	2.38
February	600	50	148	1.19	1.28
March	3,000	40	252	2.03	2.34
April	300	30	104	.839	.94
May	136	8.0	35.6	.287	.33
June	1,060	7.6	101	.815	.91
July	62	3.2	19.0	.153	.18
August	128	3.9	22.1	.178	.21
September	112	2.7	14.3	.115	.13
The year	3,000	1.6	86.5	.698	9.50

DEEP RIVER AT RAMSEUR, N.C.

LOCATION.—Water-stage recorder 2,000 feet below 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 1932.
EXTREMES.—Maximum discharge during year, 14,700 second-feet Mar. 6 (gage height, 19.18 feet); minimum, 6 second-feet several times in October and November (gage height, 0.30 foot).
1922–32: Maximum discharge (estimated), 21,100 second-feet Sept. 19, 1928 (gage height, 25.44 feet); minimum, that of October and November 1931.
REMARKS.—Records good except those below 150 second-feet and those partly estimated Oct. 9–31, which are fair. Marked regulation owing to operation of power plants. Considerable storage at High Point Reservoir.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	26	22	1,160	340	166	1,110	331	53	108	57	31
2	13	31	25	560	310	147	517	391	50	67	36	20
3	11	23	29	268	982	138	372	200	66	43	38	116
4	11	22	196	202	1,200	134	319	142	61	42	87	105
5	29	22	86	158	1,160	106	267	156	49	67	75	76
6	17	22	55	155	499	9,120	209	192	68	65	89	68
7	29	19	70	1,020	359	4,510	206	103	48	53	378	42
8	32	16	54	7,050	322	872	202	56	37	48	131	25
9	31	21	220	6,450	300	569	136	101	36	38	91	36
10	20	18	369	1,920	232	415	167	89	30	38	66	30
11	10	14	178	720	215	315	226	86	215	48	57	18
12	30	19	99	465	291	268	324	91	2,230	38	44	34
13	30	19	56	383	648	264	239	121	1,720	39	41	22
14	19	18	331	354	317	262	166	107	906	45	26	20
15	16	16	415	289	301	230	161	84	423	45	51	21
16	16	23	165	230	343	172	93	95	219	40	42	22
17	9	15	120	204	296	174	119	80	119	25	40	20
18	8	19	109	214	284	200	155	75	104	39	40	16
19	8	16	84	188	225	162	143	56	132	38	39	46
20	6	21	73	152	167	156	133	74	164	32	30	58
21	6	22	132	146	205	174	96	73	130	38	18	143
22	6	24	551	142	693	604	112	61	93	37	40	304
23	7	31	595	98	425	677	101	80	59	26	38	112
24	8	13	240	101	296	284	138	83	54	28	36	54
25	7	16	265	164	238	204	239	49	62	43	38	60
26	6	22	170	149	197	181	528	53	40	40	30	83
27	12	27	121	180	140	178	371	76	70	37	26	47
28	17	25	136	215	172	1,390	246	621	45	116	21	65
29	17	13	163	462	208	532	223	108	291	140	35	64
30	18	31	133	783	-------	329	164	96	155	55	35	46
31	11	-------	164	662	-------	828	-------	80	-------	42	31	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32	6	15.3	0.045	0.05
November	31	13	20.8	.061	.07
December	595	22	175	.510	.59
January	7,050	98	814	2.37	2.73
February	1,200	140	392	1.14	1.23
March	9,120	106	766	2.23	2.57
April	1,110	93	249	.726	.81
May	621	49	129	.376	.43
June	2,230	30	258	.752	.84
July	140	25	50.3	.147	.17
August	378	18	58.3	.170	.20
September	304	16	60.1	.175	.20
The year	9,120	6	249	.726	9.89

DEEP RIVER AT MONCURE, N.C.

LOCATION.—Water-stage recorder 1½ miles northwest of Moncure, Chatham County. Zero of gage is 185.88 feet above mean sea level.

DRAINAGE AREA.—1,340 square miles.

RECORDS AVAILABLE.—May 1898 to December 1899; July 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 23,600 second-feet Mar. 6 (gage height, 9.46 feet); minimum, 20 second-feet Nov. 24 (gage height, 0.56 foot). 1898–99, 1930–32: Maximum discharge, 24,600 second-feet Feb. 8, 1899; minimum, that of Nov. 24, 1932.

REMARKS.—Records excellent except those estimated Jan. 4–7, 18–21, June 12–18, 20–22, which are fair. Flow regulated by power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	40	41	3,360	1,880	676	2,210	712	351	598	172	107
2	52	35	30	4,690	1,230	703	2,550	1,300	280	415	125	107
3	52	33	36	2,210	1,520	658	1,500	1,290	245	305	138	1,060
4	96	33	2,490	1,170	2,380	649	1,150	750	240	305	825	1,480
5	68	30	6,680	830	3,030	606	1,010	589	168	256	3,240	539
6	54	28	1,840	780	2,290	13,300	929	507	177	229	1,030	280
7	49	28	830	1,230	1,470	18,000	658	475	204	224	676	186
8	48	27	539	12,200	1,130	18,000	658	365	213	200	658	150
9	48	28	438	18,800	1,040	10,200	841	379	204	157	712	107
10	46	31	1,650	19,200	1,030	2,460	1,050	445	172	168	430	107
11	44	32	1,690	16,400	984	1,890	780	286	640	138	273	87
12	43	29	885	5,520	1,010	1,610	1,520	592	5,500	101	182	60
13	42	27	400	1,260	3,940	1,420	1,540	1,220	3,690	110	131	50
14	43	26	280	415	2,930	1,340	1,110	712	2,130	128	146	131
15	44	26	1,550	770	1,700	1,210	951	468	1,050	87	161	204
16	58	29	1,620	667	1,950	1,050	658	400	685	89	101	91
17	79	32	940	1,020	2,130	1,010	572	351	640	116	99	60
18	58	30	995	685	1,650	918	632	337	555	125	116	56
19	48	28	730	780	1,370	810	539	305	589	99	119	56
20	44	27	780	730	1,120	907	598	324	555	82	122	125
21	42	26	531	730	973	703	572	386	515	96	89	138
22	43	25	1,520	523	2,380	1,660	515	1,100	438	94	69	75
23	43	23	3,810	676	3,140	1,750	386	995	640	104	58	43
24	43	21	2,130	580	1,900	1,610	400	598	430	71	84	204
25	43	58	1,170	640	1,340	1,090	408	438	311	56	87	267
26	41	128	885	589	1,100	907	712	330	251	49	68	164
27	41	73	667	780	995	780	1,550	298	267	58	55	116
28	36	42	649	1,010	951	2,460	1,290	1,280	327	87	52	110
29	52	68	918	1,220	712	2,830	863	1,890	1,000	99	107	218
30	60	71	995	1,980	------	1,690	547	852	531	224	101	200
31	46	------	730	2,380	------	1,170	------	445	------	146	119	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	96	36	50.3	0.038	0.04
November	128	21	37.8	.029	.03
December	6,680	30	1,240	.925	1.07
January	19,200	415	3,350	2.50	2.88
February	3,940	712	1,700	1.27	1.37
March	18,000	606	3,030	2.26	2.61
April	2,550	386	957	.714	.80
May	1,890	286	659	.492	.57
June	5,500	172	767	.572	.64
July	598	49	162	.121	.14
August	3,240	52	334	.249	.29
September	1,480	43	219	.163	.18
The year	19,200	21	1,040	.776	10.62

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

LOCATION.—Water-stage recorder at county highway bridge a quarter of a 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 1932.

EXTREMES.—Maximum discharge during year, 950 second-feet Mar. 6 (gage height, 5.10 feet); minimum, about 1.5 second-feet several times in August and September.

1928–32: Maximum discharge, 1,040 second-feet Apr. 15, 1929 (gage height, 5.45 feet); minimum, 1.3 second-feet Dec. 17, 1930 (gage height, 0.13 foot).

REMARKS.—Records good except those estimated Apr. 25 to May 5, July 9–24, Aug. 10–17, 19–30, Sept. 1, 3–22, 24–30, which are poor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	3.6	4.1	54	8.7	6.4	26	30	4.0	5.0	3.2	27
2	3.4	3.7	3.8	12.6	18.9	6.1	15.0	8.5	3.7	4.0	3.7	2.4
3	3.5	3.7	4.6	7.8	76	6.1	11.4	6.5	3.7	3.7	3.6	4.5
4	3.4	3.7	9.8	6.4	31	6.4	9.8	6	3.6	14.7	3.0	2.5
5	3.4	3.8	4.1	5.7	15.5	6.4	9.0	5.5	3.6	6.7	26	2.5
6	3.4	3.8	4.0	17.1	11.4	345	8.4	5.2	3.6	4.4	17.0	2
7	3.4	3.8	3.7	62	9.4	51	8.1	5.2	3.5	4.1	6.7	2
8	3.4	4.0	3.8	203	9.0	27	8.4	5.2	3.5	3.7	4.8	2
9	3.5	4.0	17.6	167	7.8	18.0	10.6	8.0	3.5	3.5	4.2	2
10	3.6	4.0	5.9	38	7.6	12.6	9.0	11.0	3.4	3.5	3.5	2
11	3.6	3.8	4.6	18.7	6.7	11.0	24	9.0	83	3	3.5	2
12	3.6	3.8	4.2	13.5	57	9.8	13.0	9.0	144	3	3	1.5
13	3.5	3.7	4.2	11.8	18.7	8.7	9.0	7.3	76	3	3	1.5
14	3.6	3.7	8.4	9.8	11.4	7.8	8.7	5.5	37	40	3	1.5
15	3.6	3.7	5.2	8.7	17.2	6.7	7.6	5.2	11.4	7.5	3	1.5
16	3.6	3.7	4.8	7.6	13.5	7.0	7.3	4.8	26	5	3	1.5
17	3.5	3.7	4.8	7.0	17.0	7.0	7.3	4.6	8.7	4.5	3	1.5
18	3.5	3.6	5.0	6.1	11.8	6.4	6.7	4.8	6.7	4	3.4	1.5
19	3.6	3.7	4.4	5.9	9.4	6.1	6.7	4.8	6.4	3.5	3.5	1.5
20	3.6	3.6	4.2	5.7	8.1	5.9	6.4	4.8	5.9	3.5	3	2
21	3.6	3.6	19.5	5.3	19.1	6.1	6.4	5.3	5.7	3.5	2.5	30
22	3.5	3.6	58	5.3	29	160	6.1	5.0	5.3	3.5	2.5	4
23	3.4	3.7	11.0	5.3	12.6	22	6.1	4.6	5.0	3	2.5	2.9
24	3.5	3.7	10.0	5.5	9.8	13.5	6.1	4.4	4.6	3	2	3
25	3.4	3.7	7.3	5.2	9.0	10.6	6.5	4.4	4.6	4.4	2	2.5
26	3.2	3.6	5.5	5.2	8.1	9.0	25	4.4	5.0	3.5	1.5	2.5
27	3.2	3.8	5.2	9.5	8.1	9.4	8	12.1	5.5	11.2	1.5	5
28	3.2	4.0	9.8	5.9	7.3	41	7	5.3	13.7	4.0	1.5	3.5
29	3.8	4.0	5.7	13.4	6.7	11.4	6.5	4.2	5.5	8.2	1.5	3
30	3.5	4.1	5.2	42	------	9.0	6	4.1	4.2	3.6	2	2.5
31	3.5	------	23	13.0	------	65	------	4.1	------	3.4	2.1	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3.8	3.2	3.48	0.250	0.29
November	4.1	3.6	3.76	.271	.30
December	58	3.7	8.75	.629	.73
January	203	5.2	25.3	1.82	2.10
February	76	6.7	16.4	1.18	1.27
March	345	5.9	29.6	2.13	2.46
April	26	6.1	9.87	.710	.79
May	30	4.1	6.74	.485	.56
June	144	3.4	16.7	1.20	1.34
July	40	3	5.86	.422	.49
August	26	1.5	4.15	.299	.34
September	30	1.5	4.13	.297	.33
The year	345	1.5	11.2	.806	11.00

LOWER LITTLE RIVER AT LINDEN, N.C.

LOCATION.—Chain gage at State highway bridge 1 mile west of Linden, Cumberland County, three quarters of a mile above Stewart Creek, and 3¼ miles above mouth. Zero of gage is 71.37 feet above mean sea level.

DRAINAGE AREA.—450 square miles.

RECORDS AVAILABLE.—November 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 3,590 second-feet Mar. 8 (gage height, 11.34 feet); minimum, 33 second-feet Sept. 14 (gage height, 2.14 feet).

1928–32: Maximum discharge, 10,300 second-feet Oct. 2, 1929; maximum gage height, 35.5 feet Oct. 4, 1929; minimum discharge, that of Sept. 14, 1932. Maximum stage known, 37.3 feet Sept. 21, 1928 (estimated discharge, 13,000 second-feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	114	122	535	575	350	535	179	402	214	106	51
2	99	106	130	655	535	335	385	278	320	202	99	45
3	92	99	114	655	535	306	402	335	226	179	67	48
4	92	99	735	615	775	368	368	306	226	168	82	51
5	92	99	1,430	535	735	350	350	278	238	168	68	50
6	92	130	1,610	402	655	1,060	278	251	238	158	130	49
7	92	122	1,140	455	535	2,380	264	202	292	148	148	50
8	106	106	975	735	495	3,540	238	190	238	130	92	44
9	106	99	695	1,560	420	2,740	238	139	190	99	82	51
10	106	106	655	3,540	575	1,340	402	114	179	99	68	50
11	92	99	735	2,920	455	895	495	114	202	92	52	42
12	82	106	735	1,790	455	735	775	278	1,140	75	62	45
13	92	99	695	1,220	455	695	895	695	1,740	66	114	44
14	85	106	615	1,020	615	655	855	695	1,840	60	226	39
15	99	139	615	695	655	735	695	495	1,520	81	168	52
16	92	122	575	575	735	735	575	420	1,260	78	92	75
17	92	114	402	735	655	655	455	238	1,220	72	72	56
18	106	122	535	775	615	615	455	214	895	56	70	62
19	99	114	535	655	615	655	385	179	655	49	61	65
20	99	114	455	575	535	495	385	158	455	46	114	68
21	106	114	535	535	495	495	335	251	368	68	114	70
22	99	122	575	575	815	495	278	1,180	335	52	85	59
23	106	106	575	575	815	495	251	1,840	306	52	85	61
24	99	106	615	455	695	495	226	1,520	238	44	78	71
25	106	106	535	495	615	455	251	815	214	42	66	51
26	99	106	455	495	575	402	238	575	190	57	67	49
27	99	106	264	495	575	306	385	306	190	48	70	64
28	122	122	350	775	455	575	320	535	179	82	75	99
29	130	130	655	735	420	655	264	935	238	99	59	67
30	130	122	615	655	------	655	238	695	251	148	49	58
31	130	------	535	575	------	655	------	695	------	158	59	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	130	85	102	0.227	0.26
November	139	99	112	.249	.28
December	1,610	114	620	1.38	1.59
January	3,540	402	871	1.94	2.24
February	815	420	589	1.31	1.41
March	3,540	306	817	1.82	2.10
April	895	226	407	.904	1.01
May	1,840	114	487	1.08	1.24
June	1,840	179	533	1.18	1.32
July	214	42	99.7	.222	.26
August	226	49	89.7	.199	.23
September	99	39	56.2	.125	.14
The year	3,540	39	399	.887	12.08

PEE DEE RIVER BASIN

YADKIN RIVER AT WILKESBORO, N.C.

LOCATION.—Water-stage recorder at highway bridge connecting North Wilkesboro and Wilkesboro, Wilkes County, just below mouth of Reddies River.
DRAINAGE AREA.—480 square miles.
RECORDS AVAILABLE.—October 1928 to September 1932. April 1903 to June 1909; October 1920 to September 1928 at North Wilkesboro, 1 mile below.
EXTREMES.—Maximum discharge during year, 7,500 second-feet Jan. 1 (gage height, 10.66 feet); minimum, 152 second-feet Sept. 19 (gage height, 1.50 feet).
1903–9, 1920–32: Maximum discharge, about 23,000 second-feet (revised) Oct. 2, 1929; minimum, that of Sept. 19, 1932.
Maximum stage recorded, 34.5 feet July 1916.
REMARKS.—Records good except those estimated May 29 to June 3, which are poor. Low-water flow regulated by operation of power plant on Reddies River, 1 mile upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	233	228	260	3,960	990	449	1,250	2,210	44[illegible]	460	2,640	224
2	219	228	251	1,300	854	444	958	1,220	44[illegible]	438	1,160	215
3	224	228	283	860	1,590	449	809	828	42[illegible]	379	598	211
4	219	228	703	671	1,680	563	714	714	41[illegible]	427	563	317
5	219	224	406	580	1,150	500	659	653	41[illegible]	422	931	303
6	219	224	308	744	892	1,470	634	610	40[illegible]	400	1,710	283
7	228	219	283	1,450	777	1,170	598	557	411	374	1,460	237
8	228	224	269	1,680	708	764	592	540	40[illegible]	358	677	211
9	233	237	514	2,080	653	634	1,130	557	38[illegible]	332	488	206
10	242	233	647	1,320	604	545	925	1,020	384	322	416	202
11	233	237	494	925	592	522	990	1,360	477	317	427	211
12	233	224	427	746	671	511	828	958	653	308	374	260
13	224	233	422	979	598	494	733	771	58[illegible]	298	374	224
14	219	233	746	925	557	483	683	653	622	293	332	215
15	219	233	604	777	457	460	647	604	61[illegible]	288	317	224
16	224	233	427	690	551	477	604	569	534	370	308	219
17	219	228	374	634	545	472	592	610	575	374	312	193
18	193	237	374	598	534	472	580	640	449	303	687	193
19	202	478	348	557	505	455	569	586	1,520	274	670	185
20	202	389	322	534	494	449	545	569	733	265	406	193
21	206	293	353	511	500	455	545	551	1,020	255	353	211
22	215	293	1,830	500	610	2,280	540	569	610	246	327	858
23	202	269	852	483	534	1,300	511	534	511	237	298	449
24	211	251	545	483	505	860	505	511	460	237	288	411
25	202	251	466	460	494	708	563	494	400	251	278	384
26	215	246	395	472	483	653	586	488	513	489	274	293
27	202	246	368	696	477	604	505	592	1,220	447	260	379
28	206	246	363	540	477	1,200	488	746	650	494	265	898
29	528	251	348	647	460	860	483	600	756	925	265	517
30	322	251	332	3,550	-------	746	488	500	500	411	233	342
31	237	-------	1,680	1,580	-------	1,060	-------	460	-------	303	233	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	528	193	232	0.483	0.56
November	478	219	253	.527	.59
December	1,830	251	516	1.08	1.24
January	3,960	460	1,030	2.15	2.48
February	1,680	460	691	1.44	1.55
March	2,280	444	726	1.51	1.74
April	1,250	483	675	1.41	1.57
May	2,210	460	719	1.50	1.73
June	1,520	384	584	1.22	1.36
July	925	237	364	.758	.87
August	2,640	233	578	1.20	1.38
September	898	185	309	.644	.72
The year	3,960	185	557	1.16	15.79

YADKIN RIVER AT YADKIN COLLEGE, N.C.

LOCATION.—Water-stage recorder at State highway bridge 1 mile southwest of Yadkin College, Davidson County.
DRAINAGE AREA.—2,250 square miles.
RECORDS AVAILABLE.—July 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 16,000 second-feet Jan. 9 (gage height, 12.43 feet); minimum, 395 second-feet Sept. 20, (gage height, 0.05 foot).
1928–32: Maximum discharge, 67,800 second-feet Oct. 3, 1929 (gage height, 29.8 feet); minimum, that of Sept. 20, 1932.
REMARKS.—Records good. Slight regulation caused by operation of small power plant about 10 miles upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	881	980	836	4,650	5,100	1,830	4,820	2,270	1,530	1,780	1,070	800
2	845	863	854	8,330	3,630	1,780	4,380	4,970	1,480	1,830	2,290	773
3	836	818	872	4,080	3,670	1,780	3,430	3,570	1,430	1,580	3,730	1,070
4	818	854	1,300	2,930	6,970	1,830	2,930	2,630	1,430	1,340	2,230	1,160
5	782	827	1,580	2,380	5,830	2,330	2,630	2,230	1,380	1,380	3,030	2,310
6	764	854	1,530	2,280	4,160	6,720	2,430	2,030	1,380	1,780	3,330	1,760
7	764	809	1,160	6,930	3,430	13,200	2,330	1,880	1,380	1,380	5,810	1,070
8	755	809	1,020	9,920	3,030	5,690	2,230	1,830	1,380	1,250	5,590	962
9	773	827	1,200	15,400	2,830	3,630	3,380	1,980	1,340	1,160	2,780	773
10	773	836	1,780	11,200	2,630	2,930	4,600	2,080	1,300	1,120	1,930	746
11	1,050	836	2,080	5,520	2,430	2,530	5,400	2,730	1,480	1,030	1,530	728
12	872	764	1,730	3,940	2,900	2,330	5,150	3,790	4,840	1,020	1,380	701
13	773	818	1,480	3,230	3,830	2,230	3,530	3,430	4,820	980	1,830	737
14	782	800	1,780	3,230	2,830	2,130	2,930	2,630	4,160	944	1,530	863
15	773	773	2,280	3,430	2,380	2,030	2,730	2,330	3,360	1,200	1,250	782
16	845	791	1,980	2,930	2,330	1,930	2,530	2,130	2,430	1,580	1,160	746
17	764	800	1,630	2,730	2,280	1,930	2,380	2,030	2,180	3,030	1,160	728
18	737	809	1,430	2,430	2,280	1,930	2,230	2,330	2,380	1,980	1,160	701
19	674	836	1,340	2,380	2,180	1,880	2,180	2,430	2,730	1,250	1,640	674
20	674	845	1,340	2,230	2,080	1,830	2,080	2,180	3,230	998	3,070	584
21	701	1,160	1,250	2,130	1,980	1,780	2,030	2,030	3,230	908	1,580	656
22	764	1,040	3,370	2,080	2,380	3,160	1,980	1,980	2,830	872	1,250	764
23	755	845	6,930	2,080	2,430	5,540	1,980	1,930	2,830	980	1,120	1,690
24	701	881	3,740	2,080	2,230	4,200	1,930	1,880	1,930	845	1,050	1,530
25	746	854	2,430	2,030	2,080	3,030	1,980	1,730	1,630	1,200	971	1,430
26	647	818	2,030	1,980	1,980	2,630	2,430	1,730	1,480	908	944	1,340
27	701	791	1,780	2,080	1,980	2,330	2,430	1,630	1,530	926	908	1,200
28	719	818	1,730	2,330	1,930	6,010	1,980	1,830	2,670	1,680	863	1,520
29	782	809	1,680	2,330	1,880	5,600	1,780	2,130	3,230	1,880	872	3,400
30	1,600	800	1,580	3,120	-------	3,430	1,730	1,830	2,630	1,880	1,060	2,180
31	1,340	-------	1,530	8,200	-------	3,130	-------	1,530	-------	1,200	935	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,600	647	819	0.364	0.42
November	1,160	764	846	.376	.42
December	6,930	836	1,850	.822	.95
January	15,400	1,980	4,210	1.87	2.16
February	6,970	1,880	2,950	1.31	1.41
March	13,200	1,780	3,330	1.48	1.71
April	5,400	1,730	2,820	1.25	1.40
May	4,970	1,530	2,310	1.03	1.19
June	4,840	1,300	2,320	1.03	1.15
July	3,030	845	1,370	.690	.70
August	5,810	863	1,900	.844	.97
September	3,400	584	1,150	.511	.57
The year	15,400	584	2,160	.960	13.05

PEE DEE RIVER NEAR ROCKINGHAM, N.C.

LOCATION.—Water-stage recorder at State highway bridge 1 mile above Falling Creek, 4 miles below Blewett Falls hydroelectric plant, and 6 miles west of Rockingham, Richmond County. Zero of gage is 81.81 feet above mean sea level (gage datum lowered 1 foot Oct. 1, 1931).

DRAINAGE AREA.—6,910 square miles.

RECORDS AVAILABLE.—September 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 82,800 second-feet Jan. 10 (gage height, 13.90 feet); minimum, 45 second-feet Sept. 18 (gage height, 0.75 foot). 1927–32: Maximum discharge, 212,000 second-feet Sept. 19, 1928 (gage height, 25.38 feet, new datum); minimum, that of Sept. 18, 1932.

REMARKS.—Records excellent above 300 second-feet and fair below. Flow regulated by series of storage basins extending from near station to above forks of Yadkin River.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,960	190	3,630	16,200	15,200	7,270	9,090	2,050	3,700	7,370	3,850	3,740
2	4,170	1,310	3,790	19,500	10,500	7,580	7,180	10,100	4,230	6,470	4,040	1,190
3	1,100	3,720	4,600	11,500	9,460	8,770	8,650	13,200	2,210	3,460	3,670	3,640
4	1,040	2,550	16,000	6,810	11,200	7,430	8,040	10,000	5,570	2,840	2,990	1,830
5	1,910	3,070	33,300	7,420	16,800	3,870	7,110	7,490	1,830	4,570	4,470	1,940
6	3,450	2,260	12,300	7,420	12,400	8,960	6,600	5,280	4,200	6,820	5,590	3,250
7	4,940	2,210	7,420	9,730	7,510	71,500	6,070	3,790	4,010	4,790	2,670	3,370
8	3,710	432	7,420	30,700	8,260	56,000	6,840	734	5,220	6,450	1,870	3,700
9	3,030	1,570	9,250	70,100	9,730	20,200	5,820	3,550	3,430	3,900	3,560	2,660
10	2,080	2,120	6,610	76,000	9,200	12,200	2,460	5,770	3,630	4,450	2,990	1,360
11	243	3,820	7,280	32,600	7,670	10,000	9,600	6,810	5,330	2,360	2,940	450
12	2,440	1,740	6,330	17,900	7,670	7,790	11,100	7,420	4,640	3,310	3,320	3,140
13	4,520	3,140	4,750	11,300	11,200	6,630	11,400	6,310	12,600	4,620	3,710	2,270
14	3,870	2,110	8,150	10,000	13,600	8,970	9,660	4,300	21,000	4,310	4,140	4,490
15	4,240	521	9,290	9,460	10,000	8,170	9,080	2,540	11,100	4,210	2,040	4,470
16	3,460	1,700	8,860	7,730	10,000	7,780	5,800	6,660	9,140	3,860	3,240	2,420
17	1,400	3,590	7,720	5,480	9,730	9,040	3,360	5,190	8,090	3,770	3,570	2,910
18	595	3,840	6,870	8,080	9,460	6,810	5,250	4,220	8,260	3,140	2,770	56
19	1,500	2,490	6,140	8,620	9,460	3,180	6,720	4,090	8,310	5,750	3,430	862
20	4,270	4,290	5,350	7,000	7,320	750	4,780	3,960	9,270	4,380	1,210	2,690
21	3,750	455	4,380	7,420	2,460	2,980	3,670	5,620	9,730	4,840	738	1,910
22	4,220	3,320	7,620	5,760	10,300	6,210	4,290	4,300	9,730	3,850	2,230	3,400
23	1,560	2,190	9,730	3,270	18,400	6,000	4,740	3,520	9,730	4,630	3,430	4,010
24	3,460	4,610	5,930	668	11,800	8,200	1,970	3,690	5,430	1,640	2,850	3,450
25	120	5,140	4,150	3,050	9,480	9,730	3,510	3,830	5,590	5,790	2,490	1,400
26	1,250	2,520	333	5,500	8,710	6,550	6,070	4,850	4,620	7,670	4,120	2,050
27	4,310	2,940	295	6,930	6,900	4,060	6,710	4,860	4,830	5,030	2,280	3,310
28	4,070	2,770	4,560	5,680	4,140	8,600	6,860	6,190	5,700	5,320	614	3,070
29	4,560	1,200	3,420	9,460	6,730	17,800	5,580	2,830	10,000	4,590	2,210	3,190
30	1,740	3,280	5,800	2,990	-------	12,700	3,470	2,050	10,300	6,040	3,890	2,930
31	2,430	-------	7,060	5,890	-------	8,850	-------	4,900	-------	3,850	2,220	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,940	120	2,790	0.404	0.47
November	5,140	190	2,500	.362	.40
December	33,300	295	7,370	1.07	1.23
January	76,000	668	13,900	2.01	2.32
February	18,400	2,460	9,840	1.42	1.53
March	71,500	750	11,800	1.71	1.97
April	11,400	1,970	6,380	.923	1.03
May	13,200	734	5,160	.747	.86
June	21,000	1,880	7,050	1.02	1.14
July	7,670	1,640	4,650	.673	.78
August	4,470	614	3,000	.434	.50
September	4,490	56	2,640	.382	.43
The year	76,000	56	6,420	.929	12.66

FISHER RIVER NEAR DOBSON, N.C.

LOCATION.—Chain gage at Turkey Ford Bridge, on Dobson-Ararat Highway 2 miles east of Dobson, Surrey County.
DRAINAGE AREA.—109 square miles.
RECORDS AVAILABLE.—September 1920 to December 1932 (discontinued).
EXTREMES.—Maximum discharge during period, 6,700 second-feet Oct. 17, 1932 (gage height, 10.10 feet); minimum, 18 second-feet Sept. 17, 18 (gage height, 0.04 foot).
1920–32: Maximum discharge, 8,300 second-feet Oct. 2, 1929 (gage height, estimated, 12.1 feet); minimum, 16 second-feet Aug. 30, 1925 (gage height, 0.03 foot).
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1931-32												
1	46	50	45	621	141	83	215	546	78	138	97	29
2	39	50	36	192	157	76	178	199	76	92	107	30
3	48	48	43	144	255	74	157	144	76	83	92	56
4	39	46	95	113	223	95	144	129	74	83	78	46
5	45	46	58	92	167	124	138	124	71	88	67	95
6	41	41	46	132	144	670	132	121	76	74	110	52
7	41	43	46	275	124	207	124	116	65	74	95	33
8	37	43	43	505	121	160	124	97	65	67	78	29
9	41	43	90	505	110	129	298	132	69	65	67	27
10	67	43	110	215	107	116	195	144	65	56	50	26
11	52	41	85	164	116	116	342	235	141	63	52	26
12	45	41	67	144	116	113	223	195	235	67	41	23
13	43	37	78	184	100	107	188	144	235	50	56	27
14	48	41	121	164	92	102	170	118	235	46	43	29
15	45	34	76	144	95	92	160	110	148	92	41	29
16	45	39	69	126	97	97	148	124	255	60	41	26
17	45	41	67	116	97	102	138	118	144	60	50	20
18	39	39	69	105	90	95	135	167	255	58	65	19
19	43	41	60	97	85	92	132	138	342	54	97	22
20	43	39	58	90	80	90	126	116	144	48	56	22
21	43	41	54	92	85	95	116	110	227	43	48	30
22	43	43	439	90	113	366	116	102	160	36	52	116
23	39	41	141	90	92	195	118	105	110	33	43	43
24	41	45	126	88	83	154	110	97	100	30	43	56
25	43	46	88	76	83	132	121	97	102	36	45	45
26	43	37	67	76	83	129	124	88	95	41	36	39
27	52	36	63	121	83	116	107	100	138	135	37	54
28	124	43	69	80	80	320	95	121	118	78	45	342
29	92	41	65	97	80	170	97	97	100	52	39	129
30	54	43	63	440	------	144	113	80	85	48	33	71
31	54	------	45	184	------	298	------	80	------	39	27	------

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1932				1932				1932			
1	56	2,030	121	11	69	235	160	21	110	195	132
2	48	298	121	12	60	211	170	22	90	157	151
3	43	192	124	13	56	110	181	23	74	157	192
4	48	160	118	14	52	160	219	24	71	148	298
5	796	135	121	15	56	144	192	25	67	144	505
6	688	132	121	16	107	141	154	26	65	298	388
7	124	211	121	17	3,090	135	167	27	110	160	388
8	88	151	118	18	480	870	181	28	110	154	1,120
9	76	830	116	19	215	760	195	29	83	148	480
10	71	432	154	20	138	255	148	30	76	141	342
								31	102	------	365

Discharge, in second-feet, of Fisher River near Dobson, N.C., 1931–32—Continued

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1931–32					
October	124	37	49.0	0.450	0.52
November	50	34	42.1	.386	.43
December	439	36	83.3	.764	.88
January	621	76	179	1.64	1.89
February	255	80	114	1.05	1.13
March	670	74	157	1.44	1.66
April	342	95	153	1.40	1.56
May	546	80	139	1.28	1.48
June	342	65	136	1.25	1.40
July	138	30	64.2	.589	.68
August	110	27	59.1	.542	.62
September	342	19	53.0	.486	.54
The year	670	19	102	.936	12.79
1932					
October	3,090	43	236	2.17	2.50
November	2,030	110	310	2.84	3.17
December	1,120	116	238	2.18	2.51

FISHER RIVER NEAR COPELAND, N.C.

LOCATION.—Staff gage 300 feet above highway bridge on State Highway 268, 1 mile above Cody Creek, and 2 miles west of Copeland, Surrey County.
DRAINAGE AREA.—125 square miles.
RECORDS AVAILABLE.—October 1931 to September 1932.
EXTREMES.—Maximum discharge during year, 2,060 second-feet Jan. 1 (gage height, 5.70 feet); minimum, 21 second-feet Sept. 18 (gage height, 1.70 feet).
REMARKS.—Records fair. Discharge estimated Oct. 1–7, Mar. 7, 23.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	52	60	990	153	91	237	620	86	142	85	31
2	47	50	55	220	153	91	176	190	86	142	132	48
3	52	50	55	142	632	93	164	153	80	80	82	220
4	45	50	110	130	237	142	142	142	80	75	72	35
5	47	54	80	126	176	142	142	132	75	91	82	176
6	45	52	70	128	164	960	142	126	75	91	116	61
7	44	52	82	578	142	380	114	122	75	66	190	54
8	42	50	97	550	142	164	142	132	72	72	79	37
9	43	49	91	500	130	142	314	132	68	68	68	33
10	66	52	89	256	126	130	220	132	68	63	60	31
11	52	54	77	190	124	124	550	153	142	60	55	32
12	49	50	79	164	126	122	294	220	220	58	73	30
13	48	50	130	204	126	120	190	142	190	56	68	31
14	49	49	101	237	122	116	176	130	632	50	50	33
15	49	50	88	153	120	112	164	120	176	65	44	33
16	48	54	82	142	116	108	142	120	176	72	48	32
17	43	52	79	132	112	108	142	164	450	68	48	28
18	41	52	80	130	110	110	142	132	153	56	75	23
19	39	58	75	118	103	106	132	128	380	52	114	24
20	41	70	72	112	103	103	128	122	142	48	66	26
21	42	68	72	110	99	104	126	120	256	43	55	29
22	41	65	432	104	128	658	128	120	190	44	50	190
23	42	55	153	104	116	336	122	116	128	39	48	50
24	41	55	120	104	104	164	122	103	108	38	44	61
25	43	54	108	103	103	142	142	99	93	38	39	55
26	44	54	93	97	103	132	124	97	93	42	37	49
27	41	52	89	126	103	132	84	103	176	164	37	84
28	46	52	88	106	101	380	112	130	132	70	54	500
29	176	52	84	116	95	176	110	95	114	52	37	97
30	70	54	82	596	-------	142	112	89	84	39	35	66
31	56	-------	84	204	-------	294	-------	86	-------	42	31	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	176	39	51.0	0.408	0.47
November	70	49	53.7	.430	.48
December	432	55	98.6	.789	.91
January	990	97	225	1.80	2.08
February	632	95	144	1.15	1.24
March	960	91	198	1.58	1.82
April	550	84	168	1.34	1.50
May	620	86	144	1.15	1.33
June	632	68	160	1.28	1.43
July	164	38	67.3	.538	.62
August	190	31	65.3	.522	.60
September	500	23	73.3	.586	.65
The year	990	23	121	.968	13.13

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 1932.
EXTREMES.—Maximum discharge during year, 4,900 second-feet Jan. 10 (gage height, 13.68 feet); minimum, 10 second-feet Nov. 25 (gage height, 0.40 foot).
1928–32: Maximum discharge (estimated), 24,800 second-feet Oct. 3, 1929 (gage height, 32.25 feet); minimum, that of Nov. 25, 1931.
REMARKS.—Records good below 1,000 second-feet and fair above except those estimated Mar. 7–10, which are poor. Flow regulated by Erwin Cotton Mills.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	172	178	1,700	697	383	1,450	916	263	412	296	165
2	153	201	220	1,830	671	341	1,080	874	290	665	313	196
3	96	166	183	840	656	335	740	554	273	514	586	243
4	61	171	334	536	1,070	334	662	475	193	169	401	155
5	168	159	450	471	825	305	589	437	220	511	441	82
6	139	210	310	488	630	2,370	543	429	331	427	2,150	318
7	128	89	269	2,720	469	2,800	513	411	261	323	3,120	166
8	136	112	218	3,620	505	1,500	498	352	261	264	3,040	151
9	172	202	230	4,620	504	900	799	405	268	189	735	170
10	204	159	468	4,630	472	712	854	530	277	210	494	108
11	210	192	482	2,020	490	611	934	870	313	301	320	46
12	201	182	330	900	843	641	975	780	2,560	216	430	164
13	154	204	314	876	1,160	463	740	623	1,840	208	251	146
14	181	89	644	976	464	480	623	544	1,610	214	276	140
15	167	126	704	854	500	478	587	383	734	280	331	142
16	193	204	470	610	482	445	559	427	475	485	262	184
17	96	167	370	460	477	447	488	370	418	342	267	103
18	96	210	333	544	468	448	489	398	749	373	246	51
19	177	161	253	522	503	402	471	418	1,200	262	388	153
20	137	203	310	488	378	402	456	377	1,120	233	462	131
21	143	84	349	528	355	449	444	319	716	205	267	125
22	146	172	944	398	628	1,840	445	394	504	251	293	206
23	209	228	1,700	418	545	1,130	431	432	426	131	202	236
24	96	205	880	336	465	706	412	340	375	101	217	101
25	80	195	562	435	406	566	519	324	399	305	194	202
26	154	79	328	400	423	523	667	306	270	331	218	284
27	141	222	362	381	386	442	551	332	406	235	90	183
28	158	140	405	542	390	1,490	454	260	497	236	176	258
29	147	108	364	474	328	1,460	424	370	1,190	386	227	284
30	215	231	323	646	------	745	399	390	565	595	193	243
31	194	------	351	1,120	------	860	------	289	------	390	171	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	215	61	151	0.270	0.31
November	231	79	168	.300	.33
December	1,700	178	440	.786	.91
January	4,630	336	1,140	2.04	2.35
February	1,160	328	558	.996	1.07
March	2,800	305	807	1.44	1.66
April	1,450	399	627	1.12	1.25
May	916	260	462	.825	.95
June	2,560	193	634	1.13	1.26
July	665	101	315	.562	.65
August	3,120	90	550	.982	1.13
September	318	46	171	.305	.34
The year	4,630	46	503	.898	12.21

ROCKY RIVER NEAR NORWOOD, N.C.

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

DRAINAGE AREA.—1,380 square miles.

RECORDS AVAILABLE.—October 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 36,100 second-feet Jan. 8 (gage height, 23.83 feet); minimum, 19 second-feet Oct. 28 (gage height, 0.10 foot).

1929–32: Maximum discharge (estimated), 52,500 second-feet Oct. 2, 1929 (gage height, 31.4 feet); minimum, that of Oct. 28, 1931.

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

REMARKS.—Records good except those estimated. Some regulation during extreme low flow.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	87	121	14,500	1,080	594	1,980	2,140	147	393	354	a 62
2	a 58	48	112	7,290	830	536	1,080	2,880	138	242	160	a 60
3	a 46	84	112	2,040	1,450	483	744	994	123	226	115	712
4	68	63	18,300	1,220	2,000	470	601	565	115	176	797	452
5	a 58	46	14,700	909	1,310	464	490	422	106	172	3,400	276
6	a 53	46	2,390	918	909	18,800	440	344	96	392	92[illegible]	166
7	a 53	71	744	5,580	736	21,000	410	281	101	222	37[illegible]	324
8	a 58	63	490	23,400	728	6,270	371	242	135	467	23[illegible]	193
9	a 53	34	883	30,000	1,200	1,950	731	333	150	304	82[illegible]	94
10	58	68	4,490	15,600	900	1,630	1,030	603	120	186	42[illegible]	60
11	270	61	1,960	4,540	710	1,260	670	2,090	150	132	189	a 50
12	147	61	945	2,170	1,350	1,050	1,500	935	3,670	106	135	a 44
13	104	58	662	1,680	4,070	1,010	1,380	631	13,200	89	492	48
14	79	63	4,320	1,530	1,530	918	778	382	5,260	87	272	43
15	71	74	7,720	1,290	1,040	778	572	267	1,520	81	147	39
16	a 53	46	2,990	1,070	1,900	662	483	218	1,120	72	101	46
17	74	84	1,070	909	1,950	623	416	196	543	140	282	58
18	74	74	1,030	812	1,430	623	388	172	552	565	458	a 46
19	a 58	63	1,200	719	1,140	586	371	172	4,550	272	538	a 39
20	76	71	838	608	945	523	349	176	2,540	144	804	46
21	a 56	79	694	543	965	490	319	207	2,600	113	550	a 39
22	a 48	90	5,500	503	8,440	949	299	550	1,910	81	281	1,730
23	56	90	5,650	483	3,720	1,330	290	452	690	81	196	836
24	51	118	2,060	477	1,780	744	267	281	428	70	138	753
25	a 48	90	1,150	483	1,280	523	281	211	276	83	110	468
26	a 44	90	838	452	1,040	452	1,530	163	222	263	85	299
27	a 31	106	631	890	900	422	1,890	153	246	223	83	160
28	19	79	654	1,280	804	3,030	792	1,320	660	158	81	126
29	53	90	1,290	933	685	2,380	458	675	3,760	136	76	281
30	68	56	873	2,730	-------	753	349	314	1,129	1,480	74	166
31	48	-------	1,140	2,220	-------	631	-------	193	-------	572	a 66	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	270	19	67.7	0.049	0.05
November	118	34	71.8	.052	.06
December	18,300	112	2,760	2.00	2.31
January	30,000	452	4,120	2.99	3.45
February	8,440	685	1,610	1.17	1.26
March	21,000	422	2,320	1.68	1.94
April	1,980	267	709	.514	.57
May	2,880	153	599	.434	.50
June	13,200	96	1,540	1.12	1.25
July	1,480	70	249	.180	.21
August	3,400	66	412	.299	.34
September	1,730	39	257	.186	.21
The year	30,000	19	1,230	.891	12.15

a Estimated.

LUMBER RIVER AT BOARDMAN, N.C.

LOCATION.—Staff gage at State highway bridge 1½ miles below Big Swamp and 1 mile below Atlantic Coast Line Railroad bridge at Boardman, Columbus County.
DRAINAGE AREA.—1,240 square miles.
RECORDS AVAILABLE.—September 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 2,150 second-feet Jan. 20, Mar. 18 (gage height, 6.50 feet); minimum, 170 second-feet July 27, Sept. 14 (gage height, 0.68 foot).

1929-32: Maximum discharge, 7,430 second-feet Oct. 9, 1929 (gage height, 9.20 feet); minimum, 132 second-feet Oct. 12, 1930.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jure	July	Aug.	Sept.
1	265	222	341	999	1,240	1,360	907	660	1,420	466	385	219
2	250	222	357	1,040	1,240	1,240	907	660	1,240	432	432	206
3	250	236	357	1,080	1,240	1,240	907	683	1,140	415	449	194
4	236	236	391	1,080	1,240	1,190	907	683	872	400	483	182
5	236	236	444	1,080	1,240	1,140	872	683	810	415	538	176
6	222	236	481	1,140	1,240	1,190	872	683	810	415	519	170
7	222	250	520	1,140	1,240	1,240	872	660	758	385	538	170
8	208	250	580	1,140	1,240	1,240	907	618	690	355	538	182
9	208	250	624	1,190	1,240	1,300	907	576	618	326	557	206
10	208	250	670	1,240	1,240	1,300	907	557	576	312	557	206
11	208	250	720	1,240	1,190	1,360	872	538	597	298	538	194
12	208	250	802	1,300	1,190	1,360	907	557	576	284	483	182
13	194	250	894	1,360	1,140	1,490	907	576	576	258	597	170
14	194	250	1,140	1,420	1,190	1,660	872	618	618	245	557	170
15	194	250	1,490	1,490	1,190	1,850	872	583	639	245	466	170
16	194	250	1,660	1,570	1,190	1,950	907	660	731	232	415	176
17	222	250	1,660	1,660	1,140	2,050	907	618	810	206	432	182
18	236	250	1,660	1,950	1,140	2,050	945	618	810	206	432	182
19	236	250	1,420	2,150	1,140	1,850	945	639	872	206	515	194
20	236	265	1,300	2,150	1,140	1,750	987	660	907	194	400	206
21	250	265	1,190	1,850	1,190	1,660	987	706	945	194	370	219
22	250	265	1,190	1,660	1,240	1,490	987	783	907	194	370	232
23	250	265	1,140	1,570	1,300	1,420	987	907	1,030	194	400	232
24	250	280	1,080	1,490	1,360	1,360	945	1,080	907	194	432	232
25	236	295	1,040	1,420	1,420	1,300	907	1,240	907	182	400	232
26	236	310	999	1,300	1,420	1,240	810	1,360	872	176	370	245
27	222	325	962	1,300	1,420	1,140	756	1,490	783	176	340	258
28	222	325	962	1,240	1,420	1,080	660	1,360	639	219	312	271
29	222	325	962	1,240	1,360	1,030	639	1,360	538	258	284	284
30	222	341	962	1,240	-------	987	618	1,490	590	298	258	298
31	222	-------	962	1,240	-------	945	-------	1,570	-------	340	232	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	265	194	226	0.182	0.21
November	341	222	263	.212	.24
December	1,660	341	934	.753	.87
January	2,150	999	1,390	1.12	1.29
February	1,420	1,140	1,250	1.01	1.09
March	2,050	945	1,400	1.13	1.30
April	987	618	879	.709	.79
May	1,570	538	838	.676	.78
June	1,420	500	811	.654	.73
July	466	176	281	.227	.26
August	597	232	435	.351	.40
September	298	170	208	.168	.19
The year	2,150	170	742	.598	8.15

LYNCHES RIVER AT EFFINGHAM, S.C.

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

DRAINAGE AREA.—1,070 square miles.

RECORDS AVAILABLE.—August 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 4,780 second-feet Jan. 15 (gage height, 13.70 feet); minimum, 152 second-feet Oct. 24, 25.

1929–32: Maximum discharge, 15,200 second-feet Oct. 7, 1929 (gage height, 19.25 feet); minimum, that of Oct. 24, 25, 1931.

Maximum stage known, 20.0 feet Aug. 30, 1908 (estimated discharge, 18,000 second-feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	168	160	265	744	868	1,520	699	658	507	523	370	310
2	168	160	265	721	948	1,660	644	678	539	445	385	295
3	168	168	280	768	1,000	1,460	792	639	587	430	430	280
4	168	182	280	842	1,180	1,340	792	571	475	445	507	235
5	160	190	280	868	1,180	1,040	744	539	370	415	621	235
6	160	182	295	921	1,120	1,420	699	571	370	355	792	220
7	160	175	325	1,040	1,100	1,520	678	658	340	325	1,660	295
8	168	182	355	1,160	1,040	1,220	658	744	355	310	1,980	385
9	168	182	415	1,490	1,040	1,300	658	768	340	280	1,840	385
10	160	190	507	1,940	1,120	1,400	658	555	340	310	1,400	310
11	160	190	587	1,940	1,160	1,560	639	475	340	355	1,000	265
12	160	190	658	1,740	1,060	1,520	621	430	340	310	744	235
13	160	190	744	1,490	1,000	2,220	658	400	400	280	678	220
14	160	190	921	2,500	894	3,040	744	385	475	250	639	205
15	160	190	1,040	4,680	792	2,780	817	400	555	235	604	235
16	182	205	1,120	4,580	817	2,330	894	445	699	220	523	235
17	175	220	1,100	3,500	792	2,050	948	430	842	205	430	235
18	168	220	1,000	2,720	842	1,880	1,000	400	868	190	430	250
19	168	220	842	2,220	868	1,520	1,100	385	894	190	355	280
20	160	220	639	1,910	1,000	1,400	1,180	370	868	205	385	310
21	160	220	587	1,700	1,060	1,120	1,360	400	792	190	587	310
22	168	220	604	1,420	1,240	1,040	1,280	430	658	190	507	280
23	168	235	678	1,280	1,300	948	976	445	507	175	491	310
24	152	235	721	1,120	1,300	894	744	460	460	168	539	310
25	152	250	792	948	1,300	894	678	491	415	175	604	475
26	152	250	842	842	1,280	842	639	555	370	168	699	355
27	152	250	744	817	1,280	792	604	639	475	160	768	385
28	160	250	721	817	1,340	792	571	744	1,490	160	817	370
29	160	250	792	817	1,360	744	587	817	1,180	355	868	400
30	160	250	817	817	-------	699	621	817	721	325	555	460
31	160	-------	768	842	-------	678	-------	621	-------	355	355	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	182	152	163	0.152	0.18
November	250	160	207	.193	.22
December	1,120	265	645	.603	.70
January	4,680	721	1,590	1.49	1.72
February	1,360	792	1,080	1.01	1.09
March	3,040	678	1,410	1.32	1.52
April	1,360	571	793	.741	.83
May	817	370	546	.510	.59
June	1,490	340	586	.548	.61
July	523	160	281	.263	.30
August	1,980	370	728	.680	.78
September	475	205	302	.282	.31
The year	4,680	152	694	.649	8.85

BLACK RIVER AT KINGSTREE, S.C.

LOCATION.—Tape gage at highway bridge at Kingstree, Williamsburg County.
DRAINAGE AREA.—1,240 square miles.
RECORDS AVAILABLE.—August 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 1,550 second-feet Mar. 16 (gage height, 8.6 feet); minimum, 5 second-feet Oct. 18 to Dec. 4 (gage height, 0.20 foot).

1929–32: Maximum discharge, 6,400 second-feet Jan. 25, 1930 (gage height, 12.2 feet); minimum, that of Oct. 18 to Dec. 4, 1931.

Maximum stage known, 18.0 feet Sept. 21, 1928 (discharge not determined).
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	5	5	189	419	1,320	657	302	76	104	19	678
2	25	5	5	200	403	1,280	636	276	65	92	18	596
3	20	5	5	223	403	1,280	596	251	58	80	15	485
4	15	5	5	260	435	1,200	576	239	51	88	21	403
5	12	5	7	286	502	1,170	557	227	45	88	54	358
6	11	5	9	300	557	1,200	538	204	39	96	96	302
7	9	5	9	329	596	1,320	520	182	39	96	122	251
8	9	5	9	376	636	1,410	502	161	38	104	161	193
9	9	5	9	443	657	1,410	485	151	33	151	263	161
10	9	5	9	479	678	1,360	485	141	36	182	330	141
11	9	5	9	516	721	1,280	468	131	45	161	358	113
12	9	5	9	535	743	1,280	451	122	39	151	388	92
13	7	5	9	554	765	1,320	451	100	58	122	435	80
14	7	5	9	594	765	1,410	435	84	104	96	557	72
15	7	5	10	635	765	1,500	435	72	171	76	678	88
16	7	5	17	656	811	1,550	419	65	227	62	811	182
17	7	5	24	677	835	1,460	419	58	251	48	1,140	215
18	5	5	35	677	835	1,360	419	58	263	38	1,280	227
19	5	5	44	699	811	1,280	419	80	276	32	1,280	239
20	5	5	54	678	788	1,240	403	72	276	27	1,170	227
21	5	5	64	657	811	1,200	403	76	251	22	1,100	215
22	5	5	64	657	859	1,140	403	113	227	19	1,070	204
23	5	5	64	636	958	1,070	403	131	204	18	1,010	215
24	5	5	64	616	984	1,010	403	141	182	15	1,010	239
25	5	5	71	616	1,010	958	419	151	161	16	1,010	276
26	5	5	82	596	1,100	908	419	151	151	18	958	302
27	5	5	98	557	1,200	835	388	141	141	15	908	316
28	5	5	111	520	1,280	765	358	122	131	14	859	330
29	5	5	120	485	1,320	743	330	108	122	13	788	330
30	5	5	148	451	-------	721	316	96	122	19	765	358
31	5	-------	168	435	-------	678	-------	88	-------	19	743	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26	5	8.65	0.0070	0.008
November	5	5	5.00	.0040	.004
December	168	5	43.4	.035	.04
January	699	189	501	.404	.47
February	1,320	403	781	.630	.70
March	1,550	678	1,180	.952	1.10
April	657	316	457	.369	.41
May	302	58	139	.112	.13
June	276	33	129	.104	.12
July	182	13	67.2	.054	.06
August	1,280	15	626	.505	.58
September	678	72	263	.212	.24
The year	1,550	5	349	.281	3.86

SANTEE RIVER BASIN

WATEREE RIVER NEAR CAMDEN, S.C.

LOCATION.—Water-stage recorder installed Oct. 23, 1929, at steel highway bridge 4,800 feet upstream from Seaboard Air Line Railway Bridge, 3 miles southwest of Camden, Kershaw County, and 7 miles downstream from Wateree Dam. Zero of gage is 119.735 feet above mean sea level. Staff gage used Oct. 2–4, 1929.

DRAINAGE AREA.—5,010 square miles.

RECORDS AVAILABLE.—January 1903 to June 1910; October 1929 to September 1932.

EXTREMES.—Maximum discharge during year ending Sept. 30, 1932, 50,700 second-feet Jan. 9 (gage height, 28.31 feet); minimum, 194 second-feet Nov. 9 (gage height, 1.65 feet) caused by shut-down of power plant.

1904–10, 1929–32: Maximum discharge determined, 199,000 second-feet Oct. 3, 1929 (gage height, 36.2 feet); minimum, that of Nov. 9, 1931.

Maximum stage known, 40.4 feet July 18, 1916, from United States Weather Bureau record. Maximum stage during August 1908 flood, 38.4 feet.

REMARKS.—Records good except those for Oct. 1, 5–23, 1929, which were estimated. Large diurnal fluctuation caused by operation of power plant at Wateree Dam.

Discharge, in second-feet, 1929–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1929–30												
1	7,500	8,850	4,400	10,200	7,860	5,610	8,550	8,650	605	6,620	4,980	1,280
2	43,100	5,790	8,950	9,760	3,050	1,430	8,650	7,760	•4,890	7,000	2,940	2,520
3	172,000	1,580	15,200	7,860	8,550	6,340	9,150	4,700	6,150	5,970	815	2,000
4	122,000	9,650	17,600	6,430	11,600	8,550	7,660	655	7,660	4,400	3,410	2,040
5	40,000	19,300	14,700	1,870	11,800	9,650	3,670	5,160	7,100	2,620	4,400	2,230
6	18,000	18,200	11,100	6,620	13,400	9,050	1,150	6,240	5,610	900	3,810	760
7	12,000	13,600	7,100	9,650	10,800	7,280	5,610	5,880	4,980	6,340	3,540	495
8	10,000	11,500	4,800	11,000	7,570	3,810	7,190	5,340	705	8,750	3,670	1,660
9	9,500	8,150	9,550	9,350	5,520	1,390	7,000	4,180	5,070	8,750	2,230	2,180
10	9,000	1,870	11,300	8,350	9,870	5,610	7,380	2,940	6,520	7,380	900	1,870
11	8,500	7,570	11,000	5,340	11,100	8,350	7,000	705	6,430	6,520	3,290	2,040
12	8,000	9,980	9,550	1,390	11,000	7,660	4,890	5,160	6,720	6,240	3,940	2,230
13	2,000	7,860	10,200	6,720	9,980	8,150	1,180	6,060	7,280	930	3,670	842
14	7,500	8,050	5,340	9,450	8,350	7,190	5,880	7,100	4,980	5,430	4,290	415
15	8,500	8,950	1,540	8,050	4,700	3,410	7,860	7,000	705	5,880	3,540	1,540
16	8,000	6,520	6,720	10,900	1,500	1,050	7,570	6,620	5,160	4,800	2,320	1,830
17	8,000	1,740	10,600	13,700	6,240	6,240	7,950	4,400	5,970	4,290	760	1,760
18	7,500	7,760	9,350	11,200	8,150	8,350	7,190	990	6,060	3,940	3,170	1,360
19	6,500	14,600	9,150	7,280	7,950	7,760	5,340	4,890	6,060	3,290	3,670	1,700
20	2,000	14,300	9,980	10,200	8,250	8,350	1,390	7,000	6,620	4,060	2,830	2,000
21	6,500	13,200	9,450	11,200	8,150	6,340	5,880	7,380	5,340	6,240	2,420	1,660
22	7,500	11,000	4,180	10,100	5,700	3,940	8,050	6,340	870	5,430	2,620	2,230
23	10,000	7,190	5,700	8,850	1,540	1,080	8,150	6,720	5,430	5,880	1,320	2,140
24	10,600	5,160	9,870	8,950	6,340	6,150	8,150	4,500	7,380	5,160	479	2,470
25	10,900	9,550	11,100	6,430	8,350	7,660	6,430	930	7,480	5,430	2,420	2,520
26	7,570	10,800	9,550	1,500	8,350	7,950	3,290	5,160	8,050	3,940	2,180	2,620
27	2,520	11,600	8,750	6,810	8,550	8,450	760	8,050	7,570	930	2,230	2,280
28	7,860	10,600	6,720	10,400	7,000	7,100	5,880	8,450	4,400	4,290	1,460	1,120
29	10,300	9,760	3,050	9,550	------	5,250	8,050	8,050	842	4,400	1,430	2,000
30	10,500	7,760	8,350	10,400	------	1,050	7,950	7,760	5,070	5,160	479	2,140
31	8,450	------	10,600	10,300	------	6,340	------	5,250	------	5,340	365	------

Discharge, in second-feet, of Wateree River near Camden S.C., 1928–32—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1930–31												
1	2,490	1,240	4,800	6,470	1,030	820	5,500	8,600	4,730	4,970	2,900	7,210
2	2,140	832	6,010	5,780	4,950	3,380	6,070	5,560	6,510	4,670	704	7,620
3	2,520	1,650	5,610	3,450	6,430	3,610	6,520	1,520	7,050	3,720	2,780	7,310
4	2,140	2,330	6,480	1,450	6,430	4,560	4,420	5,180	7,500	1,800	3,900	7,550
5	1,350	4,250	7,800	5,670	5,810	3,810	1,150	7,710	7,580	712	5,860	7,570
6	3,220	5,380	4,200	5,220	5,750	4,270	3,960	7,850	7,200	2,950	5,010	6,500
7	3,660	4,450	1,030	6,270	3,760	3,980	5,070	7,240	1,990	4,490	4,700	7,200
8	3,410	3,480	4,430	7,430	1,010	925	4,770	6,320	5,780	5,580	5,330	7,510
9	3,470	851	6,850	7,350	4,740	3,590	4,410	3,880	7,650	5,120	1,340	6,690
10	3,430	4,200	6,780	4,990	5,930	3,960	4,480	1,970	8,250	5,360	3,280	7,000
11	2,140	5,300	7,320	1,090	4,530	3,840	2,860	4,140	7,880	3,150	6,920	6,230
12	1,310	4,700	6,880	5,740	5,010	3,620	598	4,480	8,190	2,560	8,150	5,400
13	3,220	4,420	5,630	6,920	6,270	3,700	3,560	4,230	6,910	5,330	7,090	619
14	3,750	3,840	1,170	7,530	3,160	3,180	4,640	4,860	2,380	4,930	8,690	5,090
15	3,730	3,590	5,870	8,140	658	702	4,170	6,000	5,210	5,240	7,880	7,420
16	3,160	1,310	8,110	6,600	4,430	3,220	5,830	4,350	7,450	5,390	5,080	7,330
17	3,160	4,150	8,410	5,240	5,860	3,470	5,240	1,140	6,790	4,890	6,660	6,830
18	1,660	6,330	9,200	1,530	5,280	3,940	4,590	4,810	7,080	3,740	8,190	7,070
19	1,160	7,090	8,900	5,710	5,020	3,820	971	6,280	7,060	1,210	8,210	5,410
20	2,270	7,060	6,430	7,580	4,280	3,850	4,980	5,670	6,740	4,860	8,520	746
21	1,950	7,880	1,270	7,550	3,830	3,290	6,540	4,190	3,030	8,100	6,820	4,190
22	2,300	5,660	6,590	7,100	821	924	6,990	3,130	5,240	7,020	3,410	7,030
23	1,580	815	9,170	8,230	4,110	3,380	7,240	2,460	6,930	7,120	577	7,250
24	1,240	4,840	6,890	6,370	5,050	4,130	7,270	524	6,550	5,920	4,380	7,730
25	1,700	7,080	1,130	1,330	4,770	4,180	5,730	2,810	6,740	4,760	8,020	7,710
26	642	7,180	3,350	5,330	3,860	3,940	2,590	3,510	6,090	1,700	6,440	5,160
27	2,740	6,420	3,320	7,700	3,840	4,140	6,540	2,810	3,580	3,940	7,020	824
28	3,010	5,520	1,450	7,410	3,500	3,130	8,370	4,960	1,240	5,280	6,800	3,390
29	3,180	5,490	5,880	6,340	------	928	8,740	7,010	3,510	6,610	7,090	5,900
30	2,130	997	8,430	5,980	------	3,080	8,910	5,890	5,400	5,590	6,260	6,850
31	1,330	------	8,680	5,670	------	3,380	------	874	------	4,250	7,050	------
1931–32												
1	5,890	701	829	4,760	5,080	8,700	4,020	1,370	5,470	1,840	4,520	7,560
2	2,520	458	863	2,310	8,330	8,740	6,080	3,100	4,520	2,140	3,710	6,760
3	1,640	830	729	617	6,930	9,110	4,200	6,060	3,500	1,200	3,470	5,560
4	539	1,270	808	4,610	5,410	8,020	4,740	7,590	2,470	1,850	3,260	1,750
5	1,970	1,150	443	8,490	6,370	5,000	5,820	5,370	1,220	1,810	3,350	4,420
6	3,240	2,050	308	8,930	4,000	3,040	7,070	3,530	3,890	1,880	2,990	7,000
7	4,140	1,300	3,900	7,180	1,680	9,620	7,120	6,240	4,700	3,140	3,370	7,080
8	3,520	691	5,980	15,200	5,390	20,900	5,800	3,280	5,040	2,240	4,390	6,810
9	3,530	296	4,510	42,900	6,860	15,400	7,730	5,530	5,100	1,950	6,570	7,120
10	2,760	629	3,990	44,200	6,520	11,800	6,840	5,390	4,520	2,060	7,180	6,430
11	866	884	3,770	27,800	6,690	9,010	7,600	4,730	3,280	4,480	7,980	2,130
12	2,430	910	2,710	18,400	7,250	7,100	7,900	5,130	498	4,140	6,240	4,910
13	3,670	1,130	620	12,900	5,420	4,770	8,930	4,440	2,500	4,230	5,630	6,850
14	3,190	1,720	3,080	9,140	954	7,090	8,160	4,420	4,260	4,250	4,080	6,840
15	2,440	604	2,880	8,580	4,530	8,900	8,040	724	7,210	2,340	5,060	6,490
16	2,420	512	2,740	6,090	7,140	9,670	5,250	3,480	5,740	2,320	4,370	7,190
17	1,150	1,350	3,190	2,840	7,770	9,780	1,940	4,550	4,400	692	4,870	6,640
18	486	820	4,390	6,350	8,080	8,810	5,470	4,810	5,770	3,340	5,250	3,970
19	1,690	1,080	5,730	8,520	8,300	5,900	5,480	5,960	2,520	3,670	4,840	5,300
20	1,820	1,330	3,350	8,270	5,910	1,400	5,260	5,880	6,850	4,030	6,160	7,650
21	1,650	1,420	3,940	7,330	3,820	5,020	5,150	2,100	7,330	3,520	6,450	6,800
22	888	700	4,420	7,060	5,700	6,620	4,800	598	6,970	2,380	7,290	6,860
23	926	1,030	4,640	5,860	6,980	6,040	4,830	2,870	8,330	3,660	7,900	5,880
24	1,890	906	3,450	1,420	8,080	5,870	4,500	3,430	5,310	3,090	7,640	4,590
25	655	894	1,080	5,380	8,800	4,660	4,030	4,630	2,480	4,900	7,040	1,300
26	422	1,800	2,040	7,990	8,950	3,050	3,850	4,410	1,540	5,540	7,190	4,800
27	610	956	2,480	7,620	7,430	700	4,320	3,720	2,980	5,190	5,530	6,800
28	876	1,220	5,650	7,730	2,200	3,190	4,730	3,220	3,560	4,380	3,030	6,530
29	883	677	7,590	7,950	6,060	3,330	4,820	618	3,500	3,520	5,210	6,380
30	733	430	6,710	5,960	------	2,850	3,520	3,200	2,830	3,140	6,710	6,320
31	1,530	------	6,660	1,010	------	2,870	------	5,900	------	2,760	7,160	------

Discharge, in second-feet, of Wateree River near Camden, S.C., 1929–32—Continued

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1929–30					
October	172,000		19,400	3.87	4.46
November	19,300	1,580	9,410	1.88	2.10
December	17,600	3,050	8,890	1.77	2.04
January	13,700	1,390	8,380	1.67	1.92
February	13,400	1,500	7,900	1.58	1.64
March	9,650	1,050	6,020	1.20	1.38
April	9,150	760	6,160	1.23	1.37
May	8,650	655	5,480	1.09	1.26
June	8,050	605	5,260	1.05	1.17
July	8,750	900	5,040	1.01	1.16
August	4,980	365	2,570	.513	.59
September	2,620	415	1,800	.359	.40
The year	172,000	365	7,210	1.44	19.49
1930–31					
October	3,750	642	2,430	.485	.56
November	7,880	815	4,280	.854	.95
December	9,200	1,030	5,740	1.15	1.33
January	8,230	1,090	5,780	1.15	1.33
February	6,430	658	4,290	.856	.89
March	4,560	702	3,250	.649	.75
April	8,910	598	5,090	1.02	1.14
May	8,600	524	4,510	.900	1.04
June	8,250	1,240	5,940	1.19	1.33
July	8,100	712	4,550	.908	1.05
August	8,690	577	5,650	1.13	1.30
September	7,730	619	6,010	1.20	1.34
The year	9,200	524	4,790	.956	13.01
1931–32					
October	5,890	422	1,970	.393	.45
November	2,050	296	992	.198	.22
December	7,590	308	3,340	.667	.77
January	44,200	617	10,100	2.02	2.33
February	8,950	954	6,090	1.22	1.32
March	20,900	700	7,000	1.40	1.61
April	8,930	1,940	5,600	1.12	1.25
May	7,590	598	4,070	.812	.94
June	8,330	498	4,280	.854	.95
July	5,540	692	3,090	.617	.71
August	7,980	2,990	5,430	1.08	1.24
September	7,650	1,300	5,820	1.16	1.29
The year	44,200	296	4,820	.962	13.08

NOTE.—Monthly discharge in second-feet per square mile and run-off in inches do not represent natural flow from basin because of artificial storage in reservoirs upstream.

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 1932.

EXTREMES.—Maximum discharge during year, 53,000 second-feet Jan. 15 (gage height, 13.95 feet); minimum, 3,270 second-feet Oct. 21 (gage height, 0.83 foot).

1907–32: Maximum discharge, 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. Discharge estimated Dec. 6, Apr. 28 to May 4, July 3, 4, 10, 11. No daily fluctuation but very distinct weekly fluctuations during medium- and low-water periods caused by power plants at Parr Shoals Reservoir, on Broad River, Camden Reservoir, on Wateree River, and Lake Murray, on Saluda River.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,740	4,140	3,630	16,200	18,800	25,000	16,700	14,000	8,140	13,200	12,300	16,200
2	11,300	3,770	3,910	17,200	18,100	22,600	15,800	12,100	11,500	13,200	11,900	16,700
3	11,300	3,700	4,740	19,200	18,100	20,900	15,800	10,600	12,900	12,100	13,400	16,700
4	9,740	3,600	5,850	20,500	19,200	19,600	16,200	13,600	13,400	10,000	15,300	16,700
5	7,140	4,060	7,020	22,000	20,000	19,200	15,600	15,600	12,600	8,270	17,000	15,600
6	4,650	4,300	11,300	25,000	20,500	18,800	15,300	16,000	10,400	7,620	17,500	12,600
7	4,560	4,830	15,100	28,800	20,500	18,500	15,600	15,300	7,260	8,530	17,800	12,700
8	7,020	5,020	16,700	30,500	18,800	20,000	16,000	13,600	8,660	9,320	18,500	14,700
9	8,400	4,470	17,800	30,500	16,500	22,000	16,200	11,800	11,300	10,400	18,800	16,000
10	8,270	3,770	18,800	28,800	16,200	25,000	16,500	9,740	13,100	11,300	19,600	16,700
11	7,750	3,770	19,600	30,500	16,200	35,000	16,500	12,300	14,000	10,200	20,000	17,000
12	6,180	3,980	20,000	38,000	16,200	41,000	16,700	14,000	13,800	8,530	20,900	16,500
13	4,560	4,060	20,900	47,000	16,200	41,000	17,800	14,300	12,100	10,700	21,400	14,100
14	4,560	4,300	20,000	50,000	16,500	35,000	18,800	14,000	11,500	12,900	21,400	14,900
15	7,380	4,380	16,000	50,000	15,800	32,500	19,600	13,400	14,300	13,800	20,500	17,200
16	8,660	4,140	15,800	50,000	14,900	28,800	20,000	10,900	16,500	14,100	17,000	17,800
17	8,660	3,700	18,100	47,000	14,900	26,000	20,000	8,010	18,100	13,200	16,200	18,500
18	8,010	3,510	19,600	41,000	16,000	24,100	18,100	9,880	18,800	10,700	16,500	18,500
19	5,960	3,770	20,500	38,000	17,200	23,300	15,300	12,300	18,800	8,920	16,700	17,200
20	3,910	4,300	22,000	32,500	17,800	22,600	16,000	12,900	17,500	10,400	17,200	15,100
21	3,570	4,470	23,300	28,800	18,100	20,500	16,700	13,400	15,600	12,600	17,800	15,800
22	4,650	4,740	24,100	26,000	18,100	16,200	16,500	13,400	16,200	13,600	18,500	16,700
23	5,020	4,560	22,600	24,100	19,200	16,000	16,500	10,400	16,700	13,800	18,800	16,500
24	4,560	3,910	20,900	22,600	20,900	17,500	15,600	7,750	17,000	13,100	19,200	16,200
25	4,140	4,380	20,900	20,900	22,600	19,200	13,400	9,740	17,000	11,600	19,600	15,800
26	4,060	5,630	21,400	17,200	25,000	20,500	11,500	11,900	16,500	10,400	20,000	13,400
27	3,840	5,850	21,400	17,200	27,200	21,400	12,700	12,700	13,800	11,300	20,000	10,200
28	3,450	5,120	20,000	17,800	28,800	20,500	13,600	12,400	10,200	13,100	20,000	10,600
29	3,770	5,120	17,500	18,100	27,200	17,200	14,300	11,800	11,200	14,000	18,500	12,300
30	3,910	4,060	16,200	18,800	------	16,500	14,500	9,460	12,700	14,000	15,100	12,700
31	3,910	------	16,000	19,200	------	17,200	------	6,780	------	13,200	15,300	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,300	3,450	6,210	0.420	0.48
November	5,850	3,510	4,320	.292	.33
December	24,100	3,630	16,800	1.14	1.31
January	50,000	16,200	28,800	1.95	2.25
February	28,800	14,900	19,200	1.30	1.40
March	41,000	16,000	23,300	1.57	1.81
April	20,000	11,500	16,100	1.09	1.22
May	16,000	6,780	12,100	.818	.94
June	18,800	7,260	13,700	.926	1.03
July	14,100	7,620	11,600	.784	.90
August	21,400	11,900	17,800	1.20	1.38
September	18,500	10,200	15,400	1.04	1.16
The year	50,000	3,450	15,500	1.05	14.21

LINVILLE 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 above Lake James.
DRAINAGE AREA.—65 square miles.
RECORDS AVAILABLE.—June 1922 to September 1932.
EXTREMES.—Maximum discharge during year, 910 second-feet Jan. 1 and May 1 (gage height, 3.50 feet); minimum, 10 second-feet several times in September (gage height, 1.44 feet).
1922–32: 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.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	33	29	745	231	87	334	868	66	53	30	21
2	33	26	26	361	209	87	262	307	64	48	44	19
3	30	27	37	253	235	87	209	201	59	48	48	18
4	33	27	156	182	389	98	182	164	55	52	48	14
5	24	26	92	153	323	105	160	142	52	50	62	28
6	20	27	66	194	244	170	139	130	50	48	66	30
7	28	29	61	282	209	156	119	116	52	47	87	29
8	29	29	47	323	190	136	127	105	50	47	79	24
9	33	24	76	389	186	116	182	96	48	42	57	21
10	30	23	167	292	160	101	160	98	50	37	37	18
11	30	26	124	226	139	89	139	156	53	34	33	15
12	29	27	89	194	136	89	136	205	98	34	28	12
13	32	26	98	361	164	87	124	146	105	30	24	12
14	33	24	194	257	136	85	113	146	124	26	22	12
15	27	23	194	201	139	70	110	130	79	23	22	12
16	23	24	98	182	136	70	108	119	76	22	22	10
17	29	24	98	190	136	83	96	108	66	22	22	11
18	28	23	89	156	130	83	89	98	66	23	28	10
19	24	34	85	136	108	83	87	98	156	22	34	10
20	24	33	85	116	108	87	85	98	174	23	26	11
21	26	29	89	110	113	98	81	127	248	22	21	45
22	24	30	235	113	164	568	81	136	124	21	22	35
23	23	37	209	101	136	334	81	110	87	20	21	29
24	24	38	139	94	113	194	83	89	85	19	21	22
25	23	37	124	92	113	160	87	87	70	19	21	21
26	22	30	101	89	108	136	87	87	66	26	20	22
27	23	26	89	160	101	124	87	89	66	22	21	38
28	27	23	87	116	108	475	85	96	62	22	19	98
29	29	23	85	122	94	244	76	85	66	22	22	85
30	37	26	87	708	------	213	98	81	64	30	21	66
31	33	------	307	345	------	334	------	70	------	26	21	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	37	20	27.7	0.426	0.49
November	38	23	27.8	.428	.48
December	307	26	112	1.72	1.98
January	745	89	234	3.60	4.15
February	389	94	164	2.52	2.72
March	568	70	156	2.40	2.77
April	334	76	127	1.95	2.18
May	868	70	148	2.28	2.63
June	248	48	82.7	1.27	1.42
July	53	19	31.6	.486	.56
August	87	19	33.8	.520	.60
September	98	10	26.6	.409	.46
The year	868	10	97.6	1.50	20.44

LITTLE SUGAR CREEK NEAR CHARLOTTE, N.C.

LOCATION.—Water-stage recorder just above sewage-disposal plant of city of Charlotte, a quarter of a mile below the mouth of Brier Creek, and 5 miles south of Charlotte, Mecklenburg County.

DRAINAGE AREA.—41.4 square miles.

RECORDS AVAILABLE.—July 1924 to September 1932.

EXTREMES.—Maximum discharge during year, 5,860 second-feet June 12 (gage height, 13.90 feet); minimum, 4.3 second-feet several times during October (gage height, 1.62 feet).

1924–32: Maximum discharge, about 7,030 second-feet Aug. 16, 1928 (gage height, 14.97 feet); minimum, 1.6 second-feet July 30, Aug. 1, 1925.

REMARKS.—Records good below 1,000 second-feet and fair above. Estimated discharge, Dec. 17–21, poor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	5.3	9.0	293	30	25	57	207	10	14	24	6.0
2	5.3	5.6	6.7	54	40	24	40	38	10	14	31	6.0
3	5.6	6.3	154	34	46	23	35	25	10	12	39	57
4	5.6	5.3	844	30	38	23	31	22	10	29	506	8.0
5	5.3	5.6	44	30	30	23	27	19	10	52	44	27
6	6.0	5.3	19	105	26	1,200	27	17	10	16	16	75
7	5.0	5.3	16	263	25	101	24	16	11	14	16	8.0
8	5.3	5.3	14	701	36	59	53	16	10	13	13	6.7
9	16	5.6	167	471	34	49	86	16	12	12	14	6.0
10	7.0	6.3	61	113	28	37	34	38	37	11	10	6.0
11	5.6	6.3	27	66	27	34	52	39	25	11	9.5	5.6
12	5.6	5.6	20	55	132	34	47	20	1,130	10	94	5.3
13	6.0	5.6	68	49	62	33	31	16	725	9.0	19	5.3
14	5.3	5.3	664	47	35	28	27	15	172	9.0	9.5	6.3
15	8.4	5.3	83	41	34	26	26	14	73	15	9.0	8.0
16	16	5.6	38	38	74	25	23	14	51	11	8.5	6.3
17	6.0	6.0	31	34	47	26	23	14	41	22	11	5.6
18	5.0	6.0	25	30	40	26	23	14	247	10	12	5.3
19	5.0	6.3	24	27	33	23	22	16	302	8.0	64	5.0
20	5.3	6.0	24	25	28	22	21	16	79	8.0	20	5.0
21	5.3	6.6	110	24	176	24	21	34	128	8.0	11	36
22	5.0	7.5	280	23	172	129	21	20	31	8.5	9.0	31
23	5.0	5.6	75	23	62	35	20	14	24	8.5	9.0	11
24	4.6	5.6	46	25	44	25	21	14	23	7.0	8.5	7.0
25	4.6	5.3	33	24	38	25	39	12	23	38	8.0	6.7
26	5.0	5.0	25	24	35	24	117	12	24	9.5	8.0	6.3
27	5.6	6.0	20	88	34	60	27	23	67	9.0	7.5	10
28	5.3	5.6	56	31	31	953	22	57	40	35	7.5	9.0
29	7.0	5.3	31	62	26	57	19	14	34	23	7.0	8.0
30	5.6	5.3	25	77	------	43	19	12	16	17	6.3	6.7
31	5.3	------	315	38	------	114	------	12	------	9.0	6.0	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16	4.6	6.22	0.150	0.17
November	7.5	5.0	5.72	.138	.15
December	844	6.7	108	2.61	3.01
January	701	23	95.0	2.29	2.64
February	176	25	50.4	1.22	1.32
March	1,200	22	107	2.58	2.97
April	117	19	34.5	.833	.93
May	207	12	26.3	.635	.73
June	1,130	10	113	2.73	3.05
July	52	7.0	15.2	.367	.42
August	506	6.0	34.1	.824	.95
September	75	5.0	13.2	.319	.36
The year	1,200	4.6	50.9	1.23	16.70

BROAD RIVER NEAR CHIMNEY ROCK, N.C.

LOCATION.—Water-stage recorder 1,000 feet below Lake Lure Dam and 3 miles east of Chimney Rock, Rutherford County.

DRAINAGE AREA.—97 square miles.

RECORDS AVAILABLE.—March 1927 to September 1932; May 1907 to June 1909 at Uree, 1⅛ miles downstream.

EXTREMES.—Maximum discharge during year, 674 second-feet Aug. 20 (gage height, 2.31 feet); minimum, 1.3 second-feet Mar. 1 (gage height, 0.36 foot). 1907–9, 1927–32: 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. Practically no storage utilized in Lake Lure.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	1.7	1.9	455	262	69	236	184	152	73	147	2.9
2	1.7	74	74	239	180	107	236	290	15	70	225	76
3	68	76	114	73	224	146	74	75	143	2.7	76	36
4	1.9	1.7	372	230	151	151	230	149	97	76	221	2.3
5	70	1.7	145	75	222	142	144	73	1.9	152	275	5.1
6	1.9	73	74	280	144	74	145	147	140	74	198	4.3
7	1.9	35	72	206	1.5	280	72	104	68	76	314	3.9
8	70	1.9	2.3	300	228	142	149	1.9	71	76	421	75
9	2.3	75	124	328	229	70	226	230	69	96	197	2.9
10	35	1.7	148	182	144	143	75	72	67	2.7	76	73
11	2.3	1.7	147	234	70	142	232	226	151	148	76	3.5
12	70	72	141	149	180	65	148	146	322	38	74	80
13	2.3	1.7	2.1	330	143	1.4	72	72	238	3.1	148	3.1
14	73	67	362	322	2.5	227	74	107	77	74	69	75
15	2.5	2.5	343	232	230	71	150	1.7	153	13	79	3.1
16	74	71	226	226	232	69	105	230	115	151	2.7	75
17	2.3	71	142	143	142	144	1.9	71	154	8.4	75	35
18	2.5	1.9	126	148	146	70	234	144	110	148	77	3.1
19	73	70	69	141	146	106	74	144	73	2.7	156	75
20	2.9	73	2.5	141	144	1.9	148	225	238	72	314	2.9
21	2.5	73	195	72	40	226	75	230	148	1.5	124	72
22	75	1.9	452	146	347	229	148	141	149	71	154	145
23	2.7	145	236	148	157	226	72	194	73	68	77	53
24	35	2.3	143	1.9	75	106	2.1	224	149	2.1	2.5	35
25	2.9	1.9	146	228	226	228	234	220	71	73	77	2.5
26	69	70	70	70	72	108	150	70	1.9	201	77	146
27	2.7	1.9	70	144	169	53	73	140	148	72	36	73
28	2.5	34	144	144	111	318	76	143	75	1.9	2.5	150
29	156	2.1	73	143	70	72	73	130	76	72	151	2.9
30	75	150	73	306	-------	137	146	138	74	69	2.9	72
31	37	-------	371	268	-------	231	-------	68	-------	2.7	77	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	156	1.7	32.9	0.339	0.39
November	150	1.7	41.9	.432	.48
December	452	1.9	150	1.55	1.79
January	455	1.9	197	2.03	2.34
February	347	1.5	155	1.60	1.73
March	318	1.4	134	1.38	1.59
April	236	1.9	129	1.33	1.48
May	290	1.7	142	1.46	1.68
June	322	1.9	114	1.18	1.32
July	201	1.5	64.2	.662	.76
August	421	2.5	129	1.33	1.53
September	150	2.3	46.3	.477	.53
The year	455	1.4	111	1.14	15.62

BROAD RIVER NEAR BOILING SPRINGS, N.C.

LOCATION.—Water-stage recorder half a mile above 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 1932.
EXTREMES.—Maximum discharge during year, 10,100 second-feet Jan. 1 (gage height, 7.61 feet); minimum, 209 second-feet Oct. 8 (gage height, 0.36 foot). 1925–32: Maximum discharge, 56,800 second-feet Aug. 16, 1928 (gage height, 23.3 feet); minimum, 186 second-feet Sept. 21, 22, 1925.
REMARKS.—Records good except those estimated May 6 to June 2, which are fair. Some regulation caused by operation of power plants on Second Broad and Green Rivers.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	312	425	612	8,550	1,300	1,030	2,080	2,070	900	711	1,220	408
2	269	344	425	3,940	1,600	1,010	1,680	1,420	800	839	3,290	530
3	319	510	1,010	2,090	1,780	1,040	1,360	1,360	918	735	2,860	391
4	247	397	4,900	1,360	1,520	1,080	1,020	1,320	944	537	2,260	734
5	283	413	1,890	1,670	1,420	1,040	1,570	1,220	735	620	3,010	620
6	437	387	956	2,530	1,520	1,900	1,520	1,050	642	1,060	2,780	781
7	327	343	606	4,960	1,140	1,240	1,360	1,100	850	932	3,800	431
8	276	298	933	5,970	847	1,530	1,070	960	1,050	855	1,960	551
9	467	317	1,750	5,270	1,440	1,410	1,060	980	889	855	1,900	553
10	390	376	1,840	3,160	1,440	1,310	1,470	1,100	807	672	1,380	492
11	293	436	1,260	2,190	1,390	1,220	1,130	1,050	872	585	992	312
12	316	542	1,010	2,190	1,380	999	1,700	1,200	2,030	992	879	317
13	487	369	1,280	3,120	1,320	958	1,540	1,050	2,820	739	1,360	496
14	392	338	7,440	3,290	1,070	759	1,270	1,050	2,350	635	831	386
15	293	288	4,660	2,490	839	1,170	1,080	1,100	1,740	595	650	364
16	343	348	2,660	2,130	1,540	807	1,070	860	1,840	671	842	509
17	380	522	1,900	1,740	1,420	719	932	980	2,020	606	788	364
18	343	531	1,840	1,220	1,170	963	815	1,050	1,620	485	895	359
19	298	391	1,620	1,760	1,110	880	1,120	1,000	1,360	686	923	338
20	388	375	1,140	1,620	1,300	839	987	1,150	1,260	703	1,010	486
21	447	473	1,110	1,420	1,260	719	1,070	1,350	1,540	665	1,360	518
22	319	437	4,770	1,190	1,620	4,890	1,190	1,300	1,300	620	783	554
23	304	443	3,640	1,270	1,960	2,310	1,060	1,300	1,200	485	1,070	912
24	422	627	2,130	1,130	1,470	1,910	872	1,450	1,060	467	687	606
25	251	578	1,420	767	1,320	1,420	751	1,200	1,090	425	657	461
26	317	333	1,100	1,240	1,380	1,420	1,450	1,100	791	1,100	650	403
27	391	375	855	1,880	1,220	1,290	1,280	1,050	672	1,360	635	681
28	343	518	906	1,500	823	1,620	1,170	1,000	1,190	905	425	954
29	424	414	1,380	1,650	872	1,740	1,120	900	1,400	923	419	1,080
30	578	382	1,320	1,860	-------	1,260	852	900	923	672	461	807
31	563	-------	4,390	1,740	-------	1,780	-------	1,050	-------	658	531	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	578	247	362	0.444	0.51
November	627	288	418	.513	.57
December	7,440	425	2,020	2.48	2.86
January	8,550	767	2,480	3.04	3.51
February	1,960	823	1,330	1.63	1.76
March	4,890	719	1,360	1.67	1.93
April	2,080	751	1,220	1.50	1.67
May	2,070	860	1,150	1.41	1.63
June	2,820	642	1,250	1.53	1.71
July	1,360	425	735	.902	1.04
August	3,800	419	1,330	1.63	1.88
September	1,080	312	547	.671	.75
The year	8,550	247	1,190	1.46	19.82

BROAD RIVER AT RICHTEX, S.C.

LOCATION.—Water-stage recorder 1 mile upstream from mouth of Little Piver at Richtex, Fairfield County.

DRAINAGE AREA.—4,800 square miles.

RECORDS AVAILABLE.—November 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 51,200 second-feet Jan. 9 (gage height, 14.18 feet); minimum, about 131 second-feet Oct. 4 (gage height, 0.26 foot).

1925–32: Maximum discharge (estimated), 239,000 second-feet Oct. 3, 1929 (gage height, 30.7 feet); minimum discharge, about 113 second-feet Sept. 21, 1931 (gage height, 0.23 foot).

REMARKS.—Records good. Complete regulation from operation of Parr Shoals hydroelectric plant 11 miles upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,640	1,090	1,920	30,300	7,940	5,100	7,730	2,340	3,400	4,390	3,320	1,400
2	1,540	1,560	1,980	35,800	6,890	5,020	8,100	14,700	3,250	3,450	9,750	1,600
3	925	1,120	2,600	17,800	7,740	4,890	6,650	8,500	3,540	1,270	8,660	1,300
4	410	1,460	18,400	9,660	8,600	4,340	6,940	5,960	3,700	2,010	6,900	1,110
5	1,380	1,880	35,500	7,380	7,380	2,540	5,660	4,500	250	2,720	8,720	1,270
6	1,320	1,400	23,400	6,090	5,740	25,100	5,510	4,980	1,800	2,580	10,200	1,840
7	1,190	715	13,200	19,900	5,310	41,800	5,300	1,880	1,930	3,450	8,670	3,000
8	820	1,050	6,540	40,000	5,820	19,200	5,320	3,050	2,980	4,600	8,800	2,740
9	815	1,540	6,660	48,900	5,100	9,540	4,800	4,540	3,260	3,960	7,180	1,480
10	900	1,380	13,400	42,500	5,290	6,700	6,460	4,680	2,660	1,020	6,210	1,820
11	475	1,380	13,000	24,900	5,240	6,260	7,360	4,820	4,460	1,700	5,010	1,030
12	1,270	1,560	8,050	12,700	5,170	5,100	7,000	4,800	3,780	2,820	3,720	995
13	1,660	1,380	4,140	9,760	5,200	5,320	6,900	5,180	11,600	2,360	3,660	1,580
14	1,400	790	8,060	9,160	6,490	5,880	6,120	2,420	17,100	2,360	1,920	1,390
15	1,720	1,000	28,200	11,200	6,940	4,800	5,460	2,970	13,000	2,540	2,520	2,280
16	1,380	1,400	25,400	8,670	6,040	4,600	3,080	4,740	7,200	2,340	3,030	1,640
17	875	1,440	16,400	7,210	7,000	4,940	3,880	3,650	6,580	1,590	2,890	1,040
18	306	1,550	14,400	7,660	6,520	5,340	6,020	3,640	4,860	1,900	3,090	945
19	1,300	2,070	9,480	6,340	5,910	3,900	4,270	3,700	5,700	1,360	4,230	1,390
20	1,460	1,540	7,150	5,810	4,580	985	3,250	4,840	6,620	2,160	5,690	1,240
21	1,050	915	6,700	5,700	5,450	3,940	4,340	1,860	5,040	1,920	7,720	700
22	945	1,240	9,160	5,600	17,900	5,410	4,760	2,960	4,860	1,860	2,710	3,320
23	1,400	1,600	21,800	4,910	17,300	15,000	3,560	4,760	4,400	1,890	2,900	2,980
24	875	1,760	17,300	4,620	10,300	14,500	1,740	4,120	3,960	1,180	2,130	1,800
25	295	1,870	11,100	4,410	7,660	10,300	4,780	4,480	3,840	1,620	2,880	2,480
26	1,520	2,100	6,920	4,340	6,750	6,360	6,100	3,300	1,280	1,710	2,730	2,360
27	1,380	1,500	6,200	5,690	5,020	3,940	8,020	3,780	3,620	2,060	2,700	1,770
28	1,020	865	5,460	6,880	4,960	7,560	6,000	2,360	2,900	2,090	1,290	2,680
29	1,180	1,420	5,390	5,940	6,230	10,500	5,170	1,650	2,840	2,080	580	2,810
30	1,040	1,960	5,460	6,000	-------	7,200	5,260	4,580	4,380	4,050	1,270	3,130
31	1,220	-------	7,120	9,040	-------	6,300	-------	3,660	-------	4,790	1,870	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,720	295	1,120	0.233	0.27
November	2,100	715	1,420	.296	.33
December	35,500	1,920	11,600	2.42	2.79
January	48,900	4,340	13,700	2.85	3.29
February	17,900	4,580	7,120	1.48	1.60
March	41,800	985	8,460	1.76	2.03
April	8,100	1,740	5,520	1.15	1.28
May	14,700	1,650	4,300	.896	1.03
June	17,100	250	4,830	1.01	1.13
July	4,790	1,020	2,450	.510	.59
August	10,200	580	4,610	.960	1.11
September	3,320	700	1,840	.383	.43
The year	48,900	250	5,600	1.17	15.88

SECOND BROAD RIVER AT CLIFFSIDE, N.C.

LOCATION.—Water-stage recorder at Cliffside, Rutherford County, 2 miles above mouth of river.

DRAINAGE AREA.—230 square miles.

RECORDS AVAILABLE.—June 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 4,300 second-feet Aug. 3 (gage height, 5.28 feet); minimum, 10 second-feet several times in October, November, June.

1925–32: 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 estimated Jan. 16–21, Mar. 27–29, which are poor. Large diurnal fluctuation caused by operation of Cliffside Mills, a quarter of a mile upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	30	128	2,960	350	266	435	731	86	114	230	122
2	74	102	112	1,390	310	207	354	402	139	121	1,030	113
3	34	124	471	615	300	188	309	274	119	145	1,090	78
4	11	95	1,680	436	294	218	298	234	86	131	435	114
5	63	94	567	369	280	153	266	184	61	146	574	242
6	93	100	212	738	222	570	234	206	164	217	648	191
7	88	102	120	1,420	239	454	253	150	159	164	1,450	123
8	89	18	132	1,910	280	324	226	158	108	135	423	132
9	84	88	510	2,010	338	280	418	225	160	118	282	108
10	70	150	499	1,070	230	256	304	203	100	62	216	80
11	12	66	285	674	224	220	352	270	91	139	251	19
12	98	126	277	463	232	183	328	221	404	162	216	83
13	148	97	376	942	258	232	250	211	510	144	368	138
14	118	90	2,290	750	223	270	220	254	343	103	163	114
15	70	14	1,350	502	260	238	238	41	257	22	232	121
16	92	112	582	400	243	203	193	196	244	78	194	136
17	50	133	368	320	267	162	219	191	260	44	160	58
18	12	108	378	360	258	188	246	167	214	134	211	33
19	75	97	349	320	244	166	216	156	229	121	164	96
20	90	105	375	280	282	187	208	160	216	165	190	105
21	90	100	499	260	234	238	217	165	290	87	131	72
22	100	23	1,460	254	555	1,200	206	191	192	45	205	80
23	93	151	1,040	264	406	535	124	240	173	138	166	104
24	48	152	454	225	308	356	168	196	190	14	90	82
25	12	128	364	182	293	306	236	154	142	122	145	32
26	72	62	359	240	280	257	254	157	86	189	131	116
27	79	112	359	321	300	260	238	164	172	278	100	102
28	100	122	354	258	172	300	211	98	206	159	19	137
29	113	34	314	328	268	340	182	100	187	197	166	160
30	174	124	302	422	-------	260	93	198	162	134	122	147
31	130	-------	1,270	400	-------	424	-------	162	-------	123	108	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	174	11	79.0	0.343	0.40
November	152	14	95.3	.414	.46
December	2,290	112	575	2.50	2.88
January	2,960	182	680	2.96	3.41
February	555	172	281	1.22	1.32
March	1,200	153	305	1.33	1.53
April	435	93	250	1.09	1.22
May	731	41	208	.904	1.04
June	510	61	192	.835	.93
July	278	14	127	.552	.64
August	1,450	19	320	1.39	1.60
September	242	19	108	.470	.52
The year	2,960	11	269	1.17	15.95

NORTH PACOLET RIVER AT FINGERVILLE, S.C.

LOCATION.—Water-stage recorder about 800 feet downstream from mouth of Obed Creek at McMiller's mill and 1 mile south of Fingerville, Spartanburg County.

DRAINAGE AREA.—116 square miles.

RECORDS AVAILABLE.—November 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 2,120 second-feet Dec. 15 (gage height, 6.95 feet); minimum (estimated), 13 second-feet several times in October. 1929-32: Maximum discharge, that of Dec. 15, 1931; minimum, that of October 1931.

REMARKS.—Records good. Discharge estimated Oct. 1-3. Diurnal fluctuation caused by operation of mills upstream.

Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	54	74	1,210	189	135	391	356	131	94	402	67
2	34	53	63	458	182	127	252	199	127	94	648	70
3	42	52	267	277	182	126	217	158	115	83	257	127
4	38	54	772	220	169	127	194	142	120	91	705	295
5	44	56	365	197	157	120	179	137	108	149	682	107
6	43	56	150	512	149	347	170	130	107	209	404	104
7	43	57	121	945	146	224	162	123	106	141	492	84
8	38	55	101	953	140	180	162	120	118	112	979	78
9	46	56	386	854	147	165	328	174	110	94	606	73
10	48	57	419	440	132	156	196	326	105	91	227	72
11	38	60	204	295	131	153	202	253	121	81	179	68
12	42	61	153	248	168	144	218	198	329	81	174	70
13	43	57	305	433	155	148	175	157	514	74	173	68
14	41	59	1,480	548	140	144	163	142	391	73	139	66
15	44	57	1,320	300	152	138	156	135	199	69	125	75
16	50	56	336	248	180	133	146	128	184	71	117	69
17	46	57	201	222	172	136	146	127	200	112	128	64
18	38	50	175	204	169	136	146	135	151	83	131	60
19	42	57	144	195	154	125	142	153	190	72	122	59
20	46	63	128	180	150	128	139	206	146	65	146	62
21	46	63	266	172	211	125	132	205	149	63	122	67
22	45	63	629	163	280	913	135	202	131	61	103	171
23	44	59	638	159	205	527	132	236	137	55	100	136
24	44	56	250	157	176	230	128	170	136	57	92	95
25	45	58	199	147	166	187	131	150	112	56	87	86
26	46	56	162	149	156	169	193	140	138	141	87	85
27	40	57	136	238	151	168	144	203	110	95	83	102
28	50	55	136	168	144	345	128	357	105	81	81	167
29	115	54	123	271	136	216	122	168	112	72	76	124
30	70	57	111	305	------	184	121	146	98	70	73	100
31	58	------	726	234	------	401	------	136	------	62	73	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	115	----------	46.5	0.401	0.46
November	63	50	56.8	.490	.55
December	1,480	63	340	2.93	3.38
January	1,210	147	358	3.09	3.56
February	280	131	165	1.42	1.53
March	913	120	212	1.83	2.11
April	391	121	175	1.51	1.68
May	357	120	181	1.56	1.80
June	514	98	160	1.38	1.54
July	209	55	88.8	.766	.88
August	979	73	252	2.17	2.50
September	295	59	95.7	.825	.92
The year	1,480	----------	178	1.53	20.91

PACOLET RIVER NEAR FINGERVILLE, S.C.

LOCATION.—Water-stage recorder at county highway bridge a quarter of a mile downstream from confluence of North and South Pacolet Rivers and 2½ miles southeast of Fingerville, Spartanburg County.

DRAINAGE AREA.—212 square miles.

RECORDS AVAILABLE.—November 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 3,810 second-feet Dec. 15 (gage height, 6.45 feet); minimum, about 28 second-feet Oct. 19 (gage height, 0.13 foot) caused by shut-down of power plants.

1929–32: Maximum discharge, that of Dec. 15, 1931; minimum, that of Oct. 19, 1931.

REMARKS.—Records good. Diurnal fluctuation caused by operation of power plant on South Pacolet River and by mills on North Pacolet River. About 3,000,000 gallons a day diverted above station for Spartanburg water supply.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	55	124	1,950	317	268	658	418	230	216	435	126
2	70	106	126	1,010	408	265	488	344	223	168	738	144
3	43	99	296	388	455	260	240	290	218	126	294	184
4	38	97	993	480	404	256	444	272	225	137	777	406
5	59	101	675	428	381	244	435	268	158	210	954	163
6	63	96	208	794	265	378	426	258	240	288	684	156
7	69	57	386	1,970	172	350	412	154	215	255	562	140
8	72	59	346	2,060	258	301	388	166	1214	204	1,070	130
9	64	113	501	1,940	268	286	520	274	208	166	1,020	124
10	49	117	633	998	248	280	231	534	196	122	504	124
11	41	115	462	638	244	278	401	550	212	144	434	110
12	70	115	404	508	317	266	484	446	423	134	324	120
13	73	106	316	719	277	176	417	288	833	126	296	120
14	81	59	2,320	954	166	266	399	279	679	136	182	115
15	77	58	2,710	588	361	262	390	196	440	127	328	126
16	69	103	753	516	380	256	291	250	408	146	283	113
17	47	115	456	249	358	260	193	216	1,100	162	274	129
18	46	108	421	462	305	260	254	216	772	144	272	97
19	65	116	360	460	283	251	227	263	423	138	258	118
20	80	115	155	435	272	172	181	324	424	136	245	115
21	86	75	478	388	251	210	178	289	420	134	168	132
22	82	73	921	268	567	1,540	179	248	394	122	209	215
23	75	112	1,380	264	505	1,490	170	374	332	125	190	192
24	44	108	574	200	406	526	164	309	268	110	183	168
25	50	114	480	250	298	425	168	279	234	118	138	126
26	92	101	418	252	283	310	238	265	168	217	144	137
27	80	108	170	366	272	210	192	316	228	186	144	150
28	85	110	363	278	184	551	171	516	223	137	122	225
29	163	90	382	403	268	439	169	204	241	120	136	175
30	127	111	328	465	------	394	166	282	222	124	128	148
31	58	------	960	279	------	602	------	246	------	106	130	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	163	38	70.5	0.333	0.38
November	117	55	97.1	.458	.51
December	2,710	124	616	2.91	3.36
January	2,060	200	676	3.19	3.68
February	567	166	316	1.49	1.61
March	1,540	172	388	1.83	2.11
April	658	164	309	1.46	1.63
May	550	166	304	1.43	1.65
June	1,100	158	352	1.66	1.85
July	288	106	154	.726	.84
August	1,070	122	375	1.77	2.04
September	406	97	151	.712	.79
The year	2,710	38	319	1.50	20.45

SOUTH PACOLET RIVER RESERVOIR NEAR FINGERVILLE, S.C.

LOCATION.—Water-stage recorder at highway bridge across South Pacolet River Reservoir, 1 mile upstream from dam and 1¾ miles south of Fingerville, Spartanburg County. Zero of gage is 760 feet above mean sea level.

DRAINAGE AREA.—92 square miles.

RECORDS AVAILABLE.—March 1930 to September 1932.

EXTREMES.—Maximum gage height during year, 16.38 feet Dec. 15; minimum, 5.87 feet Oct. 2.

1930–32: Maximum gage height, that of Dec. 15, 1931; minimum, 2.76 feet Oct. 8, 1930.

REMARKS.—Records good. City of Spartanburg diverts about 3 million gallons daily for water supply from reservoir, also uses water for power purposes. Crest of concrete spillway is 772 feet with 3 feet of flashboards used to increase storage during periods of low flow. Capacity of reservoir, 117,500,000 cubic feet at gage height 15 feet.

Gage height, in feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.12	8.53	8.91	15.46	14.38	11.90	14.53	13.56	12.18	10.06	9.11	9.58
2	5.97	8.56	8.88	15.38	14.15	11.58	14.52	14.36	11.96	9.58	9.70	9.43
3	6.23	8.43	9.20	15.30	13.42	11.26	14.58	14.22	11.65	9.66	9.98	9.15
4	6.60	8.34	12.28	14.92	12.63	10.96	14.41	14.00	11.35	9.80	11.02	10.79
5	6.72	8.25	14.82	14.06	11.81	10.67	13.54	13.73	11.37	10.29	13.16	11.22
6	6.74	8.18	15.15	13.75	11.45	11.61	12.59	13.42	11.12	10.80	13.84	11.27
7	6.76	8.46	14.65	15.86	11.68	12.55	11.57	13.06	10.68	11.36	13.95	11.24
8	6.66	8.84	13.42	15.88	11.85	12.44	10.55	13.04	10.55	11.11	14.73	11.11
9	6.67	8.87	13.25	15.87	11.72	12.22	10.20	13.07	10.36	11.00	15.22	11.00
10	7.05	8.69	14.42	15.63	11.52	11.93	11.05	14.11	10.22	11.09	14.61	10.89
11	7.43	8.51	14.43	15.22	11.32	11.62	11.18	13.57	10.53	11.18	13.47	10.92
12	7.46	8.33	13.50	14.79	11.68	11.30	11.00	12.62	11.62	11.06	12.66	10.80
13	7.36	8.15	13.28	14.61	12.23	11.43	10.60	12.12	13.66	11.06	13.03	10.67
14	7.24	8.39	15.51	15.16	12.57	11.43	9.60	11.73	15.10	11.04	13.39	10.55
15	7.07	8.78	16.04	15.12	12.60	11.06	8.60	11.52	14.72	10.94	13.06	10.52
16	7.09	8.83	15.32	14.65	11.98	10.69	7.20	11.33	13.98	10.88	12.03	10.47
17	7.41	8.72	14.78	14.63	11.78	10.34	7.40	10.90	15.38	11.07	11.78	10.38
18	7.70	8.58	14.19	14.67	11.63	10.02	7.30	10.69	15.54	11.13	11.69	10.30
19	7.72	8.53	13.34	13.80	11.53	9.62	7.50	10.53	15.44	10.92	11.39	10.15
20	7.63	8.49	13.12	12.83	11.42	9.66	7.90	10.05	15.08	10.75	11.04	9.95
21	7.51	8.78	13.49	11.82	11.93	9.36	8.30	10.65	14.27	10.52	11.19	9.82
22	7.37	9.19	14.88	11.40	13.18	13.86	8.70	11.24	13.17	10.22	10.98	9.66
23	7.27	9.28	15.57	11.24	12.90	15.83	9.20	12.50	12.08	10.01	10.67	10.01
24	7.53	9.23	15.13	11.34	12.14	15.26	9.72	12.51	12.12	9.85	10.36	9.88
25	7.87	9.14	14.57	11.45	11.99	14.78	10.12	12.24	11.87	9.66	10.22	9.71
26	7.72	9.08	13.70	11.20	11.92	14.34	11.07	11.97	11.93	9.42	10.17	9.72
27	7.56	9.02	13.55	11.59	11.82	14.53	11.70	11.76	11.87	9.34	10.07	9.77
28	7.44	8.93	13.51	11.78	12.12	15.05	12.01	12.43	11.49	9.23	10.06	10.11
29	7.66	8.91	12.44	12.10	12.15	14.74	12.29	12.89	11.22	9.10	10.01	10.48
30	7.85	8.88	11.24	13.17	-------	13.98	12.57	12.82	10.68	9.07	9.84	10.56
31	8.15	-------	11.71	14.04	-------	13.68	-------	12.49	-------	9.09	9.73	-------

TIGER RIVER NEAR WOODRUFF, S.C.

LOCATION.—Water-stage recorder at Nesbitts Bridge, half a mile downstream from confluence of North and South Tiger Rivers and 6½ miles east of Woodruff, Spartanburg County.

DRAINAGE AREA.—334 square miles.

RECORDS AVAILABLE.—October 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 4,350 second-feet Jan. 8 (gage height, 6.01 feet); minimum, 50 second-feet Sept. 19 (gage height, 1.63 feet).

1929–32: Maximum discharge, that of Jan. 8, 1932; minimum, that of Sept. 19, 1932.

Maximum stage known, 14.65 feet during flood of September 1929 (estimated discharge, 30,100 second-feet).

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

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	184	114	241	2,550	613	502	938	643	368	278	117	124
2	145	108	254	1,710	673	434	844	444	328	275	270	126
3	118	212	662	860	748	440	474	594	322	148	335	167
4	114	156	3,500	641	736	368	504	475	288	118	708	200
5	90	155	2,290	640	584	396	524	432	152	268	1,280	205
6	172	184	1,210	1,050	528	1,070	475	397	143	205	1,270	271
7	150	162	582	2,820	372	805	477	334	227	174	482	209
8	119	110	527	3,970	472	695	471	207	214	172	566	166
9	110	98	1,060	3,850	522	544	489	228	195	168	728	138
10	148	212	1,130	2,240	482	468	450	338	586	128	524	114
11	130	158	926	1,250	440	507	514	390	1,030	132	394	87
12	84	124	791	956	492	454	688	405	470	263	336	66
13	148	122	498	1,050	904	322	535	380	1,690	294	265	164
14	150	162	1,570	1,120	654	378	517	314	1,100	296	152	132
15	105	122	3,430	1,000	538	417	442	196	639	201	144	138
16	106	105	2,640	882	722	432	388	198	770	142	259	146
17	122	170	1,100	604	660	424	227	327	626	122	261	124
18	116	176	854	526	598	458	352	298	412	90	296	64
19	88	140	680	600	556	424	476	338	223	160	396	61
20	150	140	362	545	524	267	388	406	204	144	268	152
21	129	274	702	507	603	324	328	382	280	100	116	112
22	107	144	1,510	494	1,050	812	302	253	344	98	132	224
23	106	114	1,460	464	960	3,020	264	465	192	146	242	314
24	127	190	1,450	281	745	1,660	194	364	281	91	236	205
25	108	195	708	345	654	904	306	334	250	68	203	106
26	80	197	564	452	608	632	658	280	192	154	144	88
27	147	198	484	598	536	368	587	269	161	112	132	204
28	132	211	530	533	332	624	433	249	271	108	96	236
29	152	132	569	764	402	789	322	166	303	174	86	199
30	182	130	532	1,040	-------	676	342	291	273	178	162	136
31	144	-------	1,140	794	-------	843	-------	364	-------	148	136	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	184	80	128	0.383	0.44
November	274	98	157	.470	.52
December	3,500	241	1,100	3.29	3.79
January	3,970	281	1,130	3.38	3.90
February	1,050	332	611	1.83	1.97
March	3,020	267	660	1.98	2.28
April	938	194	464	1.39	1.55
May	643	166	347	1.04	1.20
June	1,690	143	418	1.25	1.40
July	296	68	166	.497	.57
August	1,280	86	346	1.04	1.20
September	314	61	156	.467	.52
The year	3,970	61	475	1.42	19.34

ENOREE RIVER NEAR ENOREE, S.C.

LOCATION.—Water-stage recorder half a mile upstream from Yarborough Bridge, three quarters of a mile upstream from mouth of Warrior Creek, and 4 miles southeast of Enoree, Spartanburg County.

DRAINAGE AREA.—307 square miles.

RECORDS AVAILABLE.—August 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 9,000 second-feet Dec. 4 (gage height, 5.29 feet); minimum, about 28 second-feet July 30 (gage height, 1.51 feet).

1929–32: Maximum discharge (estimated), 35,800 second-feet Oct. 2, 1929 (gage height, 10.5 feet); minimum, that of July 30, 1932.

REMARKS.—Records good except those for Jan. 8–15, which were estimated. Diurnal fluctuations caused by operation of power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	146	228	3,990	560	408	828	1,130	177	172	214	151
2	129	170	186	1,420	542	357	566	552	194	162	267	106
3	120	123	526	672	677	388	444	431	230	162	260	145
4	126	148	7,060	518	642	340	430	392	162	166	264	348
5	158	124	4,470	468	514	382	388	307	116	252	1,420	182
6	102	137	818	1,490	465	1,520	396	276	211	312	1,500	299
7	119	151	462	4,900	446	843	362	298	272	252	350	240
8	120	116	402	4,000	457	511	396	254	177	158	430	154
9	138	174	1,140	4,000	447	448	417	326	192	151	405	158
10	163	137	1,230	1,900	446	417	454	334	332	132	315	106
11	92	146	710	850	406	400	438	265	1,610	176	176	111
12	95	145	496	650	460	358	415	242	1,280	174	184	134
13	178	159	448	800	678	314	380	277	2,870	138	168	88
14	130	161	1,820	1,000	549	380	374	184	1,210	126	128	110
15	92	134	2,540	700	503	350	320	257	491	192	166	106
16	134	185	1,990	592	584	340	274	247	829	132	224	119
17	129	140	686	510	537	326	365	283	500	102	188	68
18	116	158	604	504	512	365	316	182	395	88	190	124
19	148	174	516	472	479	222	370	292	407	182	506	148
20	134	230	428	449	452	340	310	352	411	122	1,800	64
21	158	186	1,460	416	832	350	298	280	366	130	269	106
22	134	146	2,490	402	1,400	912	313	252	247	130	180	293
23	103	220	1,400	366	804	1,900	300	330	260	91	170	943
24	119	186	858	378	583	1,030	290	362	214	50	188	391
25	108	203	546	373	514	482	384	289	180	98	150	220
26	126	191	470	396	474	436	685	230	239	148	148	160
27	109	176	418	557	436	430	425	241	213	126	132	218
28	109	183	433	512	428	746	380	249	288	159	115	270
29	175	140	394	558	425	536	295	279	181	151	178	234
30	162	188	384	855	------	451	300	238	219	122	106	168
31	186	------	1,550	778	------	740	------	248	------	108	104	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	186	92	130	0.423	0.49
November	230	116	163	.531	.59
December	7,060	186	1,200	3.91	4.51
January	4,900	366	1,140	3.71	4.28
February	1,400	406	560	1.82	1.96
March	1,900	222	549	1.79	2.06
April	828	274	397	1.29	1.44
May	1,130	182	319	1.04	1.20
June	2,870	116	482	1.57	1.75
July	312	50	150	.489	.56
August	1,800	104	351	1.14	1.31
September	943	64	198	.645	.72
The year	7,060	50	472	1.54	20.89

SALUDA RIVER NEAR PELZER, S.C.

LOCATION.—Water-stage recorder half a mile downstream from mouth of Hurricane Creek and 2 miles north of Pelzer, Anderson County.
DRAINAGE AREA.—411 square miles.
RECORDS AVAILABLE.—September 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 4,900 second-feet Dec. 15 (gage height, 5.08 feet); minimum, 41 second-feet Oct. 25 (gage height, 0.90 foot).
1929–32: Maximum discharge, 9,400 second-feet Oct. 2, 1929 (gage height, 6.88 feet); minimum, 27 second-feet Oct. 20, 1930 (gage height about 0.82 foot).
REMARKS.—Records good except those estimated, which are fair. Diurnal fluctuation caused by operation of power plants at Piedmont and Greenville.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	163	252	155	2,150	1,190	718	1,460	972	30[e]	412	1,650	389
2	204	202	327	1,580	1,370	[e] 700	1,370	1,140	[e] 360	458	1,120	395
3	184	141	535	1,200	1,540	[e] 700	1,170	982	37[e]	410	1,700	365
4	172	152	1,950	954	1,300	[e] 650	1,010	678	34[e]	429	1,810	612
5	168	174	2,200	903	[e] 900	[e] 650	1,010	[e] 600	39[e]	977	2,420	432
6	119	196	1,260	1,080	725	1,180	780	[e] 550	40[e]	702	1,430	473
7	100	171	882	3,900	888	906	840	[e] 500	[e] 40[e]	578	1,340	411
8	122	183	512	3,940	815	820	868	612	[e] 42[e]	430	1,320	371
9	218	198	1,240	3,410	828	594	1,280	634	45[e]	426	1,300	386
10	208	188	1,650	2,290	[e] 800	764	966	657	70[e]	421	900	318
11	244	181	1,290	1,760	[e] 750	756	911	530	1,93[e]	464	654	305
12	193	184	950	1,450	[e] 900	680	772	656	1,62[e]	358	667	353
13	154	187	715	1,820	[e]1,200	718	741	585	2,13[e]	378	880	318
14	169	195	2,330	1,940	900	565	730	594	1,77[e]	416	769	314
15	176	202	4,260	1,990	1,070	632	694	534	1,47[e]	346	694	311
16	165	200	2,690	1,620	1,160	646	502	[e] 600	1,45[e]	392	496	288
17	164	229	[e]1,200	1,290	893	622	723	[e] 600	1,51[e]	412	682	324
18	155	230	[e] 700	1,290	878	739	718	[e] 550	1,88[e]	331	776	329
19	110	280	[e] 650	1,080	887	575	668	[e] 550	1,07[e]	338	1,100	370
20	146	507	820	924	801	538	498	[e] 600	99[e]	304	937	340
21	164	610	902	853	934	758	674	694	1,06[e]	290	708	314
22	165	[e] 360	2,110	846	1,510	3,000	608	546	71[e]	279	662	424
23	162	[e] 320	1,780	838	1,140	2,810	630	760	64[e]	292	396	717
24	162	[e] 300	1,620	828	968	1,640	696	438	65[e]	285	528	402
25	62	[e] 280	1,190	766	941	1,140	734	[e] 460	437	347	408	388
26	140	[e] 280	874	856	854	836	888	[e] 460	58[e]	280	402	421
27	164	[e] 240	697	1,050	749	824	738	478	67[e]	445	341	582
28	160	[e] 220	718	931	737	1,160	700	[e] 480	61[e]	484	566	402
29	294	268	662	1,160	724	919	499	526	49[e]	460	440	542
30	333	168	439	1,550	-------	864	718	[e] 500	56[e]	467	389	531
31	301	-------	1,980	1,250	-------	1,300	-------	[e] 460	-------	568	394	-------

Month	Maximum	Minimum	Mean	Fer square mile	Run-off in inches
October	333	62	176	0.428	0.49
November	610	141	243	.591	.66
December	4,260	155	1,270	3.09	3.56
January	3,940	766	1,530	3.72	4.29
February	1,540	724	978	2.38	2.57
March	3,000	538	949	2.31	2.66
April	1,460	498	820	2.00	2.23
May	1,140	438	611	1.49	1.72
June	2,130	306	881	2.14	2.39
July	977	279	425	1.03	1.19
August	2,420	341	899	2.19	2.52
September	717	288	404	.983	1.10
The year	4,260	62	766	1.86	25.38

[e] Estimated.

SALUDA RIVER AT CHAPPELLS, S.C.

LOCATION.—Water-stage recorder 300 feet below new highway bridge at Chappells, Newberry County, and 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 1932.

EXTREMES.—Maximum discharge during year, 16,800 second-feet Jan. 9 (gage height, 20.51 feet); minimum, 184 second-feet Oct. 20 (gage height, 0.88 foot).

1927–32: Maximum discharge, 63,700 second-feet Oct. 2, 1929 (gage height, 31.5 feet); minimum, that of Oct. 20, 1931.

REMARKS.—Records good. Some regulations caused by operation of Ware Shoals power plant.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	512	578	611	4,800	2,640	1,990	2,550	2,100	1,080	990	4,120	644
2	496	392	514	6,100	2,520	1,710	2,780	3,480	999	1,030	3,430	611
3	434	508	514	3,850	4,600	1,670	2,370	2,530	870	868	2,570	611
4	374	468	3,070	2,640	4,780	1,630	2,190	2,030	834	694	3,190	611
5	282	392	6,260	2,290	3,370	1,630	2,150	1,670	888	868	5,690	1,070
6	353	378	9,270	2,360	2,510	4,480	1,950	1,310	745	1,860	6,400	1,070
7	419	378	7,610	5,740	1,950	5,380	1,710	1,300	1,150	1,590	4,330	1,110
8	404	378	2,380	10,200	2,030	3,410	1,670	1,110	852	1,110	2,420	885
9	404	348	2,100	16,100	2,110	2,240	2,250	1,150	906	815	2,140	694
10	419	407	3,700	15,700	1,990	1,950	2,420	1,550	925	594	2,010	628
11	419	468	4,060	10,900	1,790	1,710	2,240	1,310	1,480	628	1,830	498
12	404	422	2,840	5,220	1,950	1,790	2,500	1,230	2,600	920	1,150	468
13	496	422	2,120	3,140	2,280	1,550	1,910	1,230	3,560	562	1,270	677
14	496	422	2,150	3,660	2,480	1,630	1,670	1,150	4,840	530	1,150	611
15	450	363	4,280	3,810	2,070	1,790	1,630	962	4,580	578	1,350	562
16	466	378	5,730	3,460	2,420	1,470	1,590	906	3,770	546	1,430	628
17	481	363	6,320	2,860	2,280	1,470	1,270	1,230	4,620	422	1,110	611
18	450	452	5,200	2,550	2,110	1,710	1,270	1,080	3,000	601	1,110	514
19	356	437	3,360	2,460	1,990	1,590	1,710	1,040	3,650	885	1,310	422
20	352	452	2,280	2,280	1,870	1,310	1,430	1,150	3,340	483	2,750	646
21	466	644	2,060	1,990	2,420	1,310	1,350	1,430	2,380	546	2,080	643
22	359	745	4,750	1,870	6,760	1,910	1,230	1,550	1,950	644	1,430	956
23	395	660	6,750	1,830	6,140	3,130	1,310	1,310	1,590	594	1,390	1,120
24	496	868	5,220	1,590	3,270	4,260	1,150	1,550	1,390	351	990	1,270
25	419	483	3,630	1,750	2,460	3,090	1,350	1,310	1,230	437	885	1,260
26	287	628	2,740	1,910	2,190	2,320	2,180	962	1,110	660	815	1,110
27	380	629	2,030	2,350	2,070	1,710	2,640	1,040	1,040	644	780	1,190
28	314	644	1,870	2,420	1,710	2,030	1,830	1,080	1,510	798	711	886
29	335	530	1,930	2,110	1,750	2,550	1,510	1,110	1,230	1,120	594	1,400
30	446	498	1,750	2,390	-------	2,110	1,310	1,040	1,190	850	1,070	1,040
31	676	-------	1,980	3,000	-------	1,910	-------	1,230	-------	2,530	762	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	676	282	421	0.326	0.38
November	868	348	491	.381	.43
December	9,270	514	3,520	2.73	3.15
January	16,100	1,590	4,300	3.33	3.84
February	6,760	1,710	2,710	2.10	2.26
March	5,380	1,310	2,210	1.71	1.97
April	2,780	1,150	1,840	1.43	1.60
May	3,480	906	1,390	1.08	1.24
June	4,840	745	1,980	1.53	1.71
July	2,530	351	831	.644	.74
August	6,400	594	2,010	1.56	1.80
September	1,400	422	815	.632	.71
The year	16,100	282	1,880	1.46	19.83

SALUDA RIVER NEAR SILVERSTREET, S.C.

LOCATION.—Water-stage recorder 200 feet upstream from new Higgins Ferry Bridge, 1 mile downstream from mouth of Little River, and 2½ miles south of Silverstreet, Newberry County. Zero of gage is 345.28 feet above mean sea level.

DRAINAGE AREA.—1,570 square miles.

RECORDS AVAILABLE.—January 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 18,600 second-feet Jan. 10 (gage height, 21.12 feet); minimum, 289 second-feet Oct. 20 (gage height, 3.58 feet).

1927–32: Maximum discharge (estimated), 83,800 second-feet Oct. 3, 1929 (gage height, 33.97 feet); minimum, 248 second-feet Sept. 2?, 1927 (gage height, 3.45 feet).

REMARKS.—Records good except those for Mar. 9 to July 25, which were estimated because of backwater from Lake Murray. Some regulation from operation of power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	530	612	621	5,440	3,020	2,210	2,800	2,200	1,200	1,100	4,950	695
2	502	470	570	6,970	2,820	1,980	3,200	4,400	1,100	1,100	3,990	650
3	462	474	540	5,140	5,230	1,860	2,800	3,400	950	1,000	3,260	650
4	406	530	2,560	3,080	6,000	1,860	2,600	2,400	900	800	3,060	628
5	381	450	6,110	2,510	4,180	1,860	2,400	1,900	1,000	800	5,920	985
6	364	420	8,170	2,440	3,020	5,990	2,200	1,500	800	1,600	6,560	1,180
7	442	409	9,360	6,080	2,210	7,760	2,000	1,400	1,300	1,900	5,570	1,040
8	430	426	3,620	10,600	2,210	5,110	1,900	1,300	1,000	1,300	2,880	985
9	430	416	2,290	16,300	2,450	2,800	2,400	1,300	900	900	2,450	752
10	450	402	4,160	18,400	2,210	2,200	3,000	1,700	1,000	700	2,210	661
11	442	530	4,780	15,000	1,980	1,900	2,600	1,400	1,600	750	2,030	560
12	470	466	3,340	9,200	2,090	2,000	3,000	1,300	2,600	1,000	1,320	504
13	448	470	2,330	3,790	2,630	1,700	2,400	1,300	4,000	650	1,320	619
14	530	470	1,920	3,860	2,820	1,700	1,900	1,200	5,000	600	1,200	695
15	462	434	4,360	4,260	2,330	1,900	1,800	1,100	5,500	650	1,420	605
16	474	434	5,660	3,900	2,760	1,600	1,700	1,000	4,400	600	1,480	650
17	486	404	6,460	3,210	2,570	1,600	1,600	1,300	6,000	480	1,200	650
18	454	506	6,660	2,820	2,390	1,900	1,500	1,200	3,800	550	1,080	582
19	434	486	4,300	2,690	2,210	1,700	1,900	1,100	4,200	1,000	1,420	484
20	356	502	2,630	2,450	2,090	1,400	1,700	1,200	4,400	550	2,450	568
21	470	612	2,090	2,150	2,710	1,400	1,500	1,500	3,200	600	2,570	650
22	423	750	4,410	1,980	7,760	2,000	1,400	1,700	2,200	650	1,590	1,010
23	397	702	6,860	1,920	8,740	3,200	1,400	1,600	1,800	650	1,450	1,010
24	494	869	6,930	1,700	4,620	4,800	1,300	1,600	1,500	400	1,060	1,420
25	446	583	4,360	1,810	2,950	3,800	1,400	1,400	1,400	480	935	1,260
26	384	605	3,210	2,030	2,570	2,800	2,200	1,100	1,300	628	835	1,400
27	381	658	2,270	2,630	2,390	1,900	3,200	1,100	1,200	708	860	1,150
28	381	680	1,970	2,880	2,030	2,000	2,200	1,200	1,600	687	740	1,040
29	367	581	2,090	2,330	1,920	2,800	1,700	1,300	1,400	1,220	638	1,330
30	423	550	1,850	2,570	------	2,400	1,500	1,200	1,300	885	1,040	1,300
31	612	------	1,940	3,340	------	2,200	------	1,300	------	2,330	835	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	612	356	443	0.282	0.33
November	869	402	530	.338	.38
December	9,360	540	3,820	2.43	2.80
January	18,400	1,700	4,950	3.15	3.63
February	8,740	1,920	3,200	2.04	2.20
March	7,760	----------	2,590	1.65	1.90
April	----------	----------	2,110	1.34	1.50
May	----------	----------	1,570	1.00	1.15
June	----------	----------	2,280	1.45	1.62
July	2,330	----------	880	.561	.65
August	6,560	638	2,200	1.40	1.61
September	1,420	484	857	.546	.61
The year	18,400	356	2,120	1.35	18.38

LAKE MURRAY NEAR COLUMBIA, S.C.

LOCATION.—Water-stage recorder in intake tower about 200 feet above dam, 10 miles upstream from mouth of Saluda River, and 11 miles northwest of Columbia, Richland County. Gage set to mean sea level datum.
DRAINAGE AREA.—2,400 square miles.
RECORDS AVAILABLE.—August 1929 to September 1932.
EXTREMES.—Maximum gage height during year, 354.47 feet May 9; minimum, 323.31 feet Dec. 3.
1929–32: Maximum gage height, that of May 9, 1932; minimum, 173.2 feet Aug. 31, 1929, when impounding of water started.
REMARKS.—Records excellent.

Gage height, in feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	329.2	325.8	323.8	332.5	343.3	349.1	353.4	354.1	353.6	353.3	347.9	344.0
2	329.0	325.8	323.6	333.0	343.5	349.2	353.5	354.2	353.4	353.2	347.8	343.6
3	328.8	325.7	323.4	333.5	343.8	349.2	353.6	354.3	353.2	353.2	347.8	343.3
4	328.9	325.6	323.4	333.8	344.4	349.3	353.7	354.3	353.2	353.0	347.8	343.1
5	328.8	325.5	323.6	334.0	344.8	349.3	353.7	354.4	353.1	353.0	348.1	342.9
6	328.6	325.4	324.1	334.2	345.0	350.2	353.8	354.4	353.0	352.8	348.4	342.6
7	328.4	325.3	324.8	334.7	345.1	351.1	353.8	354.4	352.8	352.7	348.7	342.2
8	328.2	325.3	325.3	335.8	345.3	351.5	353.8	354.4	352.6	352.6	348.8	341.8
9	328.0	325.2	325.4	337.4	345.4	351.7	353.9	354.4	352.5	352.5	348.8	341.4
10	327.9	325.1	325.6	338.9	345.5	351.8	354.0	354.4	352.3	352.5	348.6	341.0
11	327.9	325.0	325.8	340.0	345.6	351.9	354.2	354.3	352.3	352.3	348.4	340.7
12	327.8	324.9	326.0	340.9	345.7	351.9	354.3	354.3	352.5	352.0	348.2	340.4
13	327.6	324.8	326.3	341.3	345.9	352.1	354.3	354.2	353.1	351.7	348.1	339.9
14	327.4	324.8	326.4	341.5	346.1	352.2	354.3	354.2	353.3	351.3	348.0	339.4
15	327.2	324.8	326.6	341.8	346.3	352.2	354.3	354.2	353.4	351.0	348.0	339.0
16	326.9	324.7	326.9	342.0	346.4	352.2	354.3	354.2	353.6	350.8	347.7	338.6
17	326.8	324.7	327.3	343.2	346.5	352.3	354.4	354.1	353.7	350.7	347.4	338.2
18	326.8	324.6	327.9	342.4	346.5	352.3	354.4	354.0	353.9	350.5	347.1	338.0
19	326.7	324.5	328.4	342.4	346.6	352.4	354.4	353.9	354.1	350.3	346.8	337.7
20	326.6	324.5	328.7	342.5	346.7	352.5	354.2	353.8	354.2	350.0	346.7	337.1
21	326.5	324.4	328.9	342.5	346.9	352.5	354.1	353.8	354.3	349.6	346.9	336.8
22	326.4	324.4	329.2	342.5	347.8	352.6	354.0	353.9	354.2	349.3	346.9	336.6
23	326.4	324.4	329.6	342.5	348.3	352.6	354.0	354.0	354.1	349.0	346.6	336.4
24	326.3	324.2	330.2	342.6	348.7	352.7	354.0	353.9	354.0	348.8	846.3	336.3
25	326.3	324.0	330.7	342.6	348.8	352.8	354.0	353.8	354.0	348.6	346.0	336.3
26	326.3	323.9	331.0	342.6	348.8	353.0	354.0	353.7	353.9	348.3	345.6	336.3
27	326.2	323.9	331.2	342.7	348.9	353.1	354.0	353.6	353.9	348.0	345.3	336.2
28	326.1	323.8	331.5	342.7	349.0	353.3	354.0	353.7	353.8	347.8	345.2	336.1
29	326.0	323.9	331.6	342.8	349.1	353.2	354.0	353.7	353.6	347.7	345.1	336.0
30	325.9	323.8	331.8	343.0	-------	353.3	354.0	353.7	353.5	347.7	344.6	336.0
31	325.8	-------	332.0	343.1	-------	353.4	-------	353.7	-------	347.8	344.3	------

SALUDA RIVER NEAR COLUMBIA, S.C.

LOCATION.—Water-stage recorder a quarter of a mile upstream from site of old Saluda mill and 2 miles upstream from mouth, at Columbia, Richland County. Zero of gage is 150.32 feet above mean sea level.

DRAINAGE AREA.—2,450 square miles.

RECORDS AVAILABLE.—August 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 10,300 second-feet Sept. 13 (gage height, 6.12 feet); minimum, 40 second-feet Dec. 28.

1925–32: Maximum discharge, 67,000 second-feet Oct. 2, 1929 (gage height, 15.22 feet); minimum discharge, 11 second-feet July 13, 1930.

REMARKS.—Records good. Regulation from storage and power plant operations at Lake Murray.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,390	175	2,110	369	733	1,180	1,260	359	3,850	4,150	5,700	6,280
2	3,300	1,660	3,000	118	1,080	1,230	197	1,540	5,090	2,340	5,730	7,880
3	1,830	1,740	2,910	73	1,600	1,190	96	1,770	4,140	1,920	5,250	5,190
4	75	1,580	1,550	144	1,310	1,080	1,660	1,860	944	3,630	4,600	3,530
5	2,300	1,620	945	137	689	152	1,980	1,900	1,900	2,970	4,070	5,840
6	2,920	1,470	564	156	215	1,460	2,110	1,580	4,530	4,690	2,880	6,740
7	3,260	736	1,170	362	102	1,290	2,120	217	5,040	3,790	1,600	7,620
8	3,280	346	2,330	1,170	946	983	2,170	50	5,050	3,760	3,830	7,580
9	2,790	1,620	2,110	883	927	850	876	2,630	5,460	2,710	5,130	8,210
10	366	1,480	2,090	374	971	875	138	3,640	4,350	3,000	5,850	6,760
11	93	1,500	2,130	506	894	856	2,580	3,710	1,610	6,070	5,820	3,870
12	2,400	1,430	1,010	718	1,100	192	2,660	2,350	1,350	7,610	5,760	7,570
13	3,070	1,330	81	710	191	114	2,610	2,130	2,320	7,730	2,690	9,560
14	3,620	495	1,020	608	86	724	2,570	304	3,000	7,580	1,440	8,370
15	3,810	112	1,340	346	1,240	1,010	2,150	54	3,100	6,440	5,340	8,120
16	3,430	1,270	1,280	235	1,690	1,250	595	2,270	2,190	3,580	6,890	7,860
17	788	1,310	1,350	124	1,550	1,390	107	3,910	1,720	3,500	7,200	5,770
18	100	1,350	1,170	1,680	1,700	1,530	2,160	3,870	603	5,910	7,440	3,480
19	1,560	1,390	194	1,830	1,400	322	3,990	3,130	92	8,330	6,820	7,390
20	1,420	1,310	63	1,940	170	101	5,430	1,990	2,510	8,210	3,540	8,670
21	1,380	1,180	107	2,350	468	2,050	5,130	627	4,230	7,470	1,680	5,370
22	935	108	126	2,550	3,140	2,330	3,100	84	3,730	7,140	5,490	3,540
23	1,190	2,830	108	932	2,700	1,630	1,190	2,570	3,900	5,290	7,270	3,660
24	523	3,170	81	224	2,640	1,270	197	3,920	4,230	4,270	7,420	2,500
25	260	3,070	69	3,020	2,340	1,650	3,130	3,780	1,630	5,240	7,550	265
26	1,200	658	52	3,360	2,780	256	2,690	2,800	578	6,560	7,390	2,310
27	1,270	1,540	41	2,680	570	82	1,810	2,590	4,140	7,270	4,270	2,880
28	1,320	238	104	2,300	127	1,540	1,860	484	5,300	6,180	1,680	2,260
29	1,420	341	116	1,790	2,130	1,980	1,680	120	5,140	5,270	6,800	2,660
30	1,440	1,350	78	674	-------	1,900	724	2,020	4,710	2,760	8,690	2,810
31	453	-------	206	154	-------	2,240	-------	3,300	-------	2,030	7,160	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,810	75	1,780	0.727	0.84
November	3,170	108	1,280	.522	.58
December	3,000	41	952	.389	.45
January	3,360	73	1,050	.429	.49
February	3,140	86	1,220	.498	.54
March	2,330	82	1,120	.457	.53
April	5,430	96	1,970	.804	.90
May	3,920	50	1,990	.812	.94
June	5,460	92	3,220	1.31	1.46
July	8,330	1,920	5,080	2.07	2.39
August	8,690	1,440	5,260	2.15	2.48
September	9,560	265	5,480	2.24	2.50
The year	9,560	41	2,540	1.04	14.10

NOTE.—The monthly discharges in second-feet per square mile and run-off depth in inches shown by the table do not represent the natural flow from the basin because of artificial storage in Lake Murray

EDISTO RIVER BASIN

SOUTH FORK OF EDISTO RIVER NEAR DENMARK, S.C.

LOCATION.—Water-stage recorder at State highway bridge 200 feet downstream from Seaboard Air Line Railway bridge, 1½ miles downstream from mouth of Little River, and 4¾ miles north of Denmark, Bamberg County. Chair gage at same location prior to Oct. 27, 1931.

DRAINAGE AREA.—720 square miles.

RECORDS AVAILABLE.—August 1931 to September 1932.

EXTREMES.—Maximum discharge during year, about 2,930 second-feet Aug. 12 (gage height, 8.47 feet); minimum, 229 second-feet July 27.

1931–32: Maximum discharge, that of Aug. 12, 1932; minimum, that of July 27, 1932.

REMARKS.—Records good below 2,000 second-feet and fair above.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	420	338	473	950	790	1,120	950	510	437	550	301	385
2	403	354	473	950	790	1,040	870	530	437	491	335	385
3	386	362	473	950	1,040	950	790	530	446	455	370	400
4	370	370	491	1,040	1,300	870	790	530	455	455	415	385
5	346	370	530	950	1,400	870	790	510	455	455	560	370
6	346	378	550	950	1,400	950	730	491	437	428	915	356
7	338	378	605	1,040	1,300	1,120	730	473	394	386	1,180	356
8	330	386	640	1,210	1,210	1,210	730	473	378	362	1,570	356
9	323	386	730	1,400	1,210	1,400	790	446	394	346	1,900	335
10	330	386	730	1,490	1,120	1,400	790	420	473	346	2,260	328
11	330	394	680	1,400	1,040	1,490	730	403	550	354	2,650	314
12	330	394	680	1,400	950	1,590	730	394	550	346	2,790	301
13	338	394	680	1,400	950	1,400	730	386	605	316	2,260	294
14	323	403	680	1,490	950	1,300	730	386	730	293	1,680	314
15	323	412	680	1,400	870	1,120	680	370	730	279	1,180	415
16	316	412	640	1,300	870	1,040	680	362	730	293	1,000	518
17	316	420	640	1,120	870	1,040	680	354	730	308	750	518
18	308	420	680	1,040	870	1,040	680	354	730	323	610	518
19	308	420	680	950	790	1,040	680	354	790	323	560	518
20	308	428	680	870	790	950	680	378	870	323	830	465
21	308	428	640	790	870	950	680	412	790	323	1,470	447
22	300	437	640	790	1,300	950	640	455	730	338	1,570	447
23	308	446	680	730	1,590	870	605	473	680	338	1,280	560
24	308	446	640	730	1,590	870	575	491	640	330	1,000	750
25	316	455	680	680	1,490	950	550	510	575	308	830	915
26	316	455	730	680	1,400	950	550	510	550	279	670	830
27	323	455	680	680	1,490	870	530	510	605	234	670	670
28	323	455	730	730	1,400	950	530	510	640	239	560	560
29	323	473	790	730	1,300	950	510	491	640	239	518	610
30	330	473	790	790	------	950	510	473	605	251	465	560
31	330	------	870	790	------	950	------	446	------	275	415	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	420	300	332	0.461	0.53
November	473	338	411	.571	.64
December	870	473	654	.908	1.05
January	1,490	680	1,010	1.40	1.61
February	1,590	790	1,140	1.58	1.70
March	1,590	870	1,070	1.49	1.72
April	950	510	688	.956	1.07
May	530	354	450	.625	.72
June	870	378	593	.824	.92
July	550	234	341	.474	.55
August	2,790	301	1,080	1.50	1.73
September	915	294	473	.657	.73
The year	2,790	234	686	.953	12.97

SAVANNAH RIVER BASIN

SAVANNAH RIVER NEAR CALHOUN FALLS, S.C.

LOCATION.—Water-stage recorder 150 feet above highway bridge, 1 mile below Seaboard Air Line Railway bridge, and 3 miles southwest of Calhoun Falls, Abbeville County.

DRAINAGE AREA.—2,876 square miles.

RECORDS AVAILABLE.—August 1896 to December 1903; March 1930 to July 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 41,400 second-feet Dec. 4 (gage height, 7.1 feet); minimum, 940 second-feet Oct. 5, 27 (gage height, 0.59 foot).

1896–1903, 1930–32: Maximum discharge, about 75,200 second-feet Feb. 14, 1900 (gage height, 19.4 feet, old datum); minimum, that of Oct. 5, 27, 1931.

REMARKS.—Slight regulation caused by operation of power plants upstream. Records collected by the Commonwealth & Southern Corporation, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	2,710	1,990	1,550	20,300	6,820	4,570	16,400	5,540	3,630	3,120
2	2,180	1,440	2,020	14,800	6,710	4,780	10,300	11,400	3,370	3,370
3	1,880	1,220	2,840	7,470	16,400	5,060	7,100	8,470	3,180	2,960
4	1,460	1,710	29,500	5,350	11,800	5,010	6,070	6,090	3,240	2,310
5	1,000	1,960	29,800	5,410	8,410	4,590	7,160	5,560	3,440	2,440
6	1,030	1,980	11,400	7,690	7,000	7,880	5,540	5,030	3,550	4,530
7	1,420	1,610	4,190	33,000	5,640	5,890	5,430	4,510	2,330	4,570
8	1,940	1,630	3,060	25,500	4,990	5,070	4,780	4,320	2,560	3,190
9	2,040	1,450	7,260	20,300	5,660	5,040	6,510	3,990	3,230	3,250
10	2,030	1,370	17,800	12,900	5,580	4,780	6,090	4,010	3,130	2,640
11	2,310	2,200	9,900	7,950	5,160	4,840	4,930	4,860	4,600	2,540
12	1,460	2,380	5,710	7,280	5,870	4,580	5,220	4,940	8,960	2,880
13	1,390	2,250	3,940	8,260	8,800	3,650	5,270	4,400	11,400	3,180
14	2,000	2,030	11,800	17,700	5,340	3,350	4,680	4,380	9,770	3,220
15	1,920	1,660	29,900	11,500	4,220	3,940	4,610	4,400	9,250	2,430
16	1,700	1,300	16,200	7,920	6,070	3,910	4,220	4,220	18,100	2,470
17	1,840	1,300	9,560	6,050	6,040	4,230	4,060	4,040	10,000	2,690
18	1,960	2,000	10,200	5,850	6,010	4,840	3,520	4,400	6,270	2,430
19	1,410	2,010	7,160	6,110	5,270	4,140	3,630	4,440	9,460	2,400
20	1,200	3,060	5,100	5,480	5,520	3,460	3,770	4,450	8,360	2,400
21	2,350	2,870	7,800	5,060	6,480	3,150	4,220	5,820	12,800	2,880
22	2,330	2,780	18,700	4,650	12,500	13,000	3,920	5,040	7,140	2,630
23	2,050	1,850	18,400	4,860	9,830	21,000	3,680	4,580	5,430	2,450
24	1,500	2,030	9,300	4,390	7,100	9,220	3,620	5,780	4,270	2,400
25	1,240	2,360	5,980	3,620	5,760	7,050	3,260	4,000	4,570	1,890
26	1,270	2,430	4,770	3,950	5,760	5,790	6,680	3,520	3,690	1,590
27	1,030	2,210	4,720	5,160	5,260	4,760	6,320	3,770	2,840	2,010
28	1,710	1,600	3,540	5,980	4,330	5,590	4,940	4,270	2,800	3,420
29	2,620	2,020	4,140	5,930	3,650	7,950	3,990	5,160	3,560	2,660
30	3,290	1,640	4,190	9,520	-------	5,820	3,780	3,420	3,660	2,820
31	2,720	-------	6,950	11,600	-------	7,360	-------	4,540	-------	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,290	1,000	1,840	0.640	0.74
November	3,060	1,220	1,940	.675	.75
December	29,900	1,550	9,920	3.45	3.98
January	33,000	3,620	9,730	3.38	3.90
February	16,400	3,650	6,830	2.37	2.56
March	21,000	3,150	5,950	2.07	2.39
April	16,400	3,260	5,460	1.90	2.12
May	11,400	3,420	4,950	1.72	1.98
June	18,100	2,330	5,950	2.07	2.31
July 1–30	4,570	1,590	2,790	.970	1.08

SAVANNAH RIVER AT AUGUSTA, GA.

LOCATION.—Staff gage 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 July 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 79,700 second-feet Jan. 9 (gage height, 30.4 feet); minimum, 730 second-feet July 28 (gage height, 4.9 feet). 1884–91, 1899–1906, 1927–32: Maximum discharge, about 350,000 second-feet Oct. 3, 1929; maximum gage height, 46.3 feet Sept. 27, 1929; minimum discharge, that of July 28, 1932.

REMARKS.—Slight regulation caused by operation of power plants upstream. Records collected by the Commonwealth & Southern Corporation, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	2,620	3,770	2,270	16,100	18,100	9,510	12,100	6,070	5,720	6,070
2	3,240	2,990	2,150	29,700	14,100	8,600	18,900	12,100	5,360	5,360
3	2,740	2,030	2,390	21,500	20,700	8,420	16,300	17,400	4,660	5,360
4	2,500	1,610	5,000	13,700	48,000	7,150	13,000	13,400	4,190	6,430
5	2,270	1,710	32,500	9,700	32,500	7,330	10,400	9,700	5,000	6,070
6	1,610	2,500	41,400	8,780	22,200	24,500	10,800	7,880	4,660	4,040
7	1,230	2,270	23,700	20,500	16,700	39,800	9,330	6,970	4,340	4,500
8	1,420	2,270	12,300	65,300	12,600	26,100	8,420	6,250	3,770	4,190
9	2,150	2,030	6,430	79,700	10,400	16,300	8,240	7,150	4,340	6,250
10	2,500	1,810	13,600	60,900	9,700	12,300	10,800	5,720	4,040	3,770
11	2,270	1,810	24,100	30,000	9,880	10,400	11,900	4,500	4,660	3,640
12	3,900	2,030	17,000	19,200	9,330	9,140	13,000	5,360	8,960	5,000
13	2,030	2,740	8,240	14,800	10,100	8,600	12,500	6,430	17,200	2,030
14	1,920	2,500	8,600	15,900	14,800	9,700	10,400	6,070	19,600	2,270
15	2,270	2,740	14,800	22,200	12,800	7,880	9,140	5,360	16,800	2,990
16	2,500	2,500	33,100	16,300	12,600	6,970	8,240	6,430	20,500	2,740
17	2,150	2,030	20,900	13,000	14,500	6,610	7,700	5,540	32,500	2,270
18	1,710	1,920	19,000	12,100	14,300	5,720	8,420	4,040	27,600	3,510
19	2,500	2,270	21,600	10,800	12,800	8,960	7,150	2,870	15,900	3,510
20	1,920	2,500	14,800	7,880	12,100	8,780	4,660	4,040	15,400	3,770
21	1,610	3,770	9,330	7,880	11,200	8,600	4,660	6,430	16,500	2,990
22	1,610	5,000	17,400	5,720	40,600	8,420	6,430	7,880	17,000	2,270
23	2,870	3,900	38,200	7,150	47,000	17,200	6,250	9,700	13,600	3,240
24	2,740	3,240	26,300	8,420	28,900	25,000	7,520	8,600	8,960	2,740
25	1,810	2,500	17,400	8,960	19,200	17,000	5,360	8,960	6,430	2,030
26	2,150	2,990	13,000	7,520	13,200	11,000	6,790	6,430	6,430	2,990
27	1,420	3,240	8,960	8,600	10,400	9,330	12,800	5,000	6,430	1,230
28	1,610	2,740	9,330	14,800	9,330	9,770	11,500	5,540	7,150	1,230
29	2,620	2,500	10,100	13,200	10,800	9,140	8,600	6,790	5,720	3,240
30	4,040	2,500	8,060	11,500	-------	11,900	7,880	8,600	4,660	2,740
31	6,430	-------	7,520	17,200	-------	10,100	-------	6,070	-------	3,770

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,430	1,230	2,400	0.329	0.38
November	5,000	1,610	2,610	.357	.40
December	41,400	2,150	15,800	2.16	2.49
January	79,700	5,720	19,300	2.64	3.04
February	48,000	9,330	17,900	2.45	2.64
March	39,800	5,720	12,300	1.68	1.94
April	18,900	4,660	9,640	1.32	1.47
May	17,400	2,870	7,200	.986	1.14
June	32,500	3,770	10,600	1.45	1.62
July	6,430	1,230	3,620	.496	.57

SENECA RIVER NEAR ANDERSON, S.C.

LOCATION.—Water-stage recorder at highway bridge 1½ miles downstream from mouth of Deep Creek, 4 miles upstream from confluence of Seneca and Tugaloo Rivers, and 10½ miles west of Anderson, Anderson County.

DRAINAGE AREA.—1,030 square miles.

RECORDS AVAILABLE.—October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 17,500 second-feet Dec. 15 (gage height, 12.14 feet); minimum about 256 second-feet Nov. 15 (gage height, 2.26 feet).

Maximum known stage, 25 feet Aug. 17, 18, 1928 (estimated discharge, 77,000 second-feet).

REMARKS.—Records good except those below 600 second-feet and those estimated, which are fair. Diurnal fluctuation caused by operation of power plant upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	509	430	880	10,200	3,040	1,920	6,590	4,680	1,420	1,220	e 6,000	862
2	570	590	854	4,390	3,580	1,840	3,330	3,950	1,320	1,240	e 4,000	902
3	626	640	1,860	3,020	5,380	1,820	2,710	2,320	1,280	1,140	e 3,600	822
4	413	628	11,500	2,620	3,990	1,840	2,470	2,030	1,110	1,100	e 3,800	3,420
5	508	625	9,180	2,230	3,040	1,860	2,290	1,910	1,190	1,920	3,590	1,990
6	586	696	3,000	6,450	2,570	2,510	2,090	1,660	1,150	2,210	e 3,400	1,290
7	510	677	2,030	14,800	2,400	2,670	2,100	1,600	1,170	1,510	e 2,800	1,120
8	594	410	1,510	8,700	2,380	2,110	2,120	1,530	1,180	1,330	e 1,800	966
9	614	639	4,920	6,840	2,410	1,910	3,010	1,550	1,140	1,160	e 1,700	900
10	780	647	7,750	4,320	2,090	1,800	2,220	1,880	1,260	1,080	1,670	804
11	434	622	3,540	3,360	2,030	1,730	2,110	1,610	3,330	1,050	1,360	754
12	570	618	2,350	2,900	3,400	1,400	2,140	1,400	5,410	1,040	e 1,300	845
13	578	648	1,770	6,790	3,880	1,570	1,870	1,380	4,320	982	2,110	838
14	534	714	9,070	6,600	2,430	1,940	1,750	1,360	3,320	960	1,260	754
15	536	428	15,500	3,900	2,290	1,570	1,730	1,310	2,710	932	1,170	843
16	574	640	5,330	3,210	2,620	1,560	1,670	1,460	4,770	998	1,210	868
17	576	646	3,330	2,860	2,540	1,630	1,630	1,340	3,570	1,040	1,410	786
18	406	634	3,510	2,710	2,550	1,760	1,730	1,540	2,340	990	4,400	608
19	460	845	2,860	2,440	2,360	1,370	1,580	1,600	3,300	974	2,990	752
20	508	920	2,170	2,280	2,330	1,490	1,600	1,510	2,950	936	1,910	731
21	538	1,180	2,950	2,190	2,560	1,800	1,600	2,480	3,840	804	1,480	874
22	524	908	8,300	2,120	4,790	10,200	1,570	2,000	2,420	874	1,290	1,330
23	526	955	6,360	1,820	3,320	9,830	1,530	3,630	1,860	815	1,140	1,380
24	592	870	3,250	1,950	2,620	3,070	1,470	2,250	1,580	795	1,030	1,110
25	371	740	2,570	2,190	2,380	2,430	1,970	1,740	1,480	811	1,000	1,120
26	486	704	2,190	1,940	2,240	2,150	2,420	1,530	1,390	797	1,060	1,210
27	560	670	1,910	2,580	2,110	2,020	2,020	1,660	1,450	902	876	1,100
28	568	796	1,830	2,300	2,020	3,170	1,540	2,030	1,390	1,310	846	1,360
29	1,510	449	1,850	3,230	2,000	2,550	1,530	1,760	1,380	e 850	972	1,420
30	1,270	702	1,520	5,520	-------	2,150	1,550	1,570	1,260	e 950	896	1,220
31	690	-------	5,090	4,870	-------	4,410	-------	1,560	-------	e 1,000	844	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,510	371	597	0.580	0.67
November	1,180	410	689	.669	.75
December	15,500	854	4,220	4.10	4.73
January	14,800	1,820	4,240	4.12	4.75
February	5,380	2,000	2,810	2.73	2.94
March	10,200	1,370	2,580	2.50	2.88
April	6,590	1,470	2,130	2.07	2.31
May	4,680	1,310	1,930	1.87	2.16
June	5,410	1,110	2,210	2.15	2.40
July	2,210	795	1,090	1.06	1.22
August	----------		844	2,030	1.97	2.27
September	3,420	608	1,100	1.07	1.19
The year	15,500	371	2,140	2.08	28.27

e Estimated.

BROAD RIVER NEAR BELL, GA.

LOCATION.—Staff gage at highway bridge on Elberton-Washington Road half a mile below mouth of Long Creek and 1 mile southeast of Bell, Elbert County. Zero of gage is 356.30 feet above mean sea level.

DRAINAGE AREA.—1,440 square miles.

RECORDS AVAILABLE.—November 1926 to July 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 14,800 second-feet June 16 (gage height, 18.24 feet); minimum, 328 second-feet Oct. 4–7.

1926–32: Maximum discharge, about 47,200 second-feet Oct. 2, 1929 (gage height, 34.8 feet); minimum, 303 second-feet Sept. 25, 1931.

REMARKS.—Records collected by the Commonwealth & Southern Corporation, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	352	503	608	7,450	2,520	1,740	5,380	2,520	931	1,160
2	377	503	608	4,590	2,320	1,620	3,900	3,750	877	1,040
3	352	478	661	2,810	7,350	1,560	2,730	2,180	877	877
4	328	478	5,010	1,980	9,330	1,620	2,520	1,560	877	1,270
5	328	478	12,200	1,620	5,650	1,740	2,380	1,390	877	1,680
6	328	478	11,200	2,450	3,360	4,140	1,980	1,270	850	1,440
7	328	478	2,120	11,600	2,450	6,120	1,620	1,220	850	1,040
8	352	478	1,800	12,900	2,120	3,520	1,620	1,220	823	2,180
9	478	478	2,730	12,000	1,980	2,380	2,180	1,220	877	2,890
10	478	478	8,200	5,560	1,860	1,980	1,680	1,160	1,160	1,920
11	529	478	3,980	3,670	1,740	1,740	2,050	1,160	1,330	1,040
12	503	503	2,050	2,450	1,740	1,680	1,860	1,100	1,920	688
13	478	503	1,680	2,660	2,120	1,620	1,500	1,040	3,040	1,100
14	426	503	2,730	5,010	2,050	1,560	1,330	988	2,320	1,330
15	401	529	5,380	2,960	1,980	1,560	1,330	988	2,810	850
16	401	529	3,440	2,380	3,590	1,440	1,330	988	14,300	850
17	377	529	3,670	2,050	3,590	1,440	1,220	988	11,600	1,040
18	377	503	7,780	1,860	2,520	2,450	1,160	931	4,320	796
19	352	555	4,920	1,740	1,980	2,050	1,100	931	2,890	769
20	352	1,440	3,670	1,680	1,860	1,620	1,100	1,330	2,660	715
21	352	1,920	5,100	1,620	[a] 6,000	1,440	1,040	1,390	3,040	715
22	377	931	13,300	1,560	11,200	1,680	1,040	1,560	2,200	688
23	401	769	9,800	1,500	8,870	5,740	1,040	1,920	1,680	661
24	401	742	4,320	1,500	3,670	3,750	1,390	1,440	1,440	715
25	401	715	3,120	1,440	2,730	2,180	2,050	1,100	1,160	715
26	401	688	2,320	1,440	2,250	1,680	3,820	1,040	1,440	688
27	401	661	1,860	2,320	1,980	1,620	2,250	1,040	1,390	796
28	401	582	1,800	1,920	1,740	2,450	1,620	1,860	1,270	931
29	426	608	1,740	1,500	1,800	2,380	1,100	1,920	1,440	1,500
30	1,270	635	1,680	3,040	-------	1,680	1,270	1,220	1,270	1,860
31	661	-------	3,520	4,410	-------	2,380	-------	1,040	-------	3,200

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,270	328	432	0.300	0.35
November	1,920	478	638	.443	.49
December	13,000	608	4,280	2.97	3.42
January	12,900	1,440	3,600	2.50	2.88
February	11,200	1,740	3,530	2.45	2.64
March	6,120	1,440	2,280	1.58	1.82
April	5,380	1,040	1,890	1.31	1.46
May	3,750	931	1,400	.972	1.12
June	14,300	823	2,450	1.70	1.90
July	3,200	661	1,200	.833	.96

[a] Estimated.

AUGUSTA CANAL NEAR AUGUSTA, GA.

LOCATION.—Two water-stage recorders at upper end of Augusta Canal. Upper gage is 1,000 feet below diversion dam, 1¼ miles downstream from Stevens Creek power dam, and 5⅝ miles northwest of Augusta, Richmond County. Lower gage is 3⅜ miles downstream from upper gage. Elevation of zero of gages is 46.58 feet (city of Augusta datum).

RECORDS AVAILABLE.—November 1930 to September 1932.

EXTREMES.—Maximum mean daily discharge during year, 3,090 second-feet Mar. 17; minimum, 640 second-feet Jan. 9.

1930–32: Maximum mean daily discharge, 3,320 second-feet Apr. 29, 1931; minimum, that of Jan. 9, 1932.

REMARKS.—Records fair. Canal diverts water for power and water-supply purposes from the Savannah River at dam 1 mile downstream from Stevens Creek Dam. Waste water from power houses returns to river by three connections above river station. Water is also pumped from canal for water supply for city of Augusta and a small amount of water entering Beaverdam Ditch is discharged into river about 13 miles downstream from Augusta.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,160	a 1,600	2,130	2,590	2,620	a2,800	2,890	893	2,730	2,250	a 2,800	2,340
2	2,340	a 2,400	1,660	2,150	2,710	a3,000	2,250	2,540	2,640	1,860	a 2,600	2,940
3	1,820	a 1,700	1,840	1,880	2,700	a3,000	1,370	2,640	2,390	1,700	a 2,800	1,640
4	1,260	a 1,300	2,580	2,630	2,340	a2,600	2,480	2,670	2,200	1,620	2,290	1,050
5	1,640	a 1,400	2,090	2,910	2,540	a2,400	2,880	2,730	a 1,700	1,740	2,530	1,670
6	1,040	a 2,200	1,650	2,800	2,750	1,410	2,850	2,610	a 2,600	2,250	a 2,400	2,590
7	880	a 2,000	2,570	2,650	1,900	2,340	2,980	1,710	a 2,600	2,400	a 1,700	2,910
8	1,030	a 2,000	2,840	1,370	2,560	2,770	2,850	1,160	a 2,600	2,430	a 2,600	2,700
9	a 1,900	a 1,700	2,700	640	2,730	2,950	2,140	2,530	a 2,600	1,980	a 3,000	2,740
10	a 2,200	a 1,500	2,830	960	2,810	2,880	1,280	2,730	a 2,400	1,750	a 2,600	1,980
11	1,740	a 1,500	2,620	2,400	2,709	3,020	2,560	2,650	a 2,000	2,480	a 2,400	1,710
12	2,120	a 1,700	2,100	2,920	2,810	2,190	2,890	2,620	2,520	2,570	a 2,200	2,540
13	1,410	a 2,400	1,880	2,840	2,540	1,700	2,900	2,310	2,540	2,550	a 1,700	2,370
14	1,170	a 2,000	2,530	2,740	1,840	2,720	3,010	1,910	2,730	2,540	a 1,700	1,940
15	1,690	1,670	2,700	2,760	2,720	2,920	3,070	1,800	2,610	2,540	a 2,600	2,450
16	1,320	1,780	2,660	2,370	2,720	2,940	2,390	2,530	2,590	1,970	a 2,600	2,590
17	1,510	1,380	2,740	1,740	2,840	3,090	1,770	2,610	2,310	1,420	a 2,200	2,280
18	1,490	1,260	2,730	2,600	2,960	2,790	2,720	2,670	1,810	2,530	2,720	1,680
19	2,000	a 2,000	2,440	2,920	2,890	2,220	2,970	2,530	1,520	2,700	2,860	2,230
20	1,440	a 2,200	1,720	2,970	2,510	1,810	2,980	2,230	2,450	2,640	2,490	1,850
21	1,320	a 1,600	2,280	2,780	1,750	2,720	2,890	1,930	2,600	2,480	a 1,500	1,570
22	1,420	1,560	2,510	2,810	2,390	2,810	2,940	1,660	2,590	2,400	a 2,800	2,730
23	2,060	2,430	2,450	2,390	2,460	2,760	2,190	2,310	a 2,600	2,100	a 2,800	3,050
24	a 2,200	2,250	2,110	1,660	2,760	2,780	2,070	2,480	a 2,200	2,040	a 2,600	a 1,900
25	a 1,400	2,090	1,510	2,640	3,020	2,790	2,770	2,710	a 1,900	2,590	a 2,600	a 1,800
26	a 1,900	2,220	1,830	2,670	2,870	2,410	2,920	2,540	a 1,700	2,690	a 2,600	a 2,600
27	a 1,100	2,340	1,760	2,810	a2,200	1,660	2,920	2,430	a 2,400	1,950	a 2,400	a 2,800
28	a 1,300	2,200	2,530	2,730	a1,600	2,590	2,800	2,000	a 2,800	2,280	1,770	a 2,800
29	a 2,000	1,930	2,820	2,760	a2,600	2,920	2,620	1,560	a 2,800	2,640	2,620	a 2,800
30	a 1,800	2,250	2,710	2,170	-------	3,000	1,900	2,610	2,340	2,300	2,460	a 2,400
31	1,980	-------	2,760	1,810	-------	2,910	-------	2,700	-------	a1,900	2,370	-------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	2,340	880	1,630	May	2,730	893	2,290
November	-------	-------	1,890	June	-------	1,520	2,380
December	2,840	1,510	2,330	July	2,700	1,420	2,240
January	2,970	640	2,390	August	-------	-------	2,430
February	3,020	-------	2,550	September	3,000	1,050	2,290
March	3,090	1,410	2,610				
April	3,070	1,280	2,580	The year	3,090	640	2,300

a Estimated.

ALTAMAHA RIVER BASIN

ALTAMAHA RIVER AT DOCTORTOWN, GA.

LOCATION.—Staff gage at Atlantic Coast Line Railroad bridge at Doctortown, Wayne County, about 4½ miles northeast of Jesup. Zero of gage is 28.77 feet above mean sea level.

DRAINAGE AREA.—13,900 square miles.

RECORDS AVAILABLE.—October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 36,800 second-feet Jan. 21 (gage height, 7.4 feet); minimum, 1,760 second-feet Oct. 8, 9, 14, 15 (gage height, −2.3 feet).

REMARKS.—Records good. Gage-height record prior to Jan. 1 furnished by the Corps of Engineers, United States Army.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,570	2,040	2,730	10,000	11,400	15,200	13,800	6,490	6,810	9,810	5,490	9,810
2	2,410	2,040	2,810	11,400	11,800	16,800	13,800	6,970	6,970	10,600	6,190	8,180
3	2,330	1,970	2,890	12,200	11,800	18,600	12,200	7,300	8,000	11,400	6,970	7,300
4	2,250	1,970	2,890	11,800	11,800	19,600	12,200	6,970	7,820	12,700	8,000	6,650
5	2,110	1,970	2,890	10,600	11,800	20,600	12,200	6,810	7,130	13,200	9,360	6,190
6	1,970	1,970	2,890	9,360	12,200	23,800	12,200	6,650	6,340	13,800	10,300	5,760
7	1,830	1,900	2,890	9,150	12,200	27,500	12,200	6,490	5,900	13,800	11,100	5,230
8	1,760	1,970	2,970	9,580	12,700	27,500	12,200	6,490	5,900	13,800	11,800	4,740
9	1,760	2,110	3,050	10,000	12,700	25,000	12,200	6,650	5,900	12,700	12,700	4,520
10	1,830	2,250	3,830	10,600	13,800	22,700	12,200	6,650	5,900	11,800	13,800	4,310
11	1,970	2,250	4,740	10,800	13,800	20,600	11,800	6,340	5,900	11,100	16,800	4,110
12	1,970	2,330	5,760	11,100	14,500	19,600	11,800	6,340	5,760	10,800	19,600	4,110
13	1,830	2,250	6,650	11,400	15,200	19,600	11,400	6,040	5,900	10,600	20,600	4,520
14	1,830	2,250	6,970	11,800	15,200	18,600	11,100	6,190	7,130	9,810	20,600	4,630
15	1,830	2,250	7,130	12,700	18,600	20,600	11,100	5,620	7,470	8,750	18,600	5,760
16	2,040	2,250	7,300	13,800	22,700	21,600	11,100	4,860	7,640	8,000	17,700	7,300
17	2,250	2,250	7,470	15,200	22,700	22,700	11,100	4,520	8,180	7,130	16,800	8,560
18	2,410	2,180	7,640	16,800	20,600	25,000	10,800	4,410	8,750	6,340	16,800	9,360
19	2,410	2,180	7,300	25,000	18,600	25,000	10,600	4,210	9,150	5,760	16,000	9,360
20	2,410	2,250	6,970	33,300	18,600	20,600	10,600	4,110	9,150	5,360	16,000	8,560
21	2,330	2,330	6,490	36,800	16,800	18,600	10,000	4,210	9,150	4,980	16,000	7,640
22	2,250	2,410	6,340	33,300	16,000	16,800	9,580	4,310	9,150	4,740	16,800	6,040
23	2,250	2,410	6,970	30,200	15,200	16,000	9,360	4,630	9,150	4,520	18,600	5,900
24	2,110	2,410	7,640	27,500	14,500	16,000	8,950	4,860	9,360	4,410	22,700	6,340
25	2,110	2,410	8,560	25,000	13,800	16,000	8,560	5,100	9,810	4,410	23,800	7,640
26	2,180	2,410	8,950	22,700	12,700	16,000	8,000	5,900	10,000	4,410	23,800	8,370
27	2,180	2,330	9,150	19,600	11,800	15,200	7,300	6,810	9,810	4,310	21,600	8,560
28	2,110	2,410	9,360	16,000	12,700	15,200	6,810	7,640	9,580	4,210	19,600	8,370
29	2,110	2,410	9,580	13,800	13,800	15,200	6,490	8,000	9,360	4,110	16,000	8,370
30	2,110	2,570	9,580	12,700	-------	14,500	6,340	7,640	9,360	4,110	13,800	8,560
31	2,110	-------	9,580	11,800	-------	13,800	-------	6,970	-------	4,310	12,200	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,570	1,760	2,120	0.152	0.18
November	2,570	1,900	2,160	.155	.17
December	9,580	2,730	6,130	.441	.51
January	36,800	9,150	16,600	1.19	1.37
February	22,700	11,400	14,800	1.06	1.14
March	27,500	13,800	19,500	1.40	1.61
April	13,800	6,340	10,600	.762	.85
May	8,000	4,110	6,010	.432	.50
June	10,000	5,900	7,880	.567	.63
July	13,800	4,110	8,250	.594	.68
August	23,800	5,490	15,500	1.12	1.29
September	9,810	4,110	6,820	.491	.55
The year	36,800	1,760	9,710	.698	9.48

OCMULGEE RIVER AT MACON, GA.

LOCATION.—Water-stage recorder at Central of Georgia Railway bridge in Macon, Bibb County. Zero of gage is 269.38 feet above mean sea level.

DRAINAGE AREA.—2,290 square miles.

RECORDS AVAILABLE.—January 1893 to December 1913; October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 15,900 second-feet Feb. 4 (gage height, 18.1 feet); minimum, 192 second-feet Nov. 9, 16, 23 (gage height, 2.15 feet).

REMARKS.—Records fair. Record of stage for Oct. 1 to Jan. 15 furnished by the Corps of Engineers, United States Army. Flow partly regulated by power plant near Jackson, Ga.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	310	460	625	2,700	1,700	3,300	3,300	2,140	2,300	3,180	1,810	950
2	330	210	650	4,920	2,760	3,300	4,560	725	2,700	1,920	1,650	950
3	392	330	675	4,020	6,460	3,120	4,020	2,700	1,810	2,030	1,600	1,050
4	370	370	775	2,470	14,600	3,000	3,300	4,020	1,020	1,450	1,280	1,000
5	210	270	1,350	3,060	8,200	2,520	3,900	3,180	850	1,000	2,470	925
6	350	330	1,550	3,660	6,100	5,350	3,360	2,580	900	1,760	2,420	875
7	370	350	460	5,630	4,320	3,840	2,580	1,700	850	1,920	1,860	1,000
8	415	330	1,400	9,850	4,380	4,140	1,550	1,600	825	1,650	2,640	800
9	370	192	1,860	10,300	3,600	3,840	1,250	1,000	1,000	2,700	2,470	800
10	350	350	1,810	6,100	3,060	3,360	1,180	950	825	1,550	1,600	825
11	370	392	1,500	3,720	2,880	3,060	1,250	900	850	1,300	1,300	775
12	230	370	1,810	3,540	2,880	2,820	3,000	875	900	1,600	925	750
13	330	330	1,000	4,020	2,580	2,360	3,060	875	1,200	1,280	1,600	725
14	415	350	600	3,780	1,150	1,400	2,700	825	925	1,200	3,000	700
15	370	310	600	3,720	1,120	2,700	2,470	825	1,000	750	2,470	675
16	290	192	550	3,660	2,760	2,820	2,580	850	1,200	750	3,060	650
17	310	310	1,920	3,120	3,240	2,640	2,360	850	1,860	725	2,470	700
18	392	370	2,360	1,760	4,020	3,180	1,550	850	1,650	800	1,550	565
19	210	370	2,820	2,880	3,900	2,940	1,650	1,550	2,580	1,020	1,150	536
20	310	392	1,600	2,640	3,600	2,140	1,250	2,080	2,700	1,300	1,450	555
21	350	392	725	2,700	3,060	1,050	1,500	1,400	3,420	875	1,500	550
22	330	438	2,700	2,640	11,900	2,700	1,280	1,400	4,020	800	2,030	590
23	330	192	2,580	2,580	13,800	2,200	1,150	1,400	3,240	775	1,400	585
24	350	392	2,940	1,450	11,100	1,980	975	1,350	2,820	1,300	1,250	725
25	330	750	3,420	1,100	7,380	2,300	850	1,280	2,700	1,810	1,250	700
26	210	725	2,520	2,520	4,980	2,140	1,500	1,500	2,200	1,220	950	775
27	330	700	2,640	3,540	3,900	2,580	1,400	2,700	1,020	1,220	900	800
28	330	700	2,030	3,240	2,940	2,580	2,030	1,920	1,000	1,150	875	675
29	370	482	2,470	2,580	2,300	3,060	2,880	1,100	950	1,400	875	675
30	330	270	2,200	1,860	-------	3,300	3,060	1,020	1,000	1,000	875	650
31	392	-------	2,420	1,400	-------	3,000	-------	2,140	-------	2,080	850	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	415	210	334	0.146	0.17
November	750	192	387	.169	.19
December	3,420	460	1,700	.742	.86
January	10,300	1,100	3,590	1.57	1.81
February	14,600	1,120	4,990	2.18	2.35
March	5,350	1,050	2,860	1.25	1.44
April	4,560	850	2,250	.983	1.10
May	4,020	725	1,560	.681	.79
June	4,080	825	1,680	.734	.82
July	3,180	725	1,400	.611	.70
August	3,060	850	1,660	.725	.84
September	1,050	536	751	.328	.37
The year	14,600	192	1,920	.838	11.44

OCONEE RIVER AT DUBLIN, GA.

LOCATION.—Water-stage recorder at Wrightsville & Tennille Railroad bridge in Dublin, Laurens County, since Apr. 14, 1932. United States Weather Bureau chain gage on highway bridge 400 feet upstream from recorder prior to Apr. 14. Zero of gage is 151.58 feet above mean sea level.

DRAINAGE AREA.—4,350 square miles (revised).

RECORDS AVAILABLE.—Fragmentary records from 1894 to 1898; February 1898 to December 1913; October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 31,200 second-feet Jan. 12 (gage height, 18.8 feet, referred to recorder); minimum, 550 second-feet Oct. 22, 23 (gage height, −2.1 feet, referred to recorder).

REMARKS.—Records good since Apr. 15 and fair prior thereto. Record of daily stage from Oct. 1 to Apr. 14 obtained from United States Weather Bureau.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	700	750	1,180	3,860	7,330	8,940	5,900	3,220	3,060	4,710	2,740	1,240
2	700	810	1,180	5,060	7,770	6,200	5,900	2,820	2,360	5,060	4,200	1,210
3	700	1,120	1,180	6,800	7,550	5,240	6,700	2,740	2,140	4,620	3,140	1,150
4	750	930	1,310	7,440	7,990	4,880	7,220	3,460	1,930	3,940	2,820	1,120
5	1,050	870	1,310	7,770	9,430	4,710	6,800	3,300	1,930	3,460	3,140	1,020
6	1,050	810	2,140	6,000	12,000	6,000	5,330	2,900	1,930	2,660	4,800	990
7	1,050	870	4,620	4,970	17,300	9,180	4,620	2,440	2,000	2,590	6,200	1,020
8	650	870	5,800	7,880	20,500	10,900	4,280	2,290	2,000	3,700	6,200	1,380
9	650	870	6,500	11,000	19,400	12,000	4,120	2,140	2,070	4,540	6,200	1,480
10	750	870	6,700	13,400	15,800	12,900	4,880	2,140	2,900	4,370	4,120	1,210
11	810	870	5,240	20,700	9,820	15,300	5,330	2,220	2,900	3,460	2,820	1,050
12	870	930	6,200	31,200	6,400	12,900	4,800	2,000	2,740	2,520	2,220	990
13	930	930	6,600	30,300	5,700	7,990	6,500	1,860	3,380	2,000	1,930	960
14	870	990	5,700	25,900	5,800	6,300	6,000	1,790	4,460	1,790	2,360	1,020
15	810	990	3,940	20,500	6,100	5,600	6,500	1,760	4,200	1,620	2,900	1,120
16	810	990	3,140	14,900	6,100	5,150	3,860	1,680	4,280	1,580	4,430	1,120
17	870	990	3,460	10,600	5,600	4,880	3,620	1,650	5,240	1,580	3,900	1,050
18	810	990	4,370	7,770	7,220	5,240	3,460	1,620	5,800	1,480	3,060	1,020
19	700	990	5,330	6,200	8,100	6,900	3,300	1,650	6,300	1,440	2,820	1,020
20	700	1,050	7,000	5,330	7,880	7,990	3,220	1,760	6,700	1,790	2,900	960
21	650	1,050	7,550	4,880	6,300	7,220	3,140	2,000	6,800	2,140	4,120	990
22	550	1,120	7,880	4,540	6,500	6,400	3,060	2,520	5,510	2,140	4,800	1,440
23	550	1,120	7,330	4,280	9,300	5,900	2,900	4,200	4,970	1,720	4,120	1,580
24	650	1,240	7,880	4,120	11,000	6,600	2,820	6,500	4,200	1,510	2,800	1,440
25	650	1,240	7,880	4,030	14,800	6,800	2,740	6,200	3,220	1,680	2,220	1,680
26	650	1,120	8,940	4,030	20,300	7,330	2,820	4,620	2,440	1,410	1,860	1,620
27	650	1,120	9,300	4,030	21,000	6,600	2,820	3,220	2,070	1,480	1,650	1,680
28	600	1,180	7,660	5,330	19,000	5,420	3,540	3,220	2,220	1,790	1,510	1,720
29	600	1,180	4,970	6,900	15,300	5,330	4,380	4,710	2,980	2,140	1,380	1,790
30	600	1,180	4,120	6,900	------	6,400	4,200	4,710	3,540	2,220	1,310	1,580
31	700	------	3,700	6,700	------	6,500	------	3,860	------	2,000	1,240	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,050	550	744	0.171	0.20
November	1,240	750	1,000	.230	.26
December	9,300	1,180	5,160	1.19	1.37
January	31,200	3,860	9,780	2.25	2.59
February	21,000	5,600	10,900	2.51	2.71
March	15,300	4,710	7,410	1.70	1.96
April	7,220	2,740	4,510	1.04	1.16
May	6,500	1,620	2,940	.676	.78
June	6,800	1,930	3,540	.814	.91
July	5,060	1,410	2,550	.586	.68
August	6,200	1,240	3,230	.742	.86
September	1,790	960	1,260	.290	.32
The year	31,200	550	4,410	1.01	13.80

SATILLA RIVER BASIN

SATILLA RIVER AT ATKINSON, GA.

LOCATION.—Staff gage at highway bridge on United States Highway 84, 400 feet downstream from Atlantic Coast Line Railroad bridge and 1 mile west of Atkinson, Brantley County.

DRAINAGE AREA.—2,970 square miles.

RECORDS AVAILABLE.—October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 12,200 second-feet Aug. 31 (gage height, 15.40 feet); minimum, 4.5 second-feet Nov. 19, 20.

REMARKS.—Records good above 40 second-feet, fair below. Gage-height record prior to Jan. 12 furnished by Corps of Engineers, United States Army.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	23	10	53	60	130	425	69	425	2,350	745	11,800
2	74	19	13	62	62	120	375	67	282	2,670	960	11,400
3	88	19	13	74	67	117	351	64	239	3,210	1,220	10,000
4	103	19	16	88	69	130	327	62	327	5,060	1,430	7,710
5	103	16	16	103	72	139	304	58	351	7,710	1,810	5,570
6	120	16	19	88	74	139	293	58	425	10,000	2,230	4,060
7	120	16	19	74	77	148	282	57	553	10,700	2,740	3,210
8	103	13	23	62	74	158	271	57	606	9,710	3,120	2,530
9	88	13	23	53	72	158	260	57	633	8,510	3,000	2,010
10	74	13	27	46	69	158	239	56	716	7,710	3,710	1,520
11	74	10	31	46	67	168	218	57	1,140	6,960	3,400	1,180
12	62	10	31	50	69	168	208	55	1,520	5,570	3,210	960
13	62	8	35	57	72	178	188	52	1,810	5,060	2,960	1,060
14	53	8	35	60	72	198	168	46	2,230	4,190	2,740	1,260
15	53	8	35	64	69	208	158	41	2,600	3,210	2,600	2,230
16	53	6	40	67	67	218	139	38	3,120	2,470	2,530	2,810
17	46	6	40	69	64	239	130	36	4,900	1,660	2,290	3,710
18	46	6	46	69	67	271	113	34	6,960	1,140	2,350	4,900
19	46	4.5	46	72	69	304	100	36	8,210	960	2,470	6,360
20	40	4.5	53	69	72	327	91	38	8,510	716	2,810	6,360
21	40	6	53	67	74	375	82	42	8,210	579	3,210	6,560
22	35	6	46	64	77	425	81	218	7,710	475	3,820	5,760
23	35	8	46	60	82	425	88	351	7,210	400	4,750	4,900
24	35	8	40	58	88	450	100	450	6,360	351	5,060	4,320
25	31	6	40	57	100	475	94	553	5,390	327	5,390	3,940
26	31	6	40	55	113	475	91	688	3,940	304	9,110	3,820
27	31	8	35	53	120	475	85	960	3,210	293	11,400	3,940
28	27	8	35	53	130	475	80	834	2,810	282	11,800	4,060
29	27	10	35	52	139	475	74	716	2,350	304	12,200	3,820
30	27	10	31	55	-------	475	72	633	2,290	450	11,800	3,820
31	23	-------	40	58	-------	450	-------	501	-------	553	12,200	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	120	23	58.4	0.020	0.02
November	23	4.5	10.5	.0035	.004
December	53	10	32.7	.011	.01
January	103	46	63.2	.021	.02
February	139	60	79.5	.027	.03
March	475	117	279	.094	.11
April	425	72	183	.062	.07
May	960	34	225	.076	.09
June	8,510	239	3,170	1.07	1.19
July	10,700	282	3,350	1.13	1.30
August	12,200	745	4,510	1.52	1.75
September	11,800	960	4,520	1.52	1.70
The year	12,200	4.5	1,370	.461	6.29

ST. MARYS RIVER BASIN

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

LOCATION.—Staff gage in sec. 8, T. 1 N., R. 21 E., 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.—About 299 square miles (revised). Watershed in Okeefenokee Swamp indeterminate.

RECORDS AVAILABLE.—January 1921 to December 1923; January 1927 to June 1930; July to September 1932.

EXTREMES.—Maximum discharge during period ending Sept. 30, 1932, 1,870 second-feet Sept. 16 (gage height, 10.20 feet); minimum, 0.6 second-foot July 25 (gage height, 1.14 feet).

1921–23, 1927–30, 1932: Maximum discharge, about 6,060 second-feet probably on Sept. 19, 1928 (gage height, 16.7 feet); no flow June 16–24, 28, 1921, May 19 to June 9, 1927.

REMARKS.—Records fair. Discharge interpolated July 17, 18. Small pumping diversion just above control; during extremely low stages entire flow of stream is diverted.

Discharge, in second-feet, 1932

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	------	26	250	11	25	387	68	21	3.6	407	815
2	------	66	250	12	18	350	60	22	2.2	550	780
3	------	104	238	13	14	275	50	23	1.6	550	815
4	------	216	205	14	9.5	227	68	24	.8	675	780
5	227	238	185	15	9.0	317	1,260	25	1.1	610	745
6	205	227	148	16	8.5	288	1,870	26	3.1	525	640
7	118	195	140	17	8.2	250	1,670	27	6.8	407	550
8	79	350	104	18	8.0	185	1,440	28	5.2	333	500
9	48	550	85	19	7.8	205	1,210	29	18	302	427
10	35	500	70	20	6.0	238	930	30	20	275	350
								31	29	250	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
July 5–31	227	0.8	34.0	0.114	0.11
August	675	26	323	1.08	1.24
September	1,870	50	557	1.86	2.08

Discharge, in second-feet, 1931–32

ST. MARYS RIVER NEAR MACCLENNY, FLA.

LOCATION.—Staff gage in sec. 2, T. 2 S., R. 22 E., at Stokes Bridge, 1 mile below junction of North and South Prongs and 6 miles northeast of Macclenny. Zero of gage is 40.00 feet above mean sea level.

DRAINAGE AREA.—About 859 square miles (revised). Watersl ed in Okeefenokee Swamp indeterminate.

RECORDS AVAILABLE.—October 1926 to September 1932.

EXTREMES.—Maximum discharge during year, 4,860 second-feet Sept. 18 (gage height, 14.10 feet); minimum, 12 second-feet May 22 (gage height, 0.70 foot).

1926–32: Maximum discharge, about 16,500 second-feet Sept. 20, 1928 (gage height, 21.9 feet); minimum discharge, that of May 22, 1932; minimum gage height, 0.04 foot June 4, 5, 1927.

REMARKS.—Records fair. Small diversion at Moniac, Ga.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	16	14	26	21	21	43	23	18	415	195	755
2	28	16	14	26	22	19	43	31	18	475	475	855
3	28	16	15	22	21	19	41	29	22	635	635	905
4	28	16	21	21	20	19	39	27	61	1,060	655	830
5	26	16	21	21	20	21	37	23	155	1,100	805	705
6	26	16	21	25	20	39	36	22	155	705	955	705
7	26	16	20	24	20	58	33	22	135	495	905	515
8	26	16	19	22	20	65	31	20	125	330	830	415
9	24	16	18	23	21	49	29	19	125	255	855	345
10	24	16	17	24	21	33	29	19	175	175	1,420	285
11	23	15	16	20	22	31	29	19	415	155	1,330	285
12	23	15	15	24	21	31	25	21	330	135	1,180	255
13	22	15	17	24	21	43	24	20	415	109	930	300
14	22	15	16	23	20	61	24	19	1,540	85	495	375
15	22	15	16	22	19	55	24	19	2,000	77	495	1,820
16	22	15	15	22	19	46	24	19	2,100	69	905	3,330
17	22	16	15	22	19	37	23	18	1,850	77	805	4,740
18	22	16	15	22	19	37	20	18	1,640	69	635	4,860
19	22	16	15	21	18	46	20	19	1,330	69	555	4,380
20	21	16	15	21	18	52	22	14	1,080	61	535	3,820
21	21	16	17	20	18	43	28	13	905	58	755	3,150
22	21	16	17	20	18	37	28	12	730	58	1,100	2,700
23	20	17	18	20	21	35	28	15	705	55	2,200	2,420
24	20	17	28	20	24	49	25	32	575	55	2,910	2,470
25	20	16	28	20	24	49	22	26	455	37	2,990	2,280
26	20	16	22	20	20	105	22	21	515	37	2,770	2,120
27	20	16	19	20	26	77	21	20	330	109	2,040	1,850
28	19	16	19	19	20	61	21	20	375	117	1,675	1,540
29	19	16	19	19	24	55	20	18	315	155	1,330	1,390
30	19	16	18	19	------	49	20	17	305	165	1,060	1,160
31	19	------	18	20	------	43	------	16	------	210	855	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	28	19	22.7	0.026	0.03
November	17	15	15.9	.018	.02
December	28	14	18.0	.021	.02
January	26	19	21.7	.025	.03
February	26	18	20.6	.024	.03
March	105	19	44.7	.052	.06
April	43	20	27.7	.032	.04
May	32	12	20.4	.024	.03
June	2,120	18	640	.745	.83
July	1,100	37	245	.285	.33
August	2,990	195	1,140	1.33	1.53
September	4,860	255	1,720	2.00	2.23
The year	4,860	12	326	.380	5.18

ST. JOHNS RIVER BASIN

WEKIVA RIVER NEAR SANFORD, FLA.

LOCATION.—Near line between secs. 33 and 34, T. 19 S., R. 29 E., at highway bridge 9 miles west of Sanford.
RECORDS AVAILABLE.—Discharge measurements from October 1931 to September 1932.
REMARKS.—Wekiva River is fed by large springs. Stage affected by backwater from St. Johns River when it is high.

Discharge measurements, in second-feet, 1931–32

Oct. 9	231	Apr. 4	208
Nov. 13	149	June 16	396
Jan. 6	178	July 14	186
Feb. 8	214	Aug. 2	250
Mar. 8	198	Sept. 6	250

BLUE SPRING NEAR ORANGE CITY, FLA.

LOCATION.—In sec. 7, T. 18 S., R. 30 E., about 2½ miles west of Orange City.
RECORDS AVAILABLE.—Discharge measurements from March to September 1932.
REMARKS.—Measurements are made in spring run just above junction with St. Johns River, a quarter of a mile below spring.

Discharge measurements, in second-feet, 1931–32

Mar 7	147	Aug. 1	147
June 16	147	Sept. 6	185
July 13	182		

OKLAWAHA RIVER NEAR OCALA, FLA.

LOCATION.—Staff gage prior to Mar. 2, 1932, water-stage recorder thereafter, in sec. 15, T. 15 S., R. 23 E., at county bridge known as Sharpes Ferry, 2 miles upstream from Silver River and 9 miles east of Ocala. Zero of gage is 36.66 feet above mean sea level.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 385 second-feet Oct. 3 (gage height, 1.68 feet); minimum, 49 second-feet Aug. 2 (gage height, −1.76 feet). 1930–32: Maximum discharge, 1,160 second-feet Apr. 5, 1931 (gage height, 4.00 feet); maximum gage height, 4.12 feet Mar. 29, 1930; minimum discharge, that of Aug. 2, 1932.

REMARKS.—Records good above 150 second-feet, fair below. Discharge estimated June 2–4, July 10–11. Complete regulation after April by power plant at Moss Bluff, 12 miles upstream; partial regulation prior to April.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	372	313	298	298	255	242	252	223	215	230	116	176
2	349	308	313	284	255	245	248	226	158	219	62	176
3	378	308	313	279	258	248	248	226	134	205	83	152
4	366	303	308	274	258	245	245	226	128	230	83	182
5	366	303	308	270	258	248	245	226	205	188	116	200
6	366	298	308	279	258	248	245	230	223	188	164	188
7	360	303	308	279	255	248	242	223	223	188	152	188
8	372	298	303	279	255	248	242	223	215	182	122	88
9	372	298	303	274	252	245	242	223	205	122	158	94
10	372	298	313	270	252	245	242	219	210	146	152	128
11	360	298	293	266	252	248	242	215	215	110	134	140
12	360	288	284	266	252	248	239	215	223	73	146	140
13	354	298	284	270	252	248	239	210	239	94	152	146
14	349	298	279	266	248	248	239	210	270	140	152	146
15	344	303	274	266	248	252	239	200	284	134	152	210
16	344	303	270	270	248	252	236	205	270	122	140	164
17	344	298	266	266	248	248	233	205	255	134	122	182
18	344	298	270	270	248	248	236	215	255	122	134	176
19	338	293	262	266	248	248	230	258	313	128	158	176
20	333	293	266	262	248	248	223	328	284	134	176	170
21	333	293	270	262	248	248	215	308	252	128	176	164
22	333	293	270	262	248	248	215	270	219	134	176	164
23	333	293	270	262	252	258	210	252	215	122	176	170
24	328	288	266	262	248	279	215	252	210	122	176	182
25	328	293	262	262	248	274	215	274	200	122	188	170
26	328	284	266	258	248	262	219	258	215	116	188	176
27	328	279	262	262	248	255	215	248	219	116	188	219
28	328	279	262	262	245	258	210	239	239	122	188	164
29	328	279	262	258	242	255	205	236	252	116	176	164
30	323	288	262	262	-------	255	205	230	242	110	164	205
31	328	-------	270	258	-------	252	-------	223	-------	110	176	-------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	378	323	347	May	328	200	235
November	313	279	296	June	313	128	226
December	313	262	282	July	230	73	142
January	298	258	268	August	188	62	150
February	258	242	251	September	219	88	167
March	279	242	251				
April	252	205	231	The year	378	62	237

OKLAWAHA RIVER NEAR CONNOR, FLA.

LOCATION.—Staff gage in sec. 3, T. 15 S., R. 23 E., at highway bridge on Ocala-Daytona highway a quarter of a mile downstream from the mouth of Silver River and 8 miles east of Ocala. Zero of gage is 31.96 feet above mean sea level.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 1,200 second-feet Oct. 3 (gage height, 5.55 feet); minimum, 643 second-feet Aug. 4 (gage height, 3.01 feet).

1930–32: Maximum discharge, 2,430 second-feet Apr. 6, 1931; maximum gage height, 7.37 feet Mar. 29, 1930; minimum discharge, that of Aug. 4, 1932.

REMARKS.—Records good. Operation of power plant at Moss Bluff affects flow at low stages.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,180	1,060	1,030	985	908	895	853	777	742	786	667	709
2	1,150	1,060	1,060	958	895	895	843	786	702	777	667	709
3	1,180	1,060	1,060	958	895	895	843	777	680	768	655	702
4	1,180	1,040	1,060	945	895	895	843	777	680	786	649	702
5	1,160	1,040	1,040	932	895	895	843	777	734	742	667	694
6	1,160	1,030	1,040	945	895	895	843	786	759	725	674	709
7	1,160	1,040	1,030	945	883	895	843	768	759	734	680	750
8	1,160	1,020	1,030	945	883	885	824	768	742	717	661	667
9	1,160	1,030	1,030	945	883	895	824	768	742	717	694	667
10	1,160	1,030	1,040	932	883	895	824	759	742	702	694	702
11	1,150	1,030	1,020	932	895	883	823	759	742	667	680	702
12	1,150	1,020	1,000	932	895	883	824	759	742	655	674	702
13	1,150	1,020	985	932	895	883	824	750	777	661	694	709
14	1,130	1,020	985	920	883	883	824	750	804	702	702	709
15	1,130	1,030	985	932	883	883	814	742	833	702	694	759
16	1,130	1,030	958	932	895	863	814	750	863	687	687	742
17	1,110	1,020	932	932	895	873	804	750	970	687	680	725
18	1,110	1,030	945	920	895	873	804	759	945	687	680	725
19	1,100	1,020	945	932	895	873	804	814	932	687	694	734
20	1,100	1,020	932	920	883	873	795	920	863	680	750	725
21	1,100	1,030	945	920	895	863	777	895	824	680	725	725
22	1,100	1,030	945	908	895	863	768	843	759	687	717	725
23	1,100	1,030	945	908	920	883	768	814	750	680	709	725
24	1,100	1,020	932	908	895	932	777	804	742	680	709	725
25	1,070	1,020	932	908	895	908	768	843	734	674	725	725
26	1,070	1,000	932	908	908	873	768	814	759	674	725	742
27	1,070	1,000	932	908	908	873	768	795	750	661	725	777
28	1,070	1,000	932	908	908	863	768	786	786	667	717	734
29	1,100	1,000	932	908	883	863	759	777	804	667	717	742
30	1,100	1,020	932	908	------	853	759	768	786	667	709	768
31	1,070	------	945	908	------	853	------	750	------	667	709	------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	1,180	1,070	1,120	May	920	742	787
November	1,060	1,000	1,030	June	970	680	782
December	1,060	920	981	July	786	661	699
January	985	908	928	August	750	649	695
February	908	883	894	September	777	667	722
March	908	853	882				
April	853	759	806	The year	1,180	649	861

OKLAWAHA RIVER AT EUREKA, FLA.

LOCATION.—Staff gage in sec. 9, T. 13 S., R. 24 E., at county highway bridge at Eureka, 3 miles downstream from mouth of Eaton Creek.
RECORDS AVAILABLE.—February 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 1,210 second-feet Oct. 1 (gage height, 5.54 feet); minimum, 682 second-feet Aug. 3 (gage height, 3.11 feet).
1930–32: Maximum discharge, 3,400 second-feet Mar. 31, 1930 (gage height, 8.02 feet); minimum, that of Aug. 3, 1932.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	1,090	1,040	1,010	950	900	900	796	822	900	738	779
2	1,180	1,080	1,140	1,040	940	891	891	804	830	891	706	779
3	1,170	1,060	1,140	1,020	930	891	891	804	813	864	690	770
4	1,190	1,050	1,140	1,020	930	891	891	804	788	856	706	770
5	1,190	1,050	1,120	1,000	930	910	882	796	830	847	714	754
6	1,190	1,050	1,100	985	930	940	873	796	864	813	738	746
7	1,170	1,040	1,090	972	930	920	873	796	864	804	746	746
8	1,170	1,040	1,090	972	930	910	864	788	838	796	730	746
9	1,180	1,040	1,080	985	930	910	864	788	830	788	738	682
10	1,180	1,040	1,080	985	930	900	856	788	822	779	746	706
11	1,170	1,030	1,080	985	930	891	856	779	822	754	746	730
12	1,160	1,030	1,060	972	930	900	856	779	822	730	722	746
13	1,150	1,030	1,060	972	920	920	847	770	830	714	730	754
14	1,140	1,020	1,050	972	920	910	847	762	864	738	730	754
15	1,140	1,020	1,040	972	920	900	847	762	920	754	738	762
16	1,120	1,020	1,020	972	920	891	838	762	960	762	730	770
17	1,120	1,030	1,020	972	900	891	838	762	1,020	754	722	754
18	1,120	1,030	1,020	972	900	900	830	813	1,010	754	722	746
19	1,120	1,030	1,010	972	900	891	830	873	1,040	754	722	754
20	1,120	1,030	1,010	972	900	891	830	930	1,080	746	838	746
21	1,110	1,030	1,010	972	910	882	813	940	1,060	738	873	746
22	1,090	1,040	1,010	960	920	891	813	930	985	738	838	746
23	1,090	1,040	1,010	960	985	920	804	891	900	739	822	746
24	1,090	1,040	1,010	960	960	1,040	796	882	864	730	813	746
25	1,080	1,040	1,010	960	940	1,020	796	910	873	722	822	746
26	1,080	1,040	1,000	960	930	972	796	940	864	730	822	746
27	1,080	1,030	1,000	960	920	950	796	920	864	722	804	754
28	1,070	1,030	985	972	910	940	796	891	882	722	796	770
29	1,080	1,020	972	960	900	930	788	864	910	730	779	754
30	1,120	1,020	992	972	-------	910	788	847	910	722	770	770
31	1,110	-------	1,000	972	-------	900	-------	830	-------	722	770	-------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	1,200	1,070	1,130	May	940	762	832
November	1,090	1,020	1,040	June	1,080	788	893
December	1,140	972	1,040	July	900	714	768
January	1,040	960	978	August	87[illegible]	690	760
February	985	900	926	September	779	682	751
March	1,040	882	916				
April	900	788	840	The year	1,20[illegible]	682	907

OKLAWAHA RIVER NEAR ORANGE SPRINGS, FLA.

LOCATION.—Staff gage in sec. 28, T. 11 S., R. 24 E., a quarter of a mile downstream from Jordans Ferry and mouth of Orange Creek and 2½ miles east of Orange Springs.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 1,240 second-feet Oct. 1 (gage height, 4.88 feet); minimum, 742 second-feet Sept. 10 (gage height, 2.56 feet).

1930–32: Maximum discharge, 3,860 second-feet Mar. 31, 1930, Apr. 8, 9, 1931; maximum stage, 8.64 feet Mar. 31, 1930; minimum discharge, that of Sept. 10, 1932.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,220	1,120	1,030	1,080	972	906	942	821	866	962	770	828
2	1,220	1,080	1,130	1,100	962	906	942	821	882	933	770	828
3	1,200	1,080	1,200	1,080	962	906	933	828	898	906	749	821
4	1,200	1,070	1,220	1,070	952	906	924	828	898	882	763	814
5	1,200	1,070	1,160	1,060	952	962	915	821	906	866	763	814
6	1,200	1,060	1,130	1,040	952	1,030	906	821	962	858	784	806
7	1,180	1,060	1,120	1,030	952	995	906	821	952	836	791	798
8	1,180	1,060	1,100	1,030	952	952	898	821	915	828	791	791
9	1,180	1,040	1,080	1,030	952	933	890	814	890	821	784	770
10	1,180	1,040	1,070	1,020	942	924	890	814	890	828	784	742
11	1,180	1,040	1,070	1,010	942	924	882	806	882	806	784	763
12	1,180	1,040	1,070	1,010	933	942	882	806	874	784	777	784
13	1,160	1,040	1,060	1,010	933	962	874	798	882	763	763	798
14	1,160	1,040	1,060	1,010	933	952	874	791	942	749	763	798
15	1,160	1,040	1,040	1,010	933	942	866	791	1,020	777	763	821
16	1,140	1,040	1,040	995	933	933	866	791	1,060	791	763	836
17	1,140	1,040	1,030	995	924	924	866	784	1,080	791	763	828
18	1,130	1,040	1,030	1,010	924	933	866	821	1,120	784	749	814
19	1,120	1,040	1,030	1,010	924	933	858	898	1,120	791	777	806
20	1,120	1,040	1,020	995	924	924	882	984	1,100	791	933	798
21	1,120	1,040	1,030	995	933	915	874	995	1,100	784	1,010	798
22	1,120	1,060	1,030	984	933	924	858	962	1,080	770	998	798
23	1,100	1,060	1,030	972	1,010	1,020	844	933	1,020	763	972	798
24	1,100	1,060	1,020	972	1,010	1,180	836	906	942	763	942	798
25	1,100	1,040	1,020	972	972	1,160	836	906	906	756	906	798
26	1,080	1,040	1,020	972	962	1,120	828	924	898	756	898	814
27	1,080	1,040	1,010	962	933	1,040	828	933	890	763	874	814
28	1,080	1,040	1,010	962	942	1,020	821	915	890	756	858	814
29	1,080	1,030	1,010	962	915	995	821	898	924	756	844	814
30	1,120	1,030	1,020	962	-------	972	821	874	962	756	828	821
31	1,120	-------	1,030	972	-------	952	-------	866	-------	763	821	-------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	1,220	1,080	1,150	May	995	784	858
November	1,120	1,030	1,050	June	1,120	866	965
December	1,220	1,010	1,060	July	962	749	804
January	1,080	962	1,010	August	1,010	749	824
February	1,010	915	947	September	836	742	804
March	1,180	906	971				
April	942	821	874	The year	1,220	742	943

NORTH FORK OF BLACK CREEK NEAR MIDDLEBURG, FLA.

LOCATION.—Staff gage in sec. 28, T. 4 S., R. 24 E., about 4 miles northwest of Middleburg.
DRAINAGE AREA.—207 square miles.
RECORDS AVAILABLE.—November 1931 to September 1932.
EXTREMES.—Maximum discharge during period, 929 second-feet Sep. 16 (gage height, 8.88 feet); minimum, 5.6 second-feet Nov. 18–22 (gage height, 0.66 foot).
REMARKS.—Records poor.

Discharge, in second-feet, 1931–32

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	8.0	21	12	22	32	18	8.8	270	62	40
2	------	8.0	25	13	18	28	25	11	270	180	90
3	------	26	20	13	18	27	28	76	300	116	76
4	------	33	18	13	21	25	25	160	300	180	58
5	------	19	18	12	29	22	20	98	160	150	62
6	------	18	15	11	76	21	17	200	85	160	90
7	------	16	14	11	72	19	16	160	54	98	80
8	------	17	13	10	54	18	14	80	36	58	58
9	------	18	13	12	47	18	13	121	28	46	40
10	------	13	13	12	46	16	11	150	21	37	25
11	------	13	11	13	40	18	13	150	18	38	23
12	------	13	11	13	39	19	16	220	15	35	26
13	------	12	11	11	62	18	11	330	14	26	39
14	------	11	11	11	58	18	10	572	12	67	290
15	------	8.8	11	11	48	16	9.6	690	10	121	716
16	------	9.6	11	11	44	15	9.6	756	9.6	54	902
17	------	8.0	11	11	39	14	9.6	770	9.6	38	546
18	5.6	8.0	13	11	43	14	9.6	520	10	33	290
19	5.6	9.6	13	11	48	14	12	370	18	39	190
20	5.6	8.8	12	11	42	22	12	210	20	46	130
21	5.6	10	12	11	36	42	13	260	15	76	94
22	5.6	11	11	12	34	50	10	220	13	76	130
23	7.4	20	11	13	58	44	9.6	90	11	190	160
24	7.4	18	11	17	140	37	8.8	54	9.6	360	170
25	8.0	17	11	19	103	31	12	46	8.0	320	150
26	8.0	14	11	31	67	25	58	36	15	180	112
27	8.0	13	11	29	62	21	34	29	30	94	85
28	8.0	12	11	27	58	17	28	34	21	58	67
29	8.0	11	11	23	54	16	20	46	16	41	54
30	8.0	10	10	------	46	14	17	121	16	32	47
31	------	10	11	------	37	------	12	------	58	29	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 18-30	8.0	5.6	6.98	0.034	0.02
December	33	8.0	13.7	.066	.08
January	25	10	13.1	.063	.07
February	31	10	14.3	.069	.07
March	140	18	50.4	.243	.28
April	50	14	23.0	.111	.12
May	58	8.8	16.8	.081	.09
June	770	8.8	220	1.06	1.18
July	300	8.0	60.4	.292	.34
August	360	26	98.1	.474	.55
September	902	23	161	.778	.87

LAKE OKEECHOBEE BASIN

LAKE OKEECHOBEE AT ST. LUCIE CANAL, FLA.

LOCATION.—Staff gage in sec. 22, T. 40 S., R. 37 E., on east shore of Lake Okeechobee at entrance to St. Lucie Canal, 8 miles north of Canal Point. Zero of gage is at mean sea level, Okeechobee Flood Control District datum.
RECORDS AVAILABLE.—October 1931 to September 1932.
EXTREMES.—Maximum stage recorded during year, 13.7 feet Sept. 15, 30; minimum, 11.3 feet May 17.
REMARKS.—Abrupt changes in stage frequently caused by wind. Gage-height record furnished by Okeechobee Flood Control District.

Gage height, in feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13.1	12.8	12.6	12.6	12.3	12.2	12.1	11.9	11.7	12.6	12.2	12.95
2	13.0	12.7	12.7	12.6	12.3	12.3	12.1	11.8	11.75	12.6	12.25	12.85
3	13.0	12.8	12.7	12.6	12.35	12.3	12.05	11.7	11.8	12.4	12.2	12.85
4	13.0	12.9	12.6	12.5	12.3	12.3	12.05	11.6	11.9	12.4	12.15	12.85
5	13.1	12.8	12.7	12.5	12.4	12.2	12.1	11.5	12.0	12.4	12.25	12.9
6	13.1	12.8	12.8	12.6	12.3	12.9	12.0	11.5	11.95	12.3	12.2	13.5
7	13.0	12.7	12.7	12.6	12.4	12.3	12.1	11.5	12.05	12.4	12.2	13.1
8	13.0	12.5	12.6	12.6	12.4	12.2	12.0	11.6	12.0	12.4	12.2	13.1
9	13.0	12.8	12.7	12.7	12.4	12.2	12.1	11.7	11.9	12.4	12.25	12.95
10	13.1	12.7	12.7	12.5	12.4	12.3	12.1	11.8	12.0	12.3	12.2	13.1
11	13.0	12.7	12.7	12.5	12.4	12.2	12.3	11.7	11.85	12.2	12.2	13.1
12	13.0	12.8	12.7	12.5	12.3	12.3	11.9	11.7	12.0	12.2	12.25	13.2
13	12.9	12.8	12.7	12.6	12.3	12.3	11.9	11.7	12.0	12.1	12.2	13.25
14	13.0	12.8	12.8	12.6	12.25	12.2	11.9	11.6	12.0	12.2	12.2	13.35
15	13.0	12.7	12.7	12.6	12.3	12.2	11.9	11.5	12.1	12.2	12.2	13.7
16	13.05	12.7	12.7	12.6	12.3	12.2	12.0	11.4	12.2	12.2	12.25	13.5
17	13.0	12.8	12.6	12.6	12.3	12.25	11.9	11.3	12.2	12.2	12.25	13.55
18	13.1	12.8	12.6	12.6	12.2	12.2	11.8	11.4	12.3	12.2	12.25	13.5
19	12.9	12.8	12.6	12.5	12.25	12.3	11.8	11.6	12.3	12.2	12.35	13.5
20	13.0	12.8	12.7	12.5	12.2	12.2	11.8	11.5	12.3	12.3	12.35	13.5
21	13.0	12.6	13.7	12.4	12.2	12.2	12.0	11.7	12.3	12.3	12.4	13.4
22	13.0	12.6	12.7	12.4	12.3	12.2	11.9	11.7	12.3	12.3	12.4	13.5
23	13.0	12.7	12.7	12.5	12.2	12.3	11.9	11.6	12.4	12.3	12.4	13.4
24	13.0	12.8	12.6	12.5	12.2	12.2	11.9	11.6	12.4	12.3	12.4	13.4
25	13.0	12.7	12.6	12.5	12.2	12.2	11.9	11.6	12.4	12.3	12.45	13.5
26	13.0	12.7	12.5	12.4	12.2	12.2	11.8	11.6	12.5	12.2	12.5	13.5
27	13.0	12.6	12.5	12.5	12.2	12.2	11.9	11.6	12.3	12.2	12.5	13.4
28	13.0	12.7	12.7	12.5	12.5	12.3	11.9	11.7	12.4	12.2	12.45	13.5
29	13.0	12.7	12.5	12.4	12.3	12.15	11.8	11.8	12.4	12.2	12.5	13.6
30	13.0	12.7	12.6	12.4	------	12.2	11.8	11.7	12.5	12.2	12.4	13.7
31	13.0	------	12.6	12.3	------	12.1	------	11.8	------	12.25	12.5	------

KISSIMMEE RIVER NEAR OKEECHOBEE, FLA.

LOCATION.—Staff gage in sec. 24, T. 37 S., R. 33 E., at highway bridge on State Highway 8, about 10 miles west of Okeechobee. Zero of gage is at mean sea level, Okeechobee Flood Control District datum.

DRAINAGE AREA.—3,260 square miles.

RECORDS AVAILABLE.—October 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 3,210 second-feet Sept. 15, 16 (gage height, 25.7 feet); minimum, 231 second-feet May 18 (gage height, 17.80 feet).

1930–32: Maximum discharge, 4,800 second-feet Oct. 5–7, 1930 (gage height, 26.65 feet); minimum, that of May 18, 1932.

REMARKS.—Records good. Gage-height record and results of many measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,210	1,130	926	833	656	544	452	316	503	989	426	1,360
2	1,200	1,120	935	833	640	536	444	324	589	989	444	1,440
3	1,200	1,110	971	824	640	536	426	324	588	944	486	1,520
4	1,190	1,100	953	816	640	528	426	316	578	892	503	1,690
5	1,190	1,090	953	808	632	520	426	308	600	833	576	1,790
6	1,190	1,090	944	808	632	520	418	308	634	774	632	1,910
7	1,190	1,080	926	799	624	520	410	274	618	697	688	1,950
8	1,180	1,070	926	790	624	512	410	282	594	632	782	2,090
9	1,190	1,070	918	782	616	512	401	274	544	576	799	2,140
10	1,190	1,060	910	765	616	512	392	265	544	536	808	2,140
11	1,190	1,050	901	756	616	503	392	265	722	494	808	2,250
12	1,180	1,050	892	756	608	503	384	265	706	469	342	2,370
13	1,180	1,040	884	740	608	494	376	256	624	444	850	2,570
14	1,170	1,040	876	740	600	494	376	256	574	418	850	2,950
15	1,170	1,030	876	740	600	503	376	248	608	410	850	3,210
16	1,160	1,020	867	731	592	512	367	240	774	392	858	3,210
17	1,160	1,020	858	722	592	512	358	240	979	392	858	3,120
18	1,150	1,020	858	714	584	520	350	231	1,040	392	858	2,870
19	1,150	1,010	850	714	584	512	350	248	1,060	444	876	2,570
20	1,160	998	850	706	576	494	376	265	1,080	444	892	2,440
21	1,160	998	850	706	568	486	392	350	1,100	469	962	2,250
22	1,160	989	842	697	568	486	384	401	1,110	452	980	2,090
23	1,160	980	833	688	568	478	376	358	1,110	426	989	1,950
24	1,160	971	824	688	560	486	384	350	1,090	410	1,010	1,910
25	1,160	962	824	680	560	486	367	358	1,070	418	1,020	1,830
26	1,160	962	816	680	568	486	350	418	1,020	426	1,050	1,720
27	1,150	953	808	672	568	486	333	452	935	460	1,060	1,660
28	1,150	953	799	672	560	486	316	494	858	486	1,090	1,600
29	1,150	944	790	664	552	478	308	478	884	460	1,100	1,550
30	1,140	935	782	664	-------	469	308	478	953	435	1,180	1,500
31	1,140	-------	782	656	-------	452	-------	520	-------	418	1,260	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,210	1,140	1,170	0.359	0.41
November	1,130	935	1,030	.316	.35
December	971	782	872	.267	.31
January	833	656	737	.226	.26
February	656	552	598	.183	.20
March	544	452	502	.154	.18
April	452	308	381	.117	.13
May	520	231	328	.101	.12
June	1,110	503	802	.246	.27
July	989	392	549	.168	.19
August	1,260	426	851	.261	.30
September	3,210	1,360	2,120	.650	.73
The year	3,210	231	827	.254	3.45

TAYLOR CREEK AT OKEECHOBEE, FLA.

LOCATION.—Staff gage in sec. 15, T. 37 S., R. 35 E., at Seaboard Air Line Railway bridge in Okeechobee. Zero of gage is at mean sea level, Okeechobee Flood Control District datum.
DRAINAGE AREA.—109 square miles.
RECORDS AVAILABLE.—December 1931 to September 1932.
EXTREMES.—Maximum discharge during period, 953 second-feet June 18 (gage height, 21.36 feet); no flow Apr. 17, 18, 20, 21, Apr. 23 to May 20.
REMARKS.—Records poor. Gage-height record and results of discharge measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, 1931–32

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	4.1	1.0	1.0	0.6	0	9.2	99	2.9	324
2	-------	4.8	1.1	1.1	.6	0	32	88	2.6	354
3	4.5	3.5	1.0	1.1	.6	0	78	78	2.5	370
4	3.7	2.8	1.3	1.1	.5	0	103	66	2.3	370
5	3.5	2.5	1.2	1.1	.5	0	163	54	3.3	339
6	3.5	2.6	1.6	.6	.4	0	266	48	5.2	324
7	3.3	2.8	1.5	.6	.4	0	324	40	7.6	309
8	2.9	2.5	1.4	.6	.3	0	324	32	57	294
9	2.7	2.5	.9	.6	.2	0	294	28	57	294
10	2.6	2.2	.8	.5	.2	0	253	26	57	280
11	2.5	1.9	.7	.5	.2	0	216	21	57	266
12	2.3	1.7	.8	.5	.2	0	183	17	48	266
13	2.2	1.7	.8	.5	.1	0	124	13	34	266
14	2.2	1.8	.8	.5	.1	0	99	10	24	253
15	2.1	1.6	.8	.5	.1	0	194	8.2	20	253
16	1.9	1.5	.8	.5	.1	0	506	7.2	16	253
17	1.7	1.4	.8	.5	0	0	790	6.4	13	240
18	1.9	1.1	.8	.5	0	0	932	6.0	14	216
19	3.4	1.1	.8	.6	.1	0	911	5.6	14	183
20	3.5	1.2	.8	.8	0	0	830	5.4	16	153
21	3.0	1.2	.8	.8	0	.2	712	5.8	18	124
22	2.9	1.1	.8	.8	.1	1.7	542	6.4	18	103
23	2.7	1.1	.8	.8	0	1.4	453	7.2	18	92
24	2.4	1.1	.8	.8	0	1.1	386	8.0	14	82
25	2.3	1.1	.8	.7	0	1.2	339	8.9	14	75
26	1.7	1.1	.8	.8	0	1.5	294	8.7	14	69
27	1.6	1.1	.8	.8	0	2.3	216	6.8	17	60
28	1.3	1.1	.7	.8	0	2.6	173	5.3	24	54
29	1.1	1.0	.7	.8	0	4.1	124	4.3	40	42
30	1.1	1.0	-------	.6	0	5.4	107	3.6	194	31
31	2.1	1.1	-------	.6	-------	5.8	-------	3.2	294	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 3–31	4.5	1.1	2.50	0.023	0.02
January	4.1	1.0	1.85	.017	.02
February	1.6	.7	.921	.0084	.009
March	1.1	.5	.710	.0065	.007
April	0.6	0	.177	.0016	.002
May	5.8	0	.880	.0081	.009
June	932	9.2	333	3.06	3.41
July	99	3.2	23.5	.216	.25
August	294	2.3	36.1	.331	.38
September	370	31	211	1.94	2.16

ST. LUCIE CANAL AT LOCK 1, AT LAKE OKEECHOBEE, FLA.

LOCATION.—Staff gage in sec. 22, T. 40 S., R. 37 E., a quarter of a mile below Lock 1, Lake Okeechobee. Zero of gage is at mean sea level, Okeechobee Flood Control District datum.

RECORDS AVAILABLE.—April 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 2,820 second-feet Sept. 29 (gage height, 13.20 feet); no flow during much of year.

1931–32: Maximum discharge, 4,990 second-feet Apr. 1, 1931; no flow during much of period November 1931 to June 1932.

REMARKS.—Records good. Gage-height record and results of discharge measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	2,710	2,680			1,490	870	1,800
2	2,710	2,620			1,490	825	1,760
3	2,710	2,590			1,420	795	1,720
4	2,710	2,350			1,380	945	1,680
5	2,680	1,400			1,420	990	1,760
6	2,680				1,380	975	1,900
7	2,710				1,380	990	1,740
8	2,710				1,320	1,000	1,720
9	2,680				1,290	1,040	1,700
10	2,650				1,290	990	1,680
11	2,650				1,200	990	1,800
12	2,650				1,170	1,100	1,900
13	2,560				1,170	1,200	1,960
14	2,680				1,160	1,230	2,000
15	2,710				1,170	1,230	2,120
16	2,710		1,560		1,140	1,240	2,080
17	2,710		1,880		1,110	1,230	2,050
18	2,710		2,000		1,110	1,280	2,050
19	2,710				975	1,320	2,020
20	2,650			1,350	945	1,290	2,050
21	2,680			1,350	930	1,340	2,080
22	2,680			1,350	930	1,340	2,100
23	2,680			1,490	930	1,370	2,300
24	2,710			1,490	900	1,420	2,550
25	2,650			1,490	930	1,420	2,550
26	2,650			1,490	900	1,460	2,520
27	2,650			1,380	900	1,460	2,610
28	2,650			1,490	870	1,460	2,760
29	2,650			1,490	870	1,350	2,790
30	2,620			1,560	885	1,340	2,550
31	2,620				870	1,540	

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	2,710	2,560	2,670	July	1,490	870	1,130
November 1–5	2,680	1,400	2,330	August	1,540	795	1,190
May 16–18	2,000	1,560	1,810	September	2,790	1,680	2,080
June 20–30	1,560	1,350	1,450				

NOTE.—Little or no flow Nov. 6 to May 15, May 19 to June 19.

FISHEATING CREEK AT PALMDALE, FLA.

LOCATION.—Staff gage in sec. 3, T. 41 S., R. 30 E., at highway bridge 1 mile south of Palmdale, Glades County. Zero of gage is 37.00 feet above mean sea level, Okeechobee Flood Control District datum.

DRAINAGE AREA.—305 square miles.

RECORDS AVAILABLE.—April 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 5,570 second-feet Sept. 13 (gage height, 8.26 feet); no flow during much of period from Nov. 29 to May 25; minimum gage height, 1.24 feet May 17.

1931–32: Maximum discharge, that of Sept. 13, 1932; no flow during much of period from Nov. 29 to May 25, 1932.

REMARKS.—Records fair from 1 to 75 second-feet; poor beyond these limits. Gage-height record and results of discharge measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	9.9	0.3	3.6	0.3	0.8	0.5	0	0.9	58	78	4,120
2	136	8.8	.5	5.4	.2	.7	.4	0	.8	74	78	3,550
3	136	8.4	.7	3.4	.2	.6	.4	0	1.0	82	136	2,830
4	117	6.0	.9	2.6	.2	.4	.3	0	1.2	87	117	2,440
5	101	4.6	.9	2.3	.2	.4	.2	0	1.2	101	117	2,000
6	96	4.0	1.0	1.8	.2	.4	.1	0	1.1	112	112	1,680
7	78	3.4	.9	1.5	.2	.4	.1	0	1.6	106	106	1,380
8	62	3.0	.8	1.2	.2	.4	.1	0	7.8	92	112	1,150
9	55	2.3	.8	1.0	.2	.4	0	0	29	82	117	986
10	45	2.0	.7	.9	.1	.4	0	0	41	62	190	930
11	55	1.7	.7	.9	.1	.4	0	0	40	48	190	752
12	70	1.6	.6	.8	.1	.4	0	0	42	37	152	1,380
13	74	1.4	.5	.8	.1	.4	0	0	38	25	136	5,220
14	78	1.3	.4	.8	.1	.5	0	0	33	19	143	4,320
15	78	1.2	.5	.8	.1	.4	0	0	28	15	244	3,290
16	74	1.0	.5	.8	.1	.4	0	0	23	12	890	2,440
17	70	.8	.5	.7	.1	.4	0	0	21	11	696	2,090
18	62	.7	.5	.7	0	.8	0	0	21	18	558	1,680
19	58	.6	.5	.6	0	1.6	0	0	16	18	446	2,450
20	55	.5	.4	.6	0	1.4	0	0	14	14	390	1,220
21	45	.5	.4	.6	0	1.1	0	0	11	9.0	310	1,080
22	38	.4	.4	.5	0	1.0	0	0	8.6	5.8	305	860
23	32	.4	.4	.5	0	1.0	0	0	11	4.8	390	752
24	30	.3	.4	.5	0	1.1	0	0	18	6.0	492	641
25	25	.3	.3	.5	.2	1.5	0	0	41	8.4	621	567
26	24	.3	3	.4	.9	1.5	0	.9	45	19	1,760	468
27	22	.2	.3	.4	1.1	1.2	0	1.9	48	41	2,000	439
28	17	.2	.2	.3	1.1	1.0	0	1.8	48	55	1,680	384
29	15	.2	.2	.3	1.0	.9	0	1.2	42	41	1,370	336
30	13	.2	.2	.3	------	.7	0	1.0	48	52	1,520	305
31	11	------	.3	.3	------	.6	------	.9	------	70	2,260	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	143	11	61.8	0.203	0.23
November	9.9	.2	2.21	.0072	.008
December	1.0	.2	.516	.0017	.002
January	5.4	.3	1.15	.0038	.004
February	1.1	0	.241	.00079	.0009
March	1.6	.4	.748	.0025	.003
April	.5	0	.070	.00023	.0003
May	1.9	0	.248	.00081	.0009
June	48	.8	22.7	.074	.09
July	112	4.8	44.7	.147	.17
August	2,260	78	567	1.86	2.14
September	5,220	305	1,690	5.54	6.18
The year	5,220	0	198	.649	8.83

INDIAN PRAIRIE CANAL NEAR LAKEPORT, FLA.

LOCATION.—Staff gage in T. 39 S., R. 33 E., 4 miles upstream from Lake Okeechobee, 8 miles southeast of Brighton, and 12 miles northeast of Lakeport. Zero of gage is at mean sea level, Okeechobee Flood Control District datum.

DRAINAGE AREA.—320 square miles.

RECORDS AVAILABLE.—April 1931 to September 1932.

EXTREMES.—Maximum discharge during period, 1,140 second-feet Sept. 15, 16 (gage height, 21.00 feet); minimum, 0.9 second-foot May 7–18 (gage height, 14.06 feet).

1931–32: Maximum discharge, that of Sept. 15–16, 1932; minimum, that of May 7–18, 1932.

REMARKS.—Records poor. Discharge estimated Jan. 3–9. Gage-height record and results of discharge measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	7.0	4.0	7.0	2.2	2.9	2.2	1.6	215	95	36	456
2	34	6.7	4.0	7.0	2.2	2.9	2.6	1.4	206	83	34	355
3	30	6.4	4.0	6.0	2.2	2.7	2.0	1.4	206	55	43	325
4	22	6.4	4.0	6.0	2.2	2.6	2.0	1.2	152	37	42	311
5	21	6.4	4.0	5.0	2.2	2.6	2.0	1.1	116	19	63	311
6	21	6.1	4.0	5.0	2.2	2.2	2.0	1.1	75	15	87	325
7	19	6.1	4.0	5.0	2.2	2.2	2.0	.9	56	9.4	206	298
8	19	4.9	4.0	4.0	2.2	2.2	1.9	.9	41	6.7	254	286
9	18	4.6	4.3	4.0	2.2	2.2	1.8	.9	38	5.2	264	286
10	18	4.6	4.3	4.0	2.2	2.2	1.9	.9	22	3.8	170	760
11	20	4.0	4.6	4.0	2.2	2.2	2.0	.9	23	3.1	51	900
12	22	4.0	4.0	4.0	2.2	3.1	1.8	.9	16	2.7	28	940
13	21	4.0	4.0	4.0	2.2	3.1	1.8	.9	27	2.6	6.7	1,060
14	19	4.0	4.0	4.0	2.2	2.2	1.6	.9	24	2.2	7.0	1,100
15	16	4.0	4.0	4.0	2.2	2.2	1.6	.9	21	2.2	17	1,140
16	16	4.0	4.0	4.0	2.2	2.2	1.6	.9	197	1.9	23	1,140
17	14	4.0	4.0	4.0	2.2	2.2	1.4	.9	170	2.2	11	1,100
18	12	4.0	4.0	4.0	2.2	2.9	1.4	.9	125	2.9	17	1,060
19	13	4.0	4.9	4.0	2.2	3.6	1.8	2.2	95	2.2	18	1,020
20	13	4.0	4.0	4.0	2.2	2.6	2.0	3.3	79	51.0	116	980
21	12	4.0	4.0	4.0	2.2	2.1	2.0	27	67	59	298	900
22	12	4.0	4.0	4.0	2.2	2.2	1.8	23	63	99	234	865
23	11	4.0	4.0	4.0	2.4	2.2	1.8	18	51	161	197	795
24	10	4.0	4.0	4.0	2.6	2.6	1.8	33	42	170	179	760
25	9.0	4.0	4.0	4.0	2.7	2.9	1.8	103	32	134	143	542
26	8.6	4.0	4.0	4.0	2.9	2.7	1.6	152	21	107	143	456
27	8.6	4.0	4.0	2.2	2.9	2.6	1.6	125	21	125	134	298
28	8.6	4.0	4.0	2.2	2.9	2.6	1.6	103	37	103	125	234
29	7.8	4.0	4.0	2.2	2.9	2.2	1.6	143	142	71	125	215
30	7.8	4.0	4.0	2.2	------	2.2	1.6	170	116	47	311	179
31	7.8	------	4.0	2.2	------	2.2	------	206	------	40	402	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	40	7.8	16.5	0.052	0.06
November	7.0	4.0	4.63	.014	.02
December	5.2	4.0	4.07	.013	.01
January	7.0	2.2	4.13	.013	.01
February	2.9	2.2	2.33	.0073	.008
March	3.6	2.1	2.50	.0078	.009
April	2.6	1.4	1.82	.0057	.006
May	206	.9	36.4	.114	.13
June	215	16	83.0	.259	.29
July	170	1.9	49.0	.153	.18
August	402	6.7	122	.381	.44
September	1,140	179	647	2.02	2.25
The year	1,140	.9	80.4	.251	3.41

PEACE CREEK BASIN

PEACE CREEK AT ARCADIA, FLA.

LOCATION.—Water-stage recorder in sec. 26, T. 37 S., R. 24 E., at highway bridge on State highway 18, half a mile west of Arcadia.

DRAINAGE AREA.—1,330 square miles.

RECORDS AVAILABLE.—April 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 6,230 second-feet Sept. 16 (gage height, 9.98 feet); minimum, 56 second-feet May 13–17 (gage height, —0.02 foot).

1931–32: Maximum discharge, that of Sept. 16, 1932; minimum, that of May 13–17, 1932.

REMARKS.—Records good. Discharge estimated Mar. 5, 19, 20, Aug. 28–30.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,370	234	80	162	90	76	83	61	294	518	195	4,130
2	1,320	216	79	137	102	75	82	61	228	500	321	4,310
3	1,280	208	80	134	107	74	77	61	237	440	336	4,310
4	1,140	198	90	119	105	73	76	61	420	381	588	3,680
5	1,010	190	108	110	102	76	73	60	454	336	500	2,800
6	905	182	110	105	102	89	72	59	430	303	482	1,970
7	845	172	102	105	100	92	70	59	388	273	444	1,470
8	805	165	98	104	98	105	69	59	348	246	398	1,140
9	765	160	96	102	94	105	68	59	312	216	339	1,010
10	765	154	94	99	92	96	67	58	264	188	291	1,100
11	745	147	92	96	92	90	67	57	243	162	261	1,740
12	765	135	92	94	90	98	66	56	240	145	234	2,800
13	765	128	90	94	90	108	66	56	252	132	222	4,400
14	705	119	87	93	90	123	66	56	282	123	285	5,530
15	645	111	86	93	89	168	65	56	324	113	288	6,030
16	605	108	83	94	89	152	65	56	430	115	231	6,230
17	570	108	83	94	86	141	64	56	570	113	219	6,030
18	518	105	84	93	84	141	62	56	570	116	222	5,430
19	482	100	86	90	84	134	60	57	570	126	234	4,490
20	448	99	84	89	83	128	70	62	535	130	273	3,440
21	420	99	83	90	82	119	74	98	625	156	500	2,490
22	395	96	83	90	82	113	74	270	885	185	825	1,970
23	374	93	83	92	86	108	82	364	885	195	925	1,580
24	348	90	82	92	90	105	76	264	1,190	170	1,100	1,280
25	330	87	82	96	83	99	72	240	1,520	162	1,240	1,100
26	312	87	79	102	82	92	67	388	1,580	160	1,240	965
27	300	87	76	104	79	93	65	518	1,280	147	1,080	845
28	285	84	76	102	82	96	65	430	885	156	845	765
29	276	83	76	100	76	90	68	339	665	178	765	685
30	261	83	76	100	------	86	62	318	570	202	885	615
31	249	------	104	94	------	84	------	360	------	198	2,880	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,370	249	645	0.485	0.56
November	234	83	131	.098	.11
December	110	76	87.2	.066	.08
January	162	89	102	.077	.09
February	107	76	90.0	.068	.07
March	168	73	104	.078	.09
April	83	60	69.8	.052	.06
May	518	56	153	.115	.13
June	1,580	228	583	.438	.49
July	518	113	212	.159	.18
August	2,880	195	601	.452	.52
September	6,230	625	2,840	2.14	2.39
The year	6,230	56	466	.350	4.77

KISSENGEN SPRING NEAR BARTOW, FLA.

LOCATION.—Staff gage in sec. 28, T. 30 S., R. 25 E., about 4½ miles southeast of Bartow.

RECORDS AVAILABLE.—Discharge measurements from March to September 1932. Single measurements only during 1917, 1929–31.

Discharge, in second-feet, 1917 and 1929–32.

1917: Feb. 25	21.3	1932: Mar. 10	28.8
1929: Feb. 5	34.7	June 11	19.2
1930: Sept. 14	30.5	July 8	22.7
1931: May 28	34.0	Aug. 3	29.1
		Sept. 8	25.4

HILLSBORO RIVER BASIN

SULPHUR SPRING AT TAMPA, FLA.

LOCATION.—In sec. 25, T. 28 S., R. 18 E., at Sulphur Springs, in Tampa.

RECORDS AVAILABLE.—Discharge measurements from February 1931 to September 1932. Single measurements only during 1917, 1929–30.

Discharge, in second-feet, 1931–32

Oct. 7	74.6	Apr. 7	24.7
Nov. 12	58.8	June 8	23.6
Dec. 4	44.7	July 6	49.1
Jan. 9	51.0	Aug. 4	34.6
Feb. 12	54.1	Sept. 9	48.8
Mar. 10	39.4		

WEEKIWACHEE RIVER BASIN

WEEKIWACHEE SPRING NEAR BROOKSVILLE, FLA.

LOCATION.—Staff gage in sec. 2, T. 23 S., R. 17 E., at head of Weekiwachee River, about 12 miles southwest of Brooksville.

RECORDS AVAILABLE.—Discharge measurements from February 1931 to September 1932. Single measurements only during 1917, 1929–30.

Discharge, in second-feet, 1931–32

Oct. 7	139	Apr. 8	129
Nov. 12	129	May 14	111
Dec. 5	143	June 8	120
Jan. 9	114	July 6	116
Feb. 12	131	Aug. 5	107
Mar. 12	117	Sept. 9	114

WITHLACOOCHEE RIVER BASIN

WITHLACOOCHEE RIVER NEAR DADE CITY, FLA.

LOCATION.—Staff gage in sec. 32, T. 24 S., R. 22 E., at Lanier Bridge, 4 miles east of Dade City.

DRAINAGE AREA.—558 square miles.

RECORDS AVAILABLE.—February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 360 second-feet June 27 (gage height, 9.40 feet); minimum, 1.0 second-foot May 17–20 (minimum gage height, 3.90 feet May 18).

1930–32: Maximum discharge, 1,960 second-feet Apr. 2, 1930 (gage height, 12.35 feet); minimum, that of May 17–20, 1932.

REMARKS.—Records fair above 100 second-feet, poor below. Discharge estimated Nov. 10.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	115	12	17	11	4.9	4.4	1.8	2.0	216	11	86
2	340	107	19	17	10	4.7	4.2	1.9	1.9	216	15	123
3	340	100	27	17	9.8	4.6	4.0	1.8	2.4	200	16	131
4	340	93	27	17	9.4	4.7	3.9	1.7	2.6	160	16	160
5	320	86	31	18	9.0	4.8	3.6	1.6	2.7	140	15	232
6	320	80	37	19	8.8	4.6	3.5	1.5	2.9	115	13	282
7	320	74	41	19	8.6	4.5	3.4	1.5	3.0	100	10	300
8	300	68	43	19	8.4	4.3	3.3	1.4	3.0	80	8.8	320
9	282	63	46	19	8.2	4.5	3.3	1.4	3.2	74	8.2	282
10	282	60	48	19	8.0	4.6	3.1	1.3	3.4	66	7.8	248
11	300	58	48	18	7.8	4.5	3.0	1.3	3.4	60	8.6	216
12	300	50	46	17	7.6	4.4	2.9	1.2	4.9	53	8.8	186
13	320	48	43	17	7.4	5.0	2.8	1.2	7.6	43	10	172
14	320	43	41	16	8.8	5.2	2.7	1.2	15	37	27	160
15	320	41	39	16	8.8	5.4	2.6	1.1	31	31	35	140
16	300	39	35	15	8.6	5.4	2.5	1.1	53	27	35	140
17	282	35	33	15	8.4	5.2	2.5	1.0	56	26	33	123
18	264	35	31	14	8.2	5.0	2.4	1.0	66	21	33	123
19	264	31	29	13	7.6	5.0	2.3	1.0	86	17	35	123
20	248	29	27	13	7.2	4.9	2.3	1.0	100	13	35	115
21	248	27	24	12	6.8	4.9	2.3	1.3	123	12	35	107
22	232	24	22	12	6.6	4.8	2.3	1.4	140	10	37	107
23	232	22	20	11	6.8	5.2	2.2	1.4	200	9.4	48	107
24	200	21	19	11	6.8	6.0	2.2	1.4	282	8.8	53	107
25	200	19	18	11	6.4	6.2	2.1	1.5	320	9.4	63	107
26	186	17	17	11	6.0	5.8	2.1	1.6	340	10	68	107
27	160	16	15	11	5.8	5.6	2.0	1.9	360	11	74	107
28	150	17	15	10	5.4	5.4	1.9	2.0	340	12	74	100
29	140	15	14	9.8	5.2	5.0	1.9	2.1	320	13	71	100
30	131	14	13	9.4	------	4.8	1.8	2.1	300	11	74	93
31	123	------	14	9.8	------	4.6	------	2.0	------	10	74	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	340	123	261	0.468	0.54
November	115	14	48.2	.086	.10
December	48	12	28.8	.052	.06
January	19	9.4	14.6	.026	.03
February	11	5.2	7.84	.014	.02
March	6.2	4.3	4.98	.0089	.01
April	4.4	1.8	2.78	.0050	.006
May	2.1	1.0	1.47	.0026	.003
June	360	1.9	106	.190	.21
July	216	8.8	58.4	.105	.12
August	74	7.8	33.9	.061	.07
September	320	86	157	.281	.31
The year	360	1.0	60.5	.108	1.48

WITHLACOOCHEE RIVER AT TRILBY, FLA.

LOCATION.—Staff gage in sec. 22, T. 23 S., R. 21 E., at high way bridge 1 mile north of Trilby.

DRAINAGE AREA.—780 square miles (revised).

RECORDS AVAILABLE.—August 1928 to February 1929; February 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 420 second-feet Oct. 1 (gage height, 4.59 feet); minimum, 11 second-feet Apr. 29, May 14–17, 22–24 (gage height, −0.48 foot).

1928–29, 1930–32: Maximum discharge, 3,340 second-feet Oct. 3, 4, 1928 (gage height, 15.35 feet); minimum, that of April and May 1932.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	420	237	49	54	37	23	18	13	12	227	13	207
2	409	227	65	56	35	23	17	13	12	237	17	267
3	409	207	153	59	35	23	16	13	12	237	23	299
4	409	198	189	56	35	23	16	12	12	247	35	288
5	398	189	189	54	35	22	16	12	12	247	37	288
6	398	180	180	54	33	22	15	12	13	247	33	288
7	387	171	171	54	33	22	15	12	13	247	31	288
8	387	162	153	52	31	22	15	12	13	237	29	277
9	387	144	144	52	31	22	15	13	13	217	29	277
10	387	;144	135	49	31	22	15	13	13	198	31	288
11	387	135	126	46	29	22	15	12	12	180	31	288
12	376	126	117	46	29	22	14	12	12	162	35	288
13	365	117	117	46	29	21	14	12	12	144	33	299
14	354	112	108	46	29	21	14	11	12	126	33	310
15	343	104	108	46	29	20	14	11	12	100	33	321
16	343	104	;100	44	27	20	13	11	12	78	35	343
17	332	92	100	44	29	20	13	11	13	65	37	354
18	332	88	92	44	27	20	13	12	13	56	68	354
19	321	85	92	44	27	20	13	12	14	52	88	321
20	321	78	88	42	27	20	13	12	14	46	117	310
21	321	78	85	42	27	20	13	12	14	39	135	277
22	310	71	82	39	26	19	13	11	15	35	180	257
23	310	68	78	39	26	22	13	11	27	31	171	227
24	288	65	71	39	26	22	13	11	44	26	162	207
25	288	62	71	37	26	22	13	12	56	21	153	207
26	277	59	65	37	24	21	13	12	74	19	153	198
27	277	59	62	37	24	20	13	12	108	16	153	189
28	267	56	59	35	23	20	13	12	122	14	162	189
29	257	54	56	35	23	19	11	13	135	13	162	180
30	247	52	54	33	-------	19	13	13	171	13	153	171
31	247	-------	54	37	-------	19	-------	13	-------	12	180	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	420	247	340	0.436	0.50
November	237	52	117	.150	.17
December	189	49	104	.133	.15
January	59	33	45.1	.058	.07
February	37	23	29.1	.037	.04
March	23	19	21.1	.027	.03
April	18	11	14.1	.018	.02
May	13	11	12.0	.015	.02
June	171	12	33.9	.043	.05
July	247	12	116	.149	.17
August	180	13	82.3	.106	.12
September	354	171	269	.345	.38
The year	420	11	98.9	.127	1.72

WITHLACOOCHEE RIVER NEAR HOLDER, FLA.

LOCATION.—Water-stage recorder in sec. 19, T. 17 S., R. 20 E., at Stokes Ferry Bridge, 4½ miles northeast of Holder.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—August 1928 to February 1929; August 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 1,070 second-feet Oct. 1 (gage height, 3.85 feet); minimum, 161 second-feet May 14 (gage height, −0.37 foot). 1928–29; 1931–32: Maximum discharge, 5,830 second-feet Oct. 16, 1928 (gage height, 11.26 feet, present datum); minimum, that of May 14, 1932.

REMARKS.—Records good except those estimated.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	685	410	a 402	369	308	345	184	a 265	402	255	a 450
2	1,040	685	402	393	369	292	330	181	a 280	353	255	a 465
3	1,010	660	410	a 390	369	278	322	181	a 300	330	270	a 480
4	1,010	635	427	a 385	353	270	322	184	a 320	315	278	a 495
5	1,010	610	427	a 378	330	278	322	184	a 330	322	270	a 508
6	980	598	436	a 367	315	308	322	191	a 330	292	278	a 520
7	980	586	427	a 355	315	300	300	198	a 318	285	270	a 532
8	950	586	418	a 340	308	292	285	198	308	278	248	a 545
9	950	574	418	330	308	292	285	180	292	270	240	a 555
10	950	563	418	315	292	292	270	183	278	278	233	541
11	920	552	418	330	285	292	278	177	270	278	240	510
12	920	552	410	322	285	315	270	170	285	292	240	510
13	890	541	410	338	285	338	262	166	285	300	233	520
14	890	541	a 410	330	285	345	240	168	a 295	315	262	520
15	860	530	a 402	315	292	338	226	170	a 315	322	255	541
16	835	520	a 393	315	285	345	212	176	a 335	338	285	530
17	810	510	a 393	315	285	361	212	174	a 355	345	278	530
18	810	500	a 393	322	285	369	212	a 175	369	361	270	520
19	810	500	402	322	285	369	212	a 175	a 376	361	270	520
20	785	500	a 393	322	285	353	212	a 190	a 382	377	300	520
21	785	500	a 410	322	292	353	212	a 225	a 388	377	345	500
22	785	500	a 410	a 330	300	353	212	a 300	393	353	353	510
23	760	481	a 410	330	338	385	205	a 330	402	322	361	520
24	760	a 472	a 410	345	322	444	205	a 325	385	292	377	541
25	760	a 462	a 410	345	322	436	191	a 315	361	255	402	530
26	760	a 462	418	345	322	418	191	a 303	345	248	427	510
27	735	a 453	418	353	315	402	184	a 290	345	248	444	510
28	735	444	418	361	322	418	181	a 280	369	248	444	490
29	710	436	a 410	361	315	393	177	a 272	402	233	427	472
30	685	418	a 402	369	-------	377	174	a 265	402	255	418	453
31	685	-------	a 402	377	-------	361	-------	a 262	-------	255	436	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,040	685	858	0.517	0.60
November	685	418	535	.322	.36
December	436	393	411	.248	.29
January	402	315	346	.208	.24
February	369	285	311	.187	.20
March	444	270	344	.207	.24
April	345	174	246	.148	.17
May	330	166	218	.131	.15
June	402	265	336	.202	.23
July	402	233	306	.184	.21
August	444	233	312	.188	.22
September	555	450	512	.308	.34
The year	1,040	166	395	.238	3.25

a Estimated.

BLUE SPRINGS NEAR DUNNELLON, FLA.

LOCATION.—Water-stage recorder in sec. 12, T. 16 S., R. 18 E., 4 miles northeast of Dunnellon.

RECORDS AVAILABLE.—Discharge measurements from February 1931 to September 1932. Single measurements only during 1917, 1929, 1930.

REMARKS.—Discharge measurements made at highway bridge 5 miles below springs. Measured discharge is practically all spring flow, as surface run-off is negligible except after heavy rains.

Discharge, in second-feet, 1931–32

Oct. 7	642	Apr. 2	583
Nov. 10	609	May 13	510
Dec. 5	699	June 8	583
Jan. 2	574	July 5	530
Feb. 12	617	Aug. 6	492
Mar. 5	554	Sept. 10	563

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.—About 932 square miles (revised). Watershed, in Okeefenokee Swamp, indeterminate.

RECORDS AVAILABLE.—January 1921 to September 1923; January 1927 to December 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 2 second-feet Oct. 2 (gage height, −0.35 foot); no flow Dec. 5–8; minimum gage height, −0.81 foot Dec. 8. 1927–31: Maximum discharge, 12,700 second-feet Oct. 3, 1929 (gage height, 18.6 feet); no flow Dec. 5–8, 1931.

REMARKS.—Records poor.

Discharge, in second-feet, 1931

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	1.4	0.2	0.1	11	0.2	0.1	------	21	0.1	0.1	------
2	2.0	.2	.1	12	.2	.1	------	22	.1	.1	------
3	1.8	.2	.1	13	.2	.1	------	23	.1	.1	------
4	1.2	.1	.1	14	.2	.1	------	24	.1	.2	------
5	.8	.1	0	15	.2	.1	------	25	.1	.2	------
6	.8	.1	0	16	.1	.1	------	26	.8	.2	------
7	.7	.1	0	17	.1	.1	------	27	.9	.2	------
8	.5	.1	0	18	.1	.1	------	28	1.0	.2	------
9	.4	.1	.1	19	.1	.1	------	29	.5	.1	------
10	.4	.1	------	20	.1	.1	------	30	.4	.1	------
								31	.2	------	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2.0	0.1	0.510	0.00055	0.0006
November	.2	.1	.127	.00014	.0002
December 1–9	.1	0	.056	.00006	.00002

SUWANNEE RIVER NEAR BENTON, FLA.

LOCATION.—Chain gage in sec. 4, T. 1 N., R. 16 E., at highway bridge known as Turners Bridge, about 6 miles northwest of Benton and 13 miles east of Jasper.
DRAINAGE AREA.—About 1,580 square miles. Watershed in Okeefenokee Swamp indeterminate.
RECORDS AVAILABLE.—December 1931 to September 1932.
EXTREMES.—Maximum discharge during period, 9,210 second-feet Sept. 21, 22 (gage height, 21.26 feet); minimum, 0.4 second-foot May 18 (gage height, 1.04 feet).
REMARKS.—Records good above 10 second-feet; poor below.

Discharge, in second-feet, 1931–32

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		3.8	4.4	2.9	13	2.5	0.8	764	508	4,290
2		2.5	2.5	1.6	23	1.3	.5	829	862	3,840
3		3.8	2.5	1.6	13	3.2	.6	862	1,060	3,650
4		3.8	1.8	1.6	25	2.5	1.0	928	1,190	3,290
5		2.5	3.8	2.9	22	1.8	3.2	928	1,260	2,870
6		1.8	1.8	4.1	13	.8	1.8	895	1,360	2,660
7		1.3	2.5	4.7	22	.6	1.3	862	1,400	2,340
8	3.8	1.5	1.8	9.9	13	.5	4.4	732	1,440	2,060
9	1.8	2.5	1.3	4.1	19	1.3	2.5	668	1,680	1,820
10	1.8	4.4	1.8	7.1	19	.5	3.8	572	1,890	1,580
11	1.5	3.8	3.8	4.1	8.5	1.0	5.0	476	1,960	1,300
12	1.5	3.8	1.8	8.5	7.1	.6	27	476	1,860	1,190
13	1.8	3.2	1.5	9.9	7.1	.5	136	445	1,680	1,090
14	1.3	5.0	1.5	8.5	5.7	.5	383	398	1,540	1,160
15	1.3	3.8	1.5	8.5	4.7	.5	1,330	321	2,240	4,490
16	1.0	4.4	3.8	13	4.7	.8	1,540	321	2,450	5,520
17	1.0	3.2	1.5	13	4.7	.5	1,500	259	2,520	6,180
18	1.5	3.8	1.3	13	9.9	.4	1,300	290	2,520	7,710
19	1.0	1.8	3.2	25	4.1	1.3	1,130	383	2,520	8,700
20	1.8	2.5	1.8	25	4.1	1.5	1,030	352	2,560	9,210
21	1.5	3.2	3.8	13	3.5	3.8	895	336	2,800	9,210
22	.8	1.8	2.5	25	3.5	3.8	796	306	3,080	9,030
23	1.5	4.4	1.8	22	3.5	3.8	732	290	3,510	8,700
24	1.0	3.2	1.5	25	3.5	1.5	668	259	4,030	8,550
25	1.8	3.8	1.8	34	2.9	1.5	636	212	4,450	8,400
26	.8	3.8	1.8	29	3.5	1.0	636	212	4,840	7,840
27	.6	3.8	1.8	19	3.5	1.0	668	184	5,000	7,590
28	1.0	3.2	2.9	19	4.1	1.0	668	212	5,080	7,160
29	.6	3.2	2.9	19	2.9	1.0	668	336	5,000	6,810
30	.8	4.4		16	4.1	1.0	732	445	4,840	6,430
31	1.3	3.8		16		.6		508	4,600	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 8–31	3.8	0.6	1.37	0.00087	0.0008
January	5.0	1.3	3.28	.0021	.002
February	4.4	1.3	2.30	.0015	.001
March	34	1.6	13.1	.0083	.01
April	25	2.9	9.25	.0059	.007
May	3.8	.4	1.37	.00087	.001
June	1,540	.5	517	.327	.36
July	928	184	486	.308	.36
August	5,080	508	2,640	1.67	1.92
September	9,210	1,090	5,160	3.27	3.65

SUWANNEE RIVER AT WHITE SPRINGS, FLA.

LOCATION.—Water-stage recorder in sec. 7, T. 2 S., R. 16 E., at highway bridge on United States Highway 41, 1 mile southeast of White Springs since Aug. 1, 1932, and staff gage at county highway bridge in White Springs, 1 mile downstream, prior thereto.

DRAINAGE AREA.—About 1,990 square miles (revised). Watershed in Okeefenokee Swamp indeterminate.

RECORDS AVAILABLE.—May 1906 to December 1908; February 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 10,100 second-feet Sept. 22–24; maximum gage height, 29.26 feet Sept. 22; minimum discharge, 4.8 second-feet Nov. 15; minimum gage height, 1.72 feet May 7–17, old gage.

1906–8, 1927–32: Maximum discharge, 20,600 second-feet Sept. 30, Oct. 1 1928 (gage height, 33.9 feet, old gage); minimum discharge, that of Nov. 15, 1931; minimum gage height, that of May 1932.

REMARKS.—Records good except those below 20 second-feet and those estimated Sept. 15–22, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	7.7	10	16	12	12	42	12	9.0	806	684	4,880
2	9.0	7.7	10	16	12	12	42	9.0	9.0	908	1,100	4,600
3	9.0	7.7	10	11	12	12	42	9.0	9.0	1,040	1,330	4,280
4	9.0	7.1	10	11	12	12	42	9.0	16	1,010	1,530	3,880
5	14	7.1	15	11	12	19	36	9.0	24	1,010	1,700	3,480
6	9.0	7.7	11	10	12	47	35	9.0	24	976	1,740	3,120
7	9.0	7.7	7.1	10	12	50	28	7.1	24	908	1,740	2,760
8	9.0	6.6	7.1	10	12	41	28	7.1	24	840	1,810	2,440
9	9.0	6.6	7.1	12	12	32	27	7.1	31	650	2,080	2,120
10	9.0	6.6	7.1	12	12	24	26	7.1	96	590	2,360	1,810
11	9.0	7.1	7.7	13	13	18	26	6.6	100	500	2,360	1,600
12	9.0	7.1	7.7	13	13	22	23	6.6	104	425	2,240	1,460
13	9.0	7.1	7.7	13	13	40	22	6.6	425	400	2,040	1,290
14	9.0	7.1	7.7	13	13	59	20	6.6	1,540	375	1,890	1,460
15	9.0	4.8	7.7	13	13	46	16	6.6	1,820	325	3,040	5,360
16	9.0	5.2	8.3	12	13	35	16	6.6	1,960	290	3,320	7,030
17	8.3	5.2	8.3	12	13	31	16	6.6	1,880	280	3,200	8,060
18	7.7	5.2	8.3	12	13	28	15	8.3	1,680	270	3,080	8,890
19	7.7	5.2	8.3	12	13	28	14	9.0	1,500	300	2,920	9,360
20	7.7	5.2	8.3	12	13	28	15	13	1,290	350	3,120	9,800
21	7.7	5.6	9.0	10	13	23	15	23	1,010	350	3,800	10,000
22	7.7	5.6	9.0	10	13	26	15	23	874	312	4,200	10,100
23	7.7	5.6	9.0	10	16	46	15	23	710	280	4,520	10,100
24	7.7	5.6	9.0	10	16	77	13	17	650	250	4,720	10,100
25	7.7	5.6	9.0	10	17	73	13	14	590	220	4,920	9,980
26	7.7	6.1	10	11	16	61	13	12	530	200	5,120	9,840
27	7.7	6.1	10	11	16	44	13	12	590	200	5,320	9,660
28	7.7	9.0	6.6	12	13	42	13	11	590	325	5,400	9,360
29	7.7	9.0	6.6	11	13	41	13	10	620	375	5,400	8,930
30	7.7	9.0	6.6	12	-------	36	13	10	710	400	5,280	8,510
31	7.7	-------	10	14	-------	35	-------	10	---------	530	5,120	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14	7.7	8.55	0.0043	0.005
November	9.0	4.8	6.80	.0034	.004
December	15	6.6	8.68	.0044	.005
January	16	10	11.8	.0059	.007
February	17	12	13.2	.0066	.007
March	77	12	35.5	.018	.02
April	42	13	22.2	.011	.01
May	23	6.6	10.5	.0053	.006
June	1,960	9.0	648	.326	.36
July	1,040	200	506	.254	.29
August	5,400	684	3,130	1.57	1.81
September	10,100	1,290	6,140	3.08	3.44
The year	10,100	4.8	874	.439	5.96

SUWANNEE RIVER AT ELLAVILLE, FLA.

LOCATION.—Water-stage recorder in sec. 24, T. 1 S., R. 11 E., at old highway bridge at Ellaville, 200 feet above Seaboard Air Line Railway bridge and 200 feet below mouth of Withlacoochee River. Elevation of zero of gage is 27.70 feet above mean sea level. Staff gage at same site and datum prior to June 20, 1932.

DRAINAGE AREA.—6,580 square miles (revised).

RECORDS AVAILABLE.—January 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 15,500 second-feet Sept. 27 (gage height, 15.67 feet); minimum discharge, 1,050 second-feet Dec. 25–30 and Jan. 2–7; minimum gage height, 2.11 feet Dec. 28 and Jan. 5–6.

1927–32: Maximum discharge, 73,000 second-feet Aug. 20, 1928 (gage height, 37.1 feet); minimum discharge, that of December 1931 and January 1932; minimum gage height, that of December 1931 and January 1932.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,460	1,250	1,100	1,100	1,740	1,900	2,860	1,400	1,350	3,470	4,680	11,000
2	1,460	1,200	1,100	1,050	1,740	2,140	2,860	1,400	1,300	3,470	4,920	10,400
3	1,400	1,200	1,100	1,050	1,790	2,140	2,740	1,400	1,300	3,600	4,920	9,910
4	1,400	1,200	1,100	1,050	1,790	2,020	2,740	1,350	1,250	3,840	4,920	9,460
5	1,400	1,200	1,100	1,050	1,790	2,020	2,740	1,350	1,250	4,200	5,030	8,940
6	1,350	1,200	1,100	1,050	1,790	2,140	2,620	1,350	1,200	4,080	5,250	8,540
7	1,350	1,200	1,100	1,050	1,840	2,260	2,500	1,300	1,200	3,960	5,470	8,060
8	1,350	1,200	1,100	1,100	1,840	2,380	2,500	1,250	1,150	3,720	5,580	7,580
9	1,350	1,200	1,100	1,150	1,790	2,500	2,380	1,250	1,150	3,470	5,800	7,140
10	1,350	1,150	1,100	1,250	1,790	2,500	2,380	1,250	1,150	3,340	6,100	6,600
11	1,350	1,150	1,100	1,350	1,790	2,620	2,260	1,200	1,200	3,220	6,400	6,200
12	1,350	1,150	1,100	1,460	1,740	2,740	2,260	1,200	1,250	3,100	6,400	5,800
13	1,300	1,150	1,100	1,570	1,740	2,860	2,140	1,150	1,460	3,040	6,300	5,360
14	1,300	1,150	1,100	1,620	1,680	2,860	2,020	1,150	2,260	2,980	6,200	5,250
15	1,300	1,150	1,100	1,900	1,620	2,860	2,020	1,150	3,470	2,980	6,200	7,320
16	1,300	1,150	1,100	2,140	1,620	2,860	1,900	1,100	4,560	2,980	6,500	10,400
17	1,300	1,150	1,100	2,260	1,680	2,860	1,900	1,100	5,580	2,980	6,690	12,400
18	1,300	1,100	1,100	2,260	1,680	2,860	1,840	1,100	6,100	2,920	6,780	13,500
19	1,300	1,100	1,100	2,260	1,680	2,980	1,790	1,150	6,300	2,860	6,690	14,000
20	1,300	1,100	1,100	2,260	1,680	2,980	1,740	1,150	6,400	2,920	6,780	14,400
21	1,300	1,100	1,100	2,260	1,740	3,100	1,740	1,200	6,300	2,860	7,050	14,800
22	1,300	1,100	1,100	2,260	1,740	3,220	1,680	1,200	6,100	2,740	7,900	14,900
23	1,250	1,100	1,100	2,140	1,790	3,340	1,680	1,200	5,690	2,680	8,860	15,100
24	1,250	1,100	1,100	2,020	1,790	3,600	1,620	1,200	5,140	2,680	9,550	15,100
25	1,250	1,100	1,050	1,900	1,790	3,720	1,570	1,200	4,680	2,620	10,300	15,100
26	1,250	1,100	1,050	1,840	1,840	3,840	1,570	1,250	4,200	2,500	10,600	15,300
27	1,250	1,100	1,050	1,840	1,900	3,720	1,520	1,250	3,960	2,380	10,600	15,300
28	1,250	1,100	1,050	1,790	1,900	3,600	1,460	1,300	3,600	2,380	10,800	15,300
29	1,250	1,100	1,050	1,790	1,900	3,470	1,460	1,350	3,470	2,740	11,200	15,200
30	1,250	1,100	1,050	1,740	-------	3,220	1,400	1,350	3,470	3,220	11,200	14,900
31	1,250	-------	1,100	1,740	-------	2,980	-------	1,350	-------	3,840	11,200	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,460	1,250	1,320	0.201	0.23
November	1,250	1,100	1,140	.173	.19
December	1,100	1,050	1,090	.166	.19
January	2,260	1,050	1,660	.252	.29
February	1,900	1,620	1,770	.269	.29
March	3,840	1,900	2,850	.433	.50
April	2,860	1,400	2,060	.313	.35
May	1,400	1,100	1,250	.190	.22
June	6,400	1,150	3,250	.494	.55
July	4,200	2,380	3,150	.479	.55
August	11,200	4,680	7,320	1.11	1.28
September	15,300	5,250	11,100	1.69	1.89
The year	15,300	1,050	3,160	.480	6.53

SUWANNEE RIVER AT LURAVILLE, FLA.

LOCATION.—Staff gage in sec. 30, T. 4 S., R. 12 E., 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.—6,900 square miles (revised).

RECORDS AVAILABLE.—February 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 14,800 second-feet Sept. 27–30 (gage height, 13.80 feet); minimum discharge, 1,490 second-feet Dec. 17–31, Jan. 3–9, May 17–18; minimum gage height, 1.50 feet Dec. 27–30, Jan. 5–8.

1927–32: Maximum discharge, about 66,000 second-feet Aug. 24, 1928 (gage height, 33.7 feet); minimum, that of Dec. 17–31, 1931, Jan. 3–9, May 17–18, 1932.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,870	1,630	1,560	1,560	2,030	2,190	3,270	1,710	1,630	3,850	4,050	10,900
2	1,870	1,630	1,560	1,560	2,030	2,280	3,180	1,710	1,630	3,750	4,550	10,800
3	1,950	1,630	1,560	1,490	2,030	2,280	3,090	1,710	1,630	3,850	4,650	10,400
4	1,950	1,630	1,560	1,490	2,030	2,280	3,000	1,710	1,560	3,950	4,750	10,000
5	1,950	1,630	1,560	1,490	2,110	2,280	3,000	1,710	1,560	4,150	4,850	9,510
6	1,870	1,630	1,560	1,490	2,110	2,280	2,910	1,710	1,560	4,250	4,950	9,210
7	1,870	1,630	1,560	1,490	2,110	2,280	2,820	1,630	1,560	4,250	5,050	8,870
8	1,870	1,630	1,560	1,490	2,110	2,370	2,820	1,630	1,560	4,150	5,250	8,320
9	1,870	1,630	1,560	1,490	2,110	2,550	2,730	1,560	1,560	4,050	5,350	7,770
10	1,870	1,630	1,560	1,560	2,110	2,550	2,730	1,560	1,560	3,850	5,350	7,330
11	1,870	1,630	1,560	1,560	2,110	2,640	2,640	1,560	1,560	3,750	5,650	6,890
12	1,790	1,630	1,560	1,560	2,030	2,820	2,550	1,560	1,560	3,650	5,850	6,450
13	1,790	1,630	1,560	1,630	2,030	2,910	2,460	1,560	1,790	3,550	5,850	6,150
14	1,790	1,630	1,560	1,790	2,030	2,910	2,370	1,560	1,870	3,450	5,850	5,950
15	1,790	1,630	1,560	1,950	1,950	3,000	2,370	1,560	2,730	3,360	5,750	6,050
16	1,790	1,630	1,560	2,190	1,950	3,000	2,280	1,560	3,650	3,360	5,950	8,100
17	1,790	1,630	1,490	2,370	1,950	3,090	2,190	1,490	4,350	3,360	6,150	10,400
18	1,790	1,560	1,490	2,460	1,950	3,090	2,190	1,490	4,950	3,270	6,250	11,700
19	1,790	1,560	1,490	2,550	1,950	3,090	2,110	1,560	5,350	3,270	6,250	12,600
20	1,790	1,560	1,490	2,550	1,950	3,090	2,110	1,560	5,550	3,270	6,350	13,200
21	1,790	1,560	1,490	2,460	2,030	3,180	2,030	1,560	5,630	3,270	6,450	13,500
22	1,790	1,560	1,490	2,370	2,030	3,270	2,030	1,560	5,650	3,270	6,670	13,900
23	1,710	1,560	1,490	2,370	2,030	3,360	1,950	1,560	5,550	3,090	7,550	14,200
24	1,710	1,560	1,490	2,280	2,030	3,550	1,950	1,560	5,350	3,090	8,320	14,300
25	1,710	1,560	1,490	2,190	2,030	3,650	1,950	1,630	5,050	3,000	8,980	14,400
26	1,710	1,560	1,490	2,190	2,030	3,750	1,870	1,630	4,750	2,910	9,570	14,600
27	1,710	1,560	1,490	2,110	2,110	3,850	1,870	1,560	4,550	2,820	9,930	14,800
28	1,710	1,560	1,490	2,110	2,110	3,750	1,790	1,560	4,350	2,730	10,300	14,800
29	1,710	1,560	1,490	2,030	2,190	3,650	1,790	1,630	4,050	2,820	10,500	14,800
30	1,710	1,560	1,490	2,030	-------	3,550	1,790	1,630	3,950	3,090	10,600	14,800
31	1,630	-------	1,490	2,030	-------	3,360	-------	1,630	-------	3,450	10,900	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,950	1,630	1,800	0.261	0.30
November	1,630	1,560	1,600	.232	.26
December	1,560	1,490	1,530	.222	.26
January	2,550	1,490	1,930	.280	.32
February	2,190	1,950	2,040	.296	.32
March	3,850	2,190	2,960	.429	.49
April	3,270	1,790	2,390	.346	.39
May	1,710	1,490	1,600	.232	.27
June	5,650	1,560	3,270	.474	.53
July	4,250	2,730	3,480	.504	.58
August	10,900	4,050	6,720	.974	1.12
September	14,800	5,950	10,800	1.57	1.75
The year	14,800	1,490	3,340	.484	6.59

SUWANNEE RIVER AT BRANFORD, FLA.

LOCATION.—Chain gage in sec. 17 or 20, T. 6 S., R. 14 E., on highway bridge in Branford.

DRAINAGE AREA.—7,090 square miles.

RECORDS AVAILABLE.—July 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 14,800 second-feet Sept. 30 (gage height, 16.66 feet); minimum discharge, 1,760 second-feet numerous days in December and January; minimum gage height, 2.55 feet May 16.

1931–32: Maximum discharge, that of Sept. 30, 1932; minimum, that of December 1931 and January 1932.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,360	2,060	1,820	1,820	2,270	2,570	3,580	2,150	1,910	4,600	4,280	10,800
2	2,360	2,000	1,820	1,820	2,270	2,630	3,440	2,150	1,910	4,440	4,680	10,600
3	2,360	2,000	1,820	1,820	2,270	2,630	3,370	2,090	1,970	4,440	4,920	10,400
4	2,360	2,000	1,820	1,760	2,330	2,750	3,370	2,090	1,970	4,440	5,080	10,200
5	2,360	2,000	1,820	1,760	2,330	2,750	3,230	2,030	1,910	4,600	5,320	9,700
6	2,360	2,000	1,820	1,760	2,390	2,810	3,230	2,030	1,970	4,680	5,320	9,600
7	2,360	2,000	1,760	1,820	2,450	2,810	3,230	2,030	1,910	4,600	5,400	9,300
8	2,360	2,000	1,760	1,820	2,450	2,810	3,170	2,030	1,910	4,520	5,560	9,010
9	2,360	2,000	1,880	1,820	2,450	2,870	3,110	2,030	1,850	4,440	5,560	8,650
10	2,360	2,000	1,820	1,820	2,390	2,870	3,050	1,970	1,910	4,440	5,880	8,200
11	2,300	2,000	1,880	1,760	2,450	2,930	2,990	1,970	1,910	4,200	6,040	7,840
12	2,300	2,000	1,820	1,880	2,390	3,050	2,990	1,910	2,030	4,120	6,220	7,570
13	2,300	2,000	1,880	1,880	2,390	3,110	2,870	1,910	2,090	3,960	6,220	7,300
14	2,300	1,940	1,880	2,000	2,330	3,170	2,870	1,790	2,450	3,880	6,310	7,210
15	2,240	2,000	1,880	2,180	2,270	3,230	2,810	1,790	2,870	3,800	6,310	7,210
16	2,240	1,940	1,820	2,360	2,330	3,230	2,750	1,790	3,720	3,800	6,400	8,470
17	2,180	1,940	1,820	2,420	2,330	3,300	2,690	1,790	4,920	3,800	6,400	10,000
18	2,180	1,940	1,820	2,540	2,270	3,370	2,630	1,790	5,080	3,800	6,490	11,200
19	2,180	1,940	1,820	2,600	2,270	3,370	2,630	1,910	5,560	3,720	6,670	11,900
20	2,120	1,940	1,820	2,600	2,330	3,370	2,570	1,910	5,800	3,580	6,760	12,500
21	2,120	1,880	1,820	2,600	2,390	3,370	2,510	1,910	6,040	3,650	6,850	13,000
22	2,120	1,940	1,820	2,600	2,390	3,510	2,510	1,850	6,040	3,510	7,210	13,500
23	2,120	1,880	1,820	2,540	2,510	3,580	2,450	1,850	6,040	3,510	7,750	13,800
24	2,120	1,880	1,820	2,540	2,450	3,650	2,450	1,850	5,880	3,510	8,380	14,000
25	2,120	1,880	1,820	2,480	2,510	3,720	2,390	1,910	5,720	3,440	8,920	14,200
26	2,120	1,880	1,760	2,420	2,510	3,880	2,390	1,910	5,560	3,370	9,200	14,400
27	2,120	1,880	1,760	2,420	2,510	3,960	2,330	1,910	5,320	3,300	9,600	14,600
28	2,120	1,880	1,820	2,360	2,510	3,960	2,210	1,910	5,080	3,230	9,900	14,700
29	2,120	1,880	1,760	2,300	2,570	3,880	2,210	1,910	4,920	3,230	10,200	14,700
30	2,120	1,880	1,760	2,360	-------	3,800	2,150	1,970	4,680	3,440	10,300	14,800
31	2,060	-------	1,880	2,300	-------	3,650	-------	1,910	-------	3,880	10,600	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,360	2,060	2,230	0.315	0.36
November	2,060	1,880	2,020	.285	.32
December	1,880	1,760	1,820	.257	.30
January	2,600	1,760	2,160	.305	.35
February	2,570	2,270	2,390	.337	.36
March	3,960	2,570	3,250	.458	.53
April	3,580	2,150	2,810	.396	.44
May	2,150	1,790	1,940	.274	.32
June	6,040	1,850	3,700	.522	.58
July	4,680	3,230	3,930	.554	.64
August	10,600	4,280	6,930	.977	1.13
September	14,800	7,210	11,000	1.55	1.73
The year	14,800	1,760	3,670	.518	7.06

SUWANNEE RIVER NEAR BELL, FLA.

LOCATION.—Water-stage recorder in sec. 17, T. 8 S., R. 14 E., at Rock Bluff Ferry, 4½ miles northwest of Bell, 10 miles below mouth of Santa Fe River. Zero of gage is 2.75 feet above mean sea level.
DRAINAGE AREA.—9,260 square miles.
RECORDS AVAILABLE.—June to September 1932.
EXTREMES.—Maximum discharge during period, 16,100 second-feet Sept. 29, 30; maximum gage height, 12.21 feet Sept. 30; minimum discharge, 3,320 second-feet June 1–3, 10–12; minimum gage height, 1.55 feet June 1, 2, 11.
REMARKS.—Records excellent.

Discharge, in second-feet, 1932

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	3,320	5,790	5,250	12,600	16	4,400	5,150	7,480	9,630
2	3,320	5,790	5,680	12,600	17	4,850	5,250	7,480	10,900
3	3,320	5,680	6,010	12,500	18	5,460	5,250	7,600	12,200
4	3,390	5,680	6,230	12,300	19	5,900	5,150	7,720	13,200
5	3,390	5,790	6,340	12,100	20	6,340	5,050	8,080	13,900
6	3,390	5,790	6,340	11,800	21	6,560	5,050	8,200	14,300
7	3,390	5,900	6,450	11,500	22	6,670	5,050	8,330	14,800
8	3,460	5,900	6,670	11,200	23	6,780	4,950	8,720	15,000
9	3,390	5,790	6,670	10,800	24	6,780	4,850	9,240	15,400
10	3,320	5,680	6,780	10,400	25	6,670	4,760	9,890	15,500
11	3,320	5,570	6,890	10,000	26	6,450	4,760	10,400	15,600
12	3,320	5,460	7,120	9,630	27	6,340	4,670	10,900	15,800
13	3,600	5,350	7,240	9,370	28	6,230	4,580	11,400	16,000
14	3,680	5,250	7,360	9,110	29	6,010	4,580	11,600	16,100
15	3,820	5,150	7,480	9,240	30	6,010	4,670	11,900	16,100
					31	-------	4,950	12,200	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June	6,780	3,320	4,760	0.514	0.57
July	5,900	4,580	5,270	.569	.66
August	12,200	5,250	8,050	.869	1.00
September	16,100	9,110	12,700	1.37	1.53

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 December 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 48 second-feet Oct. 1-4 (gage height, 4.66 feet); minimum, 22 second-feet Dec. 7, 8 (gage height, 4.24 feet).

1928-31: Maximum discharge, 14,200 second-feet Mar. 22, 1929; minimum, that of Dec. 7, 8, 1931.

Maximum stage known, 29.12 feet May 1, 1928 (discharge, 15,100 second-feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	48	28	23	11	40	27	------	21	32	26	------
2	48	28	23	12	40	27	------	22	32	25	------
3	48	28	23	13	37	27	------	23	32	25	------
4	48	27	23	14	37	27	------	24	32	25	------
5	45	27	23	15	37	26	------	25	32	23	------
6	42	27	23	16	34	26	------	26	30	23	
7	42	26	22	17	34	26	------	27	30	23	------
8	40	27	22	18	32	26	------	28	30	23	------
9	40	27	24	19	32	26	------	29	28	24	------
10	40	27	------	20	32	26	------	30	28	23	------
								31	28	------	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	48	28	36.4	0.028	0.03
November	28	23	25.9	.020	.02
December 1-9	24	22	22.9	.018	.006

ALAPAHA RIVER AT STATENVILLE, GA.

LOCATION.—Chain gage at highway bridge on road from Statenville to Valdosta, a quarter of a mile west of Statenville, Echols County.
DRAINAGE AREA.—1,370 square miles.
RECORDS AVAILABLE.—January to June 1921; December 1931 to September 1932.
EXTREMES.—Maximum discharge during period, 2,740 second-feet Aug. 30 (gage height, 11.61 feet); minimum, 17 second-feet Dec. 21, 28–31 (gage height, 0.99 foot).
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		39	270	398	805	174	63	398	286	2,250
2		38	270	398	830	166	63	434	318	1,940
3		32	286	416	805	150	76	474	318	1,730
4		22	302	434	730	142	96	516	302	1,610
5		26	318	454	680	134	92	474	302	1,190
6		22	318	516	632	126	86	416	302	880
7		28	318	516	608	118	81	474	302	656
8		40	318	538	560	108	80	494	350	608
9		75	318	560	538	102	76	560	560	538
10	34	86	318	608	516	96	88	608	705	474
11	38	94	302	632	474	89	108	705	805	398
12	34	126	302	680	434	83	118	830	930	366
13	34	174	302	730	416	76	142	980	1,100	334
14	34	238	302	755	398	69	222	1,100	1,160	416
15	34	270	302	780	382	66	302	1,250	1,160	2,250
16	22	334	302	805	366	63	705	1,310	1,190	2,600
17	27	334	318	880	366	62	755	1,160	1,190	1,850
18	27	318	318	955	350	58	632	1,000	1,280	1,280
19	22	302	318	1,030	334	63	560	656	1,370	1,190
20	21	286	302	1,100	302	66	516	632	1,460	1,030
21	18	270	286	1,160	286	69	474	494	1,670	1,000
22	22	254	286	1,250	270	64	416	416	1,970	1,000
23	21	238	286	1,280	238	60	350	366	2,250	930
24	24	222	286	1,280	206	63	318	318	2,280	830
25	27	206	286	1,160	222	68	286	302	2,220	905
26	21	222	318	1,080	222	78	302	270	2,250	1,060
27	21	238	350	1,030	222	104	302	270	2,320	855
28	20	238	366	955	222	92	334	286	2,530	755
29	18	254	382	905	206	86	366	334	2,740	755
30	18	254		805	190	76	398	302	2,670	755
31	20	270		805		68		286	2,500	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 10–31	38	18	25.3	0.018	0.01
January	334	22	179	.131	.15
February	382	270	309	.225	.24
March	1,250	398	803	.586	.68
April	830	190	427	.312	.35
May	174	58	91.6	.067	.08
June	755	63	280	.204	.23
July	1,310	270	584	.426	.49
August	2,740	286	1,320	.964	1.11
September	2,600	334	1,080	.788	.88

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 and a quarter of a mile east of Blue Springs, Brooks County.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—October 1920 to March 1921; September 1928 to December 1931 (discontinued).

EXTREMES.—Maximum discharge during period, 85 second-feet Dec. 10 (gage height, 7.27 feet); minimum discharge, 11 second-feet Oct. 27, 28, Nov. 22; minimum gage height, 6.87 feet Nov. 22.

1928–31: Maximum discharge, 23,600 second-feet Mar. 20, 1929 (gage height, 29.8 feet); minimum discharge, that of Oct. 27, 28, Nov. 22, 1931; minimum gage height, 6.81 feet Nov. 7, 9–13, 1930.

Maximum stage known, 33.34 feet Aug. 17, 1928 (discharge, 42,200 second-feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	21	12	12	11	15	14	40	21	14	12	------
2	20	12	12	12	14	13	------	22	12	11	------
3	18	12	12	13	14	13	------	23	14	12	------
4	15	12	12	14	14	13	------	24	14	13	------
5	15	12	12	15	14	13	------	25	13	13	------
6	14	12	13	16	13	13	------	26	12	13	------
7	14	12	13	17	13	13	------	27	11	13	------
8	14	12	13	18	13	13	------	28	11	13	------
9	14	12	12	19	13	12	------	29	13	13	------
10	14	14	85	20	13	12	------	30	12	13	------
								31	12	------	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	21	11	14.0	0.0093	0.01
November	14	11	12.6	.0084	.009
December 1–11	85	12	21.5	.014	.006

WITHLACOOCHEE RIVER NEAR PINETTA, FLA.

LOCATION.—Chain gage in sec. 6, T. 2 N., R. 11 E., on highway bridge a quarter of a mile west of Bellville and 5 miles east of Pinetta.
DRAINAGE AREA.—2,220 square miles.
RECORDS AVAILABLE.—December 1931 to September 1932.
EXTREMES.—Maximum discharge during period, 5,380 second-feet June 18 (gage height, 14.48 feet); minimum, 103 second-feet Dec. 16 (gage height, 6.64 feet).
REMARKS.—Records excellent.

Discharge, in second-feet, 1931–32

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		114	600	950	1,230	243	440	810	3,540	3,000
2		118	600	950	1,160	276	392	915	2,930	1,930
3		118	630	950	1,090	258	330	1,090	2,280	1,580
4		122	660	880	1,090	243	293	1,580	2,140	1,370
5		118	690	845	1,020	243	276	1,720	2,140	1,230
6		118	720	950	1,020	243	243	1,440	2,350	1,160
7		122	690	1,230	915	215	228	1,160	2,700	1,090
8		144	690	1,300	880	202	228	950	2,700	810
9		190	690	1,370	845	190	202	810	3,000	720
10		258	630	1,510	750	177	215	720	3,080	660
11	166	276	570	1,510	690	177	228	810	2,860	542
12	155	415	490	1,790	630	166	202	780	2,420	465
13	144	600	490	1,790	542	155	330	630	2,210	440
14	122	1,020	465	1,860	490	144	1,720	515	2,070	440
15	114	1,230	440	1,860	440	144	2,630	415	2,000	1,440
16	103	1,440	440	1,720	392	144	4,100	370	1,930	3,230
17	114	1,510	465	1,650	370	134	5,220	350	1,930	3,860
18	114	1,510	542	1,580	350	155	5,380	312	1,720	5,140
19	110	1,370	542	1,650	330	155	5,220	570	1,650	4,660
20	110	1,230	570	1,580	312	202	5,060	660	1,580	4,660
21	110	1,020	600	1,650	312	258	4,500	515	2,070	5,060
22	110	1,020	630	1,860	312	276	3,700	490	3,540	3,780
23	110	1,020	630	2,000	293	243	2,780	570	4,420	3,080
24	114	810	660	2,280	258	215	2,210	600	4,420	2,700
25	118	750	720	2,350	258	258	1,860	490	4,900	2,560
26	118	660	780	2,350	243	330	1,580	440	4,980	2,930
27	114	660	880	2,210	243	370	1,230	350	5,140	2,630
28	110	600	915	1,930	215	440	1,020	630	5,060	2,560
29	110	542	950	1,650	215	465	915	1,370	4,900	2,630
30	110	570		1,440	202	465	845	2,000	4,660	2,700
31	110	600		1,300		465		2,930	3,780	

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
December 11–31	166	103	118	0.053	0.04
January	1,510	114	654	.295	.34
February	950	440	634	.286	.31
March	2,350	845	1,580	.712	.82
April	1,230	202	570	.257	.29
May	465	134	247	.111	.13
June	5,380	202	1,790	.806	.90
July	2,930	312	871	.392	.45
August	5,140	1,580	3,070	1.38	1.59
September	5,140	440	2,300	1.04	1.16

SANTA FE RIVER AT WORTHINGTON, FLA.

LOCATION.—Staff gage in sec. 33, T. 6 S., R. 19 E., at highway bridge on State Highway 49 a quarter of a mile south of Worthington and a quarter of a mile below mouth of New River.

RECORDS AVAILABLE.—November 1931 to September 1932.

EXTREMES.—Maximum discharge during peroid, 1,540 second-feet Sept. 17 (gage height, 16.46 feet); minimum, 1.3 second-feet May 17 and June 1 (gage height, 7.15 feet).

REMARKS.—Records good above 10 second-feet and poor below. Discharge estimated Mar. 23.

Discharge, in second-feet, 1931–32

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	3.0	7.8	5.1	5.1	18	4.7	1.3	85	29	429
2	------	3.0	7.8	5.5	4.9	16	4.1	1.4	75	35	393
3	------	3.5	7.2	5.1	5.1	14	3.7	1.6	75	70	405
4	------	4.7	6.6	5.1	5.8	13	3.1	1.7	70	95	393
5	------	5.1	5.3	4.9	12	12	3.1	2.0	66	115	357
6	------	6.2	5.5	4.9	22	11	2.7	3.3	57	115	253
7	------	6.9	5.1	4.7	27	10	2.4	5.5	51	105	242
8	------	6.2	5.1	4.9	25	9.8	2.2	16	43	95	209
9	------	5.5	5.5	5.3	24	8.6	2.1	18	36	95	165
10	------	5.3	5.5	5.1	23	7.5	2.0	19	33	95	135
11	------	4.5	5.1	5.1	18	9.4	1.8	20	28	85	100
12	------	4.1	5.1	4.9	19	8.6	1.7	19	23	90	95
13	------	3.9	4.9	4.9	23	8.6	1.7	18	18	66	85
14	------	3.7	4.9	4.7	27	7.2	1.6	29	13	75	120
15	------	3.4	4.9	4.7	27	6.6	1.4	45	9.0	85	369
16	------	3.3	4.5	4.7	20	6.2	1.4	75	9.0	187	733
17	------	3.3	4.9	4.5	16	5.5	1.3	105	4.5	187	1,540
18	2.7	3.1	4.9	4.3	20	5.1	1.7	145	5.5	253	1,350
19	2.9	3.0	4.9	4.1	21	4.7	2.0	155	5.5	275	1,050
20	2.8	3.5	4.5	3.9	20	5.5	2.3	176	6.9	286	771
21	2.9	3.9	4.5	4.3	22	5.8	2.0	165	9.0	297	595
22	2.9	3.9	4.3	4.5	23	6.9	2.0	145	5.5	297	493
23	2.9	3.7	4.3	5.8	30	6.2	2.1	115	4.7	309	791
24	2.9	3.5	4.3	6.2	66	5.3	1.9	85	3.9	357	565
25	3.0	3.3	4.3	6.2	70	4.9	1.7	66	3.3	521	453
26	3.0	3.4	4.1	9.0	66	4.5	1.5	57	3.5	831	875
27	3.0	3.4	4.3	10	43	3.7	1.4	48	5.5	791	357
28	3.1	3.4	4.3	9.8	35	3.5	1.6	70	8.2	751	321
29	3.1	3.4	4.5	5.5	28	3.3	1.7	66	23	697	309
30	3.1	3.1	4.7	------	23	2.9	1.6	90	28	611	286
31	------	3.7	5.1	------	19	------	1.4	------	28	493	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November 18–30	3.1	2.7	2.95	0.0051	0.002
December	6.9	3.0	4.00	.0069	.008
January	7.8	4.1	5.12	.0088	.01
February	10	3.9	5.44	.0094	.01
March	70	4.9	25.5	.044	.05
April	18	2.9	7.81	.013	.01
May	4.7	1.3	2.13	.0037	.004
June	176	1.3	58.8	.102	.11
July	85	3.3	27.0	.047	.05
August	831	29	271	.468	.54
September	1,540	85	475	.820	.92

SANTA FE RIVER NEAR HIGH SPRINGS, FLA.

LOCATION.—Staff gage in sec. 29, T. 7 S., R. 17 E., at highway bridge on State Highway 5A 150 feet upstream from Atlantic Coast Line Railroad bridge and 2 miles northwest of High Springs. Zero of gage is 25.78 feet above mean sea level.

RECORDS AVAILABLE.—January 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 1,230 second-feet Sept. 19 (gage height, 3.44 feet); minimum, 78 second-feet June 9, 10 (gage height, 0.48 foot).

1931–32: Maximum discharge, 1,480 second-feet Apr. 9–11, 1931 (gage height, 3.84 feet); minimum, that of June 9, 10, 1932.

REMARKS.—Records good above 300 second-feet; fair below.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	271	247	235	178	135	120	130	125	80	211	145	655
2	271	247	229	172	140	120	122	120	80	223	145	610
3	271	247	229	172	140	110	128	120	82	223	151	595
4	271	250	229	178	140	122	125	120	88	223	175	570
5	271	253	229	178	135	122	125	115	85	229	181	560
6	265	256	226	175	135	122	122	112	88	232	193	550
7	265	253	226	178	140	112	125	112	85	241	193	490
8	265	253	226	175	140	112	125	108	80	238	205	445
9	265	253	226	175	140	120	130	108	78	232	205	380
10	259	253	226	163	135	105	125	112	78	223	205	340
11	265	253	220	160	135	110	130	108	82	217	199	311
12	259	253	220	160	135	120	122	102	92	211	199	295
13	262	253	220	160	135	120	118	95	142	199	205	280
14	265	247	220	160	135	110	115	95	125	190	205	292
15	265	247	214	160	130	110	120	95	128	187	211	348
16	271	244	211	157	125	110	120	92	135	175	217	450
17	265	244	211	151	125	115	120	90	148	169	217	805
18	253	244	211	151	130	118	120	100	163	163	232	1,080
19	253	244	211	145	128	112	125	98	181	151	253	1,230
20	253	244	211	142	122	115	125	92	190	145	280	1,200
21	259	244	208	138	125	125	125	90	205	142	307	1,060
22	259	244	208	135	125	130	128	82	211	140	348	930
23	256	244	208	138	120	130	125	80	214	135	425	955
24	253	244	208	142	120	122	125	80	214	132	435	1,000
25	247	241	202	142	120	120	125	80	208	132	460	1,000
26	253	235	193	140	120	130	125	85	196	135	545	955
27	253	235	196	140	120	135	125	90	211	132	625	905
28	253	235	199	140	125	135	125	92	199	130	680	830
29	253	235	193	140	118	122	125	82	202	130	705	755
30	253	235	193	140	------	132	125	82	208	125	705	705
31	247	------	187	132	------	138	------	82	------	142	680	------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
October	271	247	260	May	125	80	98.2
November	256	235	246	June	214	78	143
December	235	187	214	July	241	125	179
January	178	132	155	August	705	145	329
February	140	118	130	September	1,230	280	686
March	138	105	120				
April	130	115	124	The year	1,230	78	223

SANTA FE RIVER NEAR FORT WHITE, FLA.

LOCATION.—Water-stage recorder in sec. 28, T. 7 S., R. 16 E., 2 miles upstream from county highway bridge on road between Willeford and Fort White and 4 miles south of Fort White, Columbia County. Zero of gage is 21.28 feet above mean sea level.

RECORDS AVAILABLE.—October 1927 to January 1930; June to September 1932.

EXTREMES.—Maximum discharge during period, 1,740 second-feet (estimated) Sept. 20; minimum, 670 second-feet June 4–5 (gage height, 0.65 foot).

1927–30, 1932: Maximum discharge, about 4,750 second-feet Aug. 27–29, 1928 (gage height, 9.5 feet); minimum, that of June 4–5, 1932.

REMARKS.—Records excellent except those for June 6–15, which are fair, and those for Sept. 12–20, 25–30, when discharge was estimated.

Discharge, in second-feet, 1932

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	------	838	750	1,330	16	770	780	865	1,090
2	------	838	750	1,290	17	810	770	874	1,250
3	690	838	770	1,290	18	810	760	892	1,480
4	670	847	800	1,290	19	820	750	928	1,670
5	670	847	800	1,250	20	838	750	973	1,740
6	770	856	820	1,250	21	847	740	1,000	1,700
7	910	865	838	1,210	22	838	730	1,030	1,670
8	874	856	838	1,160	23	820	720	1,080	1,670
9	847	838	838	1,120	24	820	720	1,130	1,670
10	790	838	847	1,090	25	820	730	1,140	1,740
11	770	829	856	1,070	26	800	740	1,210	1,740
12	740	820	856	1,050	27	810	720	1,250	1,700
13	874	800	856	1,030	28	810	720	1,330	1,670
14	760	790	865	1,030	29	829	720	1,330	1,630
15	760	780	865	1,030	30	838	740	1,370	1,590
					31	------	750	1,370	------

Month	Maximum	Minimum	Mean	Month	Maximum	Minimum	Mean
June 3–30	910	670	800	August	1,370	750	972
July	865	720	785	September	1,740	1,030	1,380

ICHATUCKNEE SPRINGS NEAR HILDRETH, FLA.

LOCATION.—In sec. 23, T. 6 S., R. 15 E., at bridge on State Highway 5A 1 mile east of Hildreth.

RECORDS AVAILABLE.—Discharge measurements from January 1931 to September 1932. Single measurements only during 1917, 1929, 1930.

Discharge, in second-feet, 1931–32

Nov. 7	352	Mar. 15	291	July 8	299
Dec. 12	320	Apr. 28	281	Aug. 11	284
Jan. 26	311	June 4	260	Sept. 8	329
Feb. 23	302	June 22	296		

ST. MARKS RIVER BASIN

WAKULLA SPRING NEAR CRAWFORDVILLE, FLA.

LOCATION.—Water-stage recorder at spring in sec. 11, T. 3 S., R. 1 W., 6 miles northeast of Crawfordville.

RECORDS AVAILABLE.—Discharge measurements from February to June 1932 (discontinued). Single measurements only during 1929, 1930.

REMARKS.—Discharge measurements made at bridge 3 miles below spring. During periods following heavy rainfall the discharge at bridge includes some surface run-off as well as discharge of Wakulla Spring.

Discharge, in second-feet, 1931–32

Nov. 5	61.6	Feb. 26	91.6	June 24	256
Dec. 12	68.1	Mar. 25	78.2		
Jan. 28	134	May 20	121		

OCHLOCKONEE RIVER BASIN

OCHLOCKONEE RIVER NEAR HAVANA, FLA.

LOCATION.—Chain gage in sec. 24, T. 2 N., R. 2 W., at bridge on State Highway 1 three quarters of a mile above Georgia, Florida & Alabama Railway bridge and 5 miles southeast of Havana.

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—December 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 5,680 second-feet Sept. 21 (gage height, 26.20 feet); minimum discharge, 30 second-feet Nov. 11–16, 18–21; minimum gage height, 11.89 feet Nov. 20.

1928–32: Maximum discharge, 14,200 second-feet Mar. 19, 1929 (gage height, 30.3 feet); minimum, that of November 1931.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	34	37	132	826	756	826	202	922	850	2,650	2,700
2	64	34	37	177	850	687	922	202	687	1,140	2,950	1,780
3	61	33	37	300	850	595	1,040	202	549	1,580	2,950	1,430
4	56	32	38	319	802	549	1,040	185	459	1,720	2,550	1,380
5	54	32	38	281	756	549	994	169	549	1,700	2,250	1,33
6	47	32	44	227	710	946	874	169	526	1,500	2,250	1,310
7	44	31	47	338	664	1,260	779	169	526	1,380	2,450	1,160
8	43	31	43	1,070	641	1,500	710	161	503	1,230	2,130	922
9	44	31	59	2,020	595	1,760	641	146	641	922	2,650	756
10	44	31	154	2,500	572	1,990	595	132	1,070	733	2,650	641
11	112	30	245	3,190	549	2,130	526	125	1,310	618	2,450	526
12	338	30	300	4,140	503	2,100	503	118	1,310	526	2,210	481
13	263	30	300	4,700	503	1,850	459	105	1,210	549	2,100	438
14	169	30	300	4,600	503	1,600	438	98	1,450	459	2,020	417
15	132	30	218	4,140	526	1,380	417	91	1,640	377	1,760	922
16	98	30	185	3,430	572	1,210	377	86	2,130	319	1,520	1,350
17	85	31	161	2,700	549	1,090	357	82	2,370	281	1,520	1,720
18	71	30	139	2,100	549	1,160	338	86	2,500	245	1,430	2,290
19	63	30	132	1,600	549	1,380	338	118	2,650	227	1,280	2,850
20	56	30	118	1,350	572	1,660	377	245	2,600	595	1,280	3,690
21	50	30	125	1,160	595	1,820	377	874	2,250	1,110	1,400	5,680
22	47	33	112	1,040	641	1,820	377	1,380	1,850	994	1,430	4,500
23	44	33	112	946	733	1,720	377	1,660	1,600	779	1,820	3,550
24	42	34	185	898	756	1,660	338	1,920	1,380	503	1,920	3,190
25	40	32	218	826	826	1,430	319	2,060	1,160	549	2,060	2,900
26	39	34	193	802	826	1,350	281	2,250	946	397	2,290	2,650
27	38	34	161	779	779	1,260	281	2,130	756	319	2,700	2,500
28	37	34	125	756	779	1,160	245	1,850	595	397	3,190	2,500
29	36	34	125	733	779	1,020	227	1,450	503	1,330	3,690	2,450
30	36	35	105	756	-------	946	210	1,330	710	1,850	3,980	2,290
31	34	-------	105	779	-------	802	-------	1,110	-------	2,290	3,620	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	338	34	75.6	0.074	0.09
November	35	30	31.8	.031	.03
December	300	37	135	.132	.15
January	4,700	132	1,570	1.54	1.78
February	850	503	667	.654	.71
March	2,130	549	1,330	1.30	1.50
April	1,040	210	519	.509	.57
May	2,250	82	674	.661	.76
June	2,650	503	1,250	1.23	1.37
July	2,290	227	886	.868	1.00
August	3,980	1,280	2,290	2.25	2.59
September	5,680	417	2,010	1.97	2.20
The year	5,680	30	955	.936	12.75

OCHLOCKONEE RIVER NEAR BLOXHAM, FLA.

LOCATION.—Water-stage recorder in sec. 29, T. 1 S., R. 4 W., 1,000 feet below dam and 1 mile west of Bloxham.

DRAINAGE AREA.—1,660 square miles.

RECORDS AVAILABLE.—June 1926 to September 1932.

EXTREMES.—Maximum discharge during year, 6,070 second-feet Sept. 2? (gage height, 13.00 feet); minimum, 1 second-foot on several days.

1926–32: Maximum discharge, 19,900 second-feet Aug. 19, 1928 (gage height, 21.4 feet); no flow Sept. 21, 22, 1929, and on several days in 1931.

REMARKS.—Records fair above 25 second-feet and poor below. Flow regulated by operation of power plant 1,000 feet above gage.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	137	6	612	1,810	1,310	2,020	626	1,650	1,660	1,730	4,280
2	117	103	3	731	1,900	1,290	2,030	302	1,770	1,740	1,870	3,460
3	177	116	2	118	1,880	1,210	1,260	288	1,800	1,130	2,250	3,620
4	28	115	245	416	1,660	1,280	1,920	270	1,790	1,130	1,940	3,640
5	87	23	1	544	1,640	1,300	1,930	373	423	1,650	2,600	3,800
6	104	88	1	701	1,160	675	1,780	376	1,410	1,640	3,050	3,450
7	97	31	1	1,130	472	1,320	1,610	507	1,470	1,710	3,190	2,330
8	5	149	1	2,100	1,660	1,860	1,940	381	1,450	1,640	3,130	2,130
9	3	232	4	3,590	1,670	1,760	1,680	326	1,600	2,040	2,920	2,200
10	67	27	27	4,050	1,540	2,170	1,000	298	1,740	1,500	2,930	2,120
11	10	27	17	4,420	1,410	1,980	1,800	300	1,800	1,800	3,030	2,930
12	60	75	134	4,670	1,670	2,150	753	295	732	1,750	2,950	1,730
13	3	1	63	4,840	1,180	2,140	1,380	266	1,650	1,620	2,870	1,680
14	95	47	316	4,810	637	2,290	1,500	304	2,200	1,850	2,830	1,770
15	125	180	386	4,900	1,140	2,470	1,550	362	2,200	1,560	2,730	2,250
16	103	58	488	4,810	1,190	1,800	1,860	225	2,250	1,560	2,430	2,110
17	30	212	615	4,250	1,090	1,560	1,100	60	2,160	1,500	2,690	2,040
18	69	11	634	3,460	1,110	1,440	729	100	2,160	1,980	2,730	896
19	69	2	854	3,570	1,070	1,680	496	271	2,510	1,640	2,730	1,710
20	62	1	198	3,800	458	1,330	486	374	2,290	1,250	2,770	3,460
21	62	1	260	2,800	266	2,270	267	1,050	2,430	1,530	2,850	4,220
22	78	130	100	1,800	516	2,420	672	1,150	2,770	1,080	2,830	4,980
23	73	49	20	1,150	1,010	2,430	290	1,550	2,640	897	2,930	5,710
24	96	2	1	456	1,060	2,650	417	1,980	2,610	477	3,070	5,800
25	143	165	1	1,630	1,350	2,640	379	2,200	2,560	961	2,950	5,670
26	251	3	60	1,750	1,150	2,710	388	2,200	2,350	889	3,150	5,370
27	73	2	76	1,800	1,240	2,240	318	2,030	2,200	718	3,230	4,820
28	88	2	48	1,770	784	2,350	143	1,480	2,120	834	3,530	4,560
29	54	1	258	1,400	1,190	2,360	199	600	2,070	919	4,110	4,420
30	96	69	248	1,740	-------	1,940	345	939	1,430	1,520	4,350	4,340
31	137	-------	227	1,400	-------	1,820	-------	1,080	-------	1,430	4,490	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	251	3	82.1	0.049	0.06
November	232	1	68.6	.041	.05
December	854	1	171	.103	.12
January	4,900	118	2,430	1.46	1.68
February	1,900	266	1,200	.723	.78
March	2,710	675	1,900	1.14	1.31
April	2,030	143	1,070	.644	.72
May	2,200	60	728	.438	.51
June	2,770	423	1,940	1.17	1.30
July	2,040	477	1,410	.850	.98
August	4,490	1,730	2,930	1.76	2.03
September	5,800	896	3,380	2.04	2.28
The year	5,800	1	1,440	.868	11.82

APALACHICOLA RIVER BASIN

CHATTAHOOCHEE RIVER AT WEST POINT, GA.

LOCATION.—Water-stage recorder just below Oseligee Creek and 1 mile upstream from West Point, Troup County.

DRAINAGE AREA.—3,550 square miles.

RECORDS AVAILABLE.—July 1896 to September 1932.

EXTREMES.—Maximum discharge during year, 29,200 second-feet Feb. 22 (gage height, 14.24 feet); minimum, 245 second-feet Oct. 6 (gage height, 1.85 feet).

1896–1932: Maximum discharge, 134,000 second-feet Dec. 10, 1919 (gage height, 30.0 feet); minimum discharge, 224 second-feet Sept. 12, 1925 (gage height, 1.64 feet).

REMARKS.—Records fair. Slight diurnal fluctuation caused by power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	367	900	1,140	14,600	14,100	5,290	17,100	5,890	2,960	5,290	4,690	1,470
2	301	998	1,110	13,600	10,100	5,090	16,500	7,330	2,670	8,590	4,790	1,490
3	312	848	1,150	11,800	16,500	4,890	18,200	11,300	2,580	6,910	3,430	1,410
4	356	692	3,340	7,120	22,200	6,090	10,400	9,020	2,490	5,090	4,690	1,320
5	312	640	12,600	5,290	19,300	6,490	7,120	5,890	2,490	5,090	4,590	1,300
6	272	616	16,000	9,680	12,600	7,960	6,290	4,990	2,490	4,400	4,200	1,270
7	301	580	16,500	13,800	8,590	8,800	5,690	4,500	2,490	6,090	6,490	1,210
8	334	640	6,490	14,400	6,910	7,120	5,490	4,100	2,490	12,300	6,290	1,490
9	367	604	6,700	16,000	6,490	6,290	5,290	3,810	2,400	8,170	4,400	1,490
10	412	640	8,590	10,100	6,090	5,290	5,490	3,720	2,400	5,290	2,960	1,180
11	424	679	9,460	7,330	5,490	4,890	5,690	3,430	2,300	3,520	2,280	1,080
12	412	679	9,680	6,090	5,690	4,690	5,490	3,430	4,010	2,960	2,490	1,040
13	424	705	5,490	9,020	7,540	4,500	5,090	3,340	4,890	2,670	2,210	1,010
14	424	731	4,990	13,800	8,590	4,400	4,790	3,240	5,490	2,400	4,690	1,030
15	412	718	8,590	13,600	8,170	4,300	4,500	3,140	4,590	2,230	4,990	998
16	412	692	13,800	10,800	10,100	4,200	4,300	3,140	5,690	2,120	4,300	1,030
17	367	744	18,800	7,330	12,100	4,200	4,200	2,960	6,290	2,020	5,090	1,080
18	334	861	23,600	6,090	9,910	5,490	4,200	2,960	8,800	2,860	5,290	1,030
19	290	1,080	18,200	5,290	7,750	5,290	4,200	3,050	6,910	2,580	7,960	956
20	272	1,520	11,800	4,790	7,120	4,790	4,200	3,140	8,800	3,000	4,890	942
21	281	1,580	11,600	4,500	9,910	4,400	4,200	3,620	9,910	3,140	4,790	4,200
22	301	4,500	20,700	4,200	26,400	7,960	4,010	3,910	7,330	2,270	3,620	5,090
23	323	2,490	19,600	4,100	24,000	16,500	4,300	4,500	5,090	1,910	2,580	8,170
24	356	1,750	13,300	4,100	17,100	13,800	4,200	4,300	3,910	3,000	2,300	4,990
25	400	1,580	11,600	4,100	10,400	9,020	4,010	3,910	3,810	2,670	2,020	3,140
26	356	1,360	7,750	4,100	7,750	6,090	7,120	4,100	3,340	2,760	1,800	3,050
27	334	1,240	5,890	6,090	6,700	5,490	9,460	3,520	3,620	3,340	1,660	3,050
28	367	1,180	5,090	6,700	6,090	6,490	6,910	4,300	3,340	2,860	1,630	3,340
29	389	1,110	4,500	5,690	5,690	7,750	5,490	4,400	3,340	3,430	1,880	2,960
30	436	1,080	4,200	8,590	-------	6,490	4,590	3,520	3,140	2,860	1,640	2,580
31	520	-------	7,540	14,900	-------	8,590	-------	3,140	-------	2,580	1,540	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	520	272	360	0.101	0.12
November	4,500	580	1,110	.313	.35
December	23,600	1,110	9,990	2.81	3.24
January	16,000	4,100	8,630	2.43	2.80
February	26,400	5,490	11,000	3.10	3.34
March	16,500	4,200	6,540	1.84	2.12
April	18,200	4,010	6,620	1.86	2.08
May	11,300	2,960	4,370	1.23	1.42
June	9,910	2,300	4,340	1.22	1.36
July	12,300	1,910	4,010	1.13	1.30
August	7,960	1,540	3,750	1.06	1.22
September	8,170	942	2,150	.606	.68
The year	26,400	272	5,230	1.47	20.03

CHATTAHOOCHEE RIVER AT COLUMBUS, GA.

LOCATION.—Water-stage recorder at Central of Georgia Railway bridge in Columbus, Muscogee County, half a mile below Eagle and Phoenix Dam and 1¼ miles below City Mills Dam. Zero of gage is 185.25 feet above mean sea level.

DRAINAGE AREA.—4,670 square miles.

RECORDS AVAILABLE.—December 1912; August 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 36,000 second-feet Feb. 22 (gage height, 22.30 feet); minimum, 294 second-feet Oct. 23, Nov. 14 (gage height, 0.06 foot).

1912, 1929–32: Maximum discharge, 46,000 second-feet Nov. 17, 1931 (gage height, 26.63 feet); minimum, that of Oct. 23, Nov. 14, 1931.

Maximum stage known, 53.2 feet Mar. 15, 1929 (discharge not determined).

REMARKS.—Records fair. Considerable diurnal fluctuation caused by several power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,380	495	1,420	21,900	15,000	7,140	18,400	5,670	4,480	5,220	3,650	3,250
2	1,340	642	1,380	18,100	14,600	6,880	18,200	7,010	4,370	5,440	6,150	2,760
3	1,100	630	1,500	15,200	14,600	7,010	16,400	9,010	3,750	4,580	5,440	2,760
4	873	642	1,420	9,410	24,300	7,400	17,700	11,900	2,050	5,440	5,550	1,810
5	1,340	985	1,580	6,340	25,700	8,550	6,400	5,110	1,490	5,330	6,270	2,570
6	1,340	750	1,220	15,700	16,400	8,550	6,750	5,440	2,950	6,150	6,750	2,660
7	1,300	565	2,400	20,300	8,900	13,700	6,630	4,900	3,350	5,910	4,130	3,550
8	1,260	495	3,600	18,700	7,620	8,250	8,610	3,150	3,750	8,540	8,840	3,550
9	1,220	678	4,130	19,900	8,570	7,820	4,470	6,630	3,950	11,900	6,630	3,350
10	1,220	738	7,020	16,600	7,170	7,400	6,880	6,150	2,860	3,650	6,150	2,520
11	985	786	7,950	9,070	6,600	7,140	7,600	6,270	2,950	5,550	5,000	1,490
12	1,180	943	12,400	7,470	6,740	6,750	8,100	6,150	2,050	5,440	4,060	2,480
13	1,180	1,220	4,460	18,100	8,090	4,900	6,880	6,270	2,570	4,790	3,450	2,520
14	1,300	570	9,290	19,300	10,800	5,000	6,750	6,750	2,660	4,580	2,240	2,570
15	1,180	500	10,100	16,900	8,410	7,140	6,510	5,790	5,790	4,160	5,910	2,570
16	908	866	8,090	16,900	9,760	7,140	6,150	5,110	5,790	4,580	6,030	2,330
17	726	768	18,900	8,730	14,500	7,270	5,550	5,670	8,590	3,650	4,280	1,620
18	620	838	24,100	6,210	13,500	7,140	5,220	5,790	6,790	4,260	5,790	1,280
19	768	908	23,700	7,170	8,250	6,750	4,900	4,790	8,430	5,330	9,650	2,050
20	726	866	18,700	6,600	8,730	3,150	2,950	5,000	7,300	4,480	9,330	2,140
21	642	666	9,760	7,020	9,700	4,370	3,950	4,680	10,800	5,000	3,930	2,660
22	666	915	19,500	6,340	32,700	7,210	4,580	4,480	7,400	4,900	6,150	3,950
23	575	1,060	24,900	6,080	32,900	9,300	4,790	5,440	6,270	3,250	3,950	4,060
24	515	1,020	18,500	4,130	22,000	14,400	3,750	4,790	6,030	1,490	3,850	3,550
25	555	1,180	15,400	4,460	14,600	10,200	4,480	4,370	5,790	2,950	3,250	1,540
26	560	1,220	9,240	6,340	8,850	9,820	5,670	2,760	4,370	3,950	2,530	2,760
27	545	1,620	6,470	7,320	9,990	4,790	11,400	1,950	4,060	4,900	2,140	3,850
28	605	1,720	4,570	6,740	7,000	8,100	7,400	1,900	5,220	4,370	3,450	3,950
29	590	786	6,080	7,320	7,060	8,850	6,390	1,070	5,000	4,260	3,550	4,060
30	595	1,580	6,600	7,770	-------	8,250	4,790	3,150	4,900	4,480	4,370	4,060
31	480	-------	12,200	18,300	-------	12,700	-------	4,160	-------	2,660	4,480	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,380	480	912	0.195	0.22
November	1,720	495	888	.190	.21
December	24,900	1,220	9,570	2.05	2.36
January	21,900	4,130	11,600	2.48	2.86
February	32,900	6,600	13,200	2.83	3.05
March	19,300	3,150	8,160	1.75	2.02
April	18,400	2,950	7,610	1.63	1.82
May	11,900	1,070	5,200	1.11	1.28
June	10,800	1,490	4,860	1.04	1.16
July	11,900	1,490	4,880	1.04	1.20
August	9,650	2,140	5,060	1.08	1.24
September	4,060	1,280	2,810	.602	.67
The year	32,900	480	6,220	1.33	18.09

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 1932.
EXTREMES.—Maximum discharge during year, 42,100 second-feet Feb. 24 (gage height, 28.25 feet); minimum, 1,220 second-feet Oct. 26 (gage height, 1.79 feet).

1928–32: Maximum discharge, 203,000 second-feet Mar. 18, 1929 (gage height, 56.05 feet); minimum, that of Oct. 26, 1931.

REMARKS.—Records good except those estimated Nov. 29 to Dec. 4, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,210	1,580		16,000	16,600	10,900	13,400	7,960	4,580	7,600	6,340	5,790
2	2,160	1,440	2,850	22,000	18,400	10,100	20,300	6,450	5,680	7,840	5,350	5,680
3	2,260	1,400		21,500	17,200	9,970	20,500	8,080	5,790	8,080	6,010	5,240
4	2,210	1,400		17,500	16,500	9,710	21,200	9,060	5,790	8,560	7,960	4,580
5	2,030	1,540	2,850	14,800	25,900	9,970	19,500	11,600	5,020	8,200	8,320	4,150
6	1,760	1,540	3,050	11,000	28,600	11,900	10,800	9,840	3,650	7,480	9,320	3,550
7	1,850	1,620	3,150	19,500	23,600	15,000	10,100	6,680	3,350	7,960	10,600	3,450
8	2,750	1,850	2,950	31,000	15,000	16,300	9,190	6,450	4,150	7,600	9,840	3,650
9	3,150	1,720	3,650	30,200	12,300	13,500	9,060	5,680	5,020	7,370	9,450	4,360
10	2,950	1,540	5,680	27,100	11,700	12,100	10,500	5,020	5,790	11,400	11,000	4,250
11	2,660	1,540	6,560	24,200	11,400	11,000	6,910	7,370	6,910	9,450	9,320	4,150
12	2,480	1,720	9,190	17,600	10,400	10,400	9,060	7,260	6,230	5,350	7,840	3,550
13	2,120	1,800	9,840	13,800	10,100	9,450	10,800	7,260	5,790	5,460	6,340	2,660
14	1,980	1,760	10,900	18,400	10,100	8,200	9,840	7,020	4,690	6,340	5,790	2,850
15	2,080	2,080	6,680	25,900	13,400	6,910	8,930	7,370	6,010	5,680	5,130	3,450
16	2,080	2,030	11,900	24,000	11,700	7,600	8,560	7,480	7,370	5,460	4,800	3,550
17	2,080	1,580	10,100	20,500	12,300	9,580	8,080	6,680	9,450	5,240	7,480	3,450
18	1,900	1,540	13,400	16,200	14,300	10,400	7,960	7,140	11,900	5,350	6,910	3,250
19	1,540	1,900	20,300	11,600	15,300	10,400	7,260	8,680	11,300	4,910	6,450	2,660
20	1,400	1,940	22,200	10,400	15,200	10,100	7,140	11,200	12,300	5,790	9,840	2,570
21	1,310	2,120	20,300	10,400	12,500	8,440	6,560	19,200	9,060	6,340	11,600	2,850
22	1,440	2,160	16,900	10,100	15,600	5,900	4,910	18,700	11,900	5,790	10,100	3,250
23	1,400	1,980	16,500	9,840	35,600	7,960	5,790	14,300	10,400	6,120	7,140	3,850
24	1,360	1,940	24,000	9,580	41,400	16,000	6,230	12,100	8,560	5,790	9,970	5,020
25	1,310	2,160	22,900	9,060	34,400	18,400	6,120	10,400	7,720	4,360	8,080	5,020
26	1,310	2,300	17,800	7,720	23,100	13,400	5,460	8,080	7,600	3,150	6,680	4,250
27	1,360	2,300	13,900	8,930	14,900	12,000	6,910	7,260	7,140	3,850	5,350	3,150
28	1,400	2,480	10,200	12,000	13,200	10,600	8,930	6,800	5,570	5,240	4,250	4,360
29	1,400	2,850	8,560	12,000	12,300	8,800	11,200	5,130	5,570	6,560	3,750	5,570
30	1,440	2,850	7,370	11,300	-------	10,600	8,560	4,250	6,560	6,230	4,580	5,350
31	1,540	-------	9,060	12,100	-------	11,200	-------	3,550	-------	5,790	5,020	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,150	1,310	1,900	0.236	0.27
November	1,400	1,890	.235	.26
December	24,000	----------	10,400	1.29	1.49
January	31,000	7,720	16,300	2.03	2.34
February	41,400	10,100	17,700	2.20	2.37
March	18,400	5,900	10,900	1.36	1.57
April	21,200	4,910	9,990	1.24	1.38
May	19,200	3,550	8,520	1.06	1.22
June	12,300	3,350	7,030	.874	.98
July	11,400	3,150	6,460	.803	.93
August	11,600	3,750	7,440	.925	1.07
September	5,790	2,570	3,980	.495	.55
The year	41,400	1,310	8,520	1.06	14.43

APALACHICOLA RIVER NEAR RIVER JUNCTION, FLA.

LOCATION.—Water-stage recorder in sec. 5, T. 3 N., R. 6 W., at Louisville & Nashville Railroad bridge 1 mile below confluence of Flint and Chattahoochee Rivers and 1½ miles west of River Junction. Zero of gage is 44.90 feet above mean sea level.

DRAINAGE AREA.—17,100 square miles.

RECORDS AVAILABLE.—December 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 45,600 second-feet Feb. 25 (gage height, 14.34 feet); minimum, 5,120 second-feet Nov. 5, 11.

1928–32: Maximum discharge, 293,000 second-feet Mar. 20, 1929 (gage height, 34.70 feet); minimum, that of Nov. 5, 11, 1931.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,080	5,920	6,250	18,600	23,000	26,700	20,900	16,000	13,300	14,400	14,200	13,100
2	6,080	5,760	5,920	24,600	27,600	25,900	25,900	14,900	14,000	15,800	15,600	13,500
3	6,080	5,420	5,760	28,400	28,600	24,800	31,100	13,300	14,400	17,400	15,100	13,300
4	6,250	5,280	6,080	27,800	27,800	23,800	31,700	16,000	14,200	18,600	13,000	12,500
5	6,250	5,280	6,080	25,400	29,500	22,700	31,400	17,000	13,800	19,900	17,400	11,300
6	5,760	5,280	6,080	23,500	34,600	23,000	29,700	17,400	12,900	20,200	17,200	10,500
7	5,590	5,280	6,250	23,500	36,200	24,600	23,000	15,800	11,500	19,600	19,400	10,100
8	5,920	5,280	6,250	34,600	33,200	27,300	21,400	13,100	11,100	19,900	21,600	9,700
9	6,420	5,420	7,080	41,000	27,600	28,400	19,600	12,700	11,600	18,900	23,200	9,700
10	7,240	5,280	7,900	41,700	24,600	26,700	19,600	11,600	12,100	18,200	21,200	10,100
11	7,240	5,120	9,520	41,000	24,000	26,200	16,700	11,500	12,700	20,400	21,900	9,700
12	6,740	5,280	10,900	38,700	24,300	25,900	17,000	13,300	13,100	17,900	20,600	9,520
13	6,420	5,420	13,100	34,600	23,800	25,700	17,900	13,100	13,100	14,400	13,200	8,800
14	6,250	5,420	14,200	33,700	23,000	24,800	19,200	12,900	12,900	14,400	17,400	8,440
15	6,080	5,420	14,200	38,400	22,200	23,200	18,400	12,700	12,900	14,000	13,200	8,440
16	6,250	5,590	12,300	41,700	23,800	20,900	17,400	12,900	14,400	13,100	14,600	8,440
17	6,420	5,590	15,800	40,300	22,500	21,400	17,200	12,700	16,000	12,500	14,000	8,620
18	6,080	5,420	15,100	37,700	22,200	21,900	16,700	12,300	17,900	11,600	15,000	8,980
19	6,080	5,280	19,400	33,200	24,600	22,500	16,200	13,500	20,900	11,300	15,600	8,620
20	5,760	5,590	24,600	28,600	25,400	21,900	15,600	15,600	21,200	11,100	13,200	8,260
21	5,420	5,590	26,500	26,500	24,300	21,400	15,300	19,200	22,200	12,100	13,400	8,260
22	5,420	5,760	25,400	25,100	23,000	19,900	14,400	26,700	20,400	12,900	23,900	8,260
23	5,280	5,760	21,900	23,800	30,000	17,900	12,700	25,100	21,900	12,500	19,900	8,800
24	5,280	5,590	23,500	22,500	41,400	20,200	13,100	21,900	20,400	12,500	18,200	9,160
25	5,280	5,420	27,800	20,900	44,900	27,300	13,300	20,200	18,200	12,100	20,200	9,900
26	5,420	5,590	27,000	19,600	42,400	27,800	12,900	19,400	17,200	10,700	19,200	9,900
27	5,920	5,760	24,600	18,400	37,100	24,800	12,700	17,400	16,500	9,900	18,400	9,340
28	6,080	5,920	21,200	19,400	31,100	23,000	14,200	16,200	15,500	10,500	16,700	9,980
29	5,590	5,920	17,900	22,500	28,400	19,400	16,500	15,100	14,000	11,900	14,600	9,900
30	5,280	6,080	16,200	22,500	-------	18,200	17,700	14,600	13,800	12,900	13,100	10,700
31	5,420	-------	16,200	22,500	-------	19,900	-------	14,200	-------	13,300	13,100	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,240	5,280	5,980	0.350	0.40
November	6,080	5,120	5,520	.323	.36
December	27,800	5,760	14,900	.871	1.00
January	41,700	18,400	29,100	1.70	1.96
February	44,900	22,200	28,700	1.68	1.81
March	28,400	17,900	23,500	1.37	1.58
April	31,700	12,700	19,000	1.11	1.24
May	26,700	11,500	15,800	.924	1.07
June	22,200	11,100	15,500	.906	1.01
July	20,400	9,900	14,700	.860	.99
August	21,900	13,100	17,500	1.02	1.18
September	13,500	8,260	9,830	.575	.64
The year	44,900	5,120	16,600	.971	13.24

FLINT RIVER AT MONTEZUMA, GA.

LOCATION.—Chain gage at highway bridge half a mile below Buck Creek and 1 mile northwest of Montezuma, Macon County. Zero of gage is 257.4 feet above mean sea level.

DRAINAGE AREA.—2,920 square miles.

RECORDS AVAILABLE.—July 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 12,600 second-feet Jan. 11 (gage height, 14.10 feet); minimum, 455 second-feet Oct. 21, 28 (gage height, 0.51 foot).

1930–32: Maximum discharge, 23,100 second-feet Nov. 20, 1930 (gage height, 17.80 feet); minimum, that of Oct. 21, 28, 1931.

REMARKS.—Records good. Flow regulated by hydroelectric plant above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	680	770	950	3,670	4,230	4,230	3,400	2,500	2,320	2,980	1,960	1,140
2	680	770	950	5,190	4,020	3,530	4,020	2,320	1,900	3,740	1,670	1,090
3	635	725	950	6,650	3,880	3,220	4,470	2,200	1,720	4,470	1,670	1,040
4	680	725	1,140	7,250	3,810	3,040	4,310	2,020	1,670	3,880	2,740	1,090
5	770	725	1,040	7,150	5,110	3,040	3,880	1,780	1,560	3,160	2,740	1,090
6	680	725	1,240	5,950	6,250	4,020	3,340	1,670	1,500	2,860	2,740	1,040
7	635	725	1,450	5,110	7,730	4,950	2,980	1,670	1,400	1,840	3,460	950
8	815	770	1,340	6,550	9,570	5,850	2,740	1,670	1,340	1,720	4,020	860
9	995	770	1,450	8,870	8,590	6,450	2,740	1,560	1,240	1,620	4,160	770
10	1,140	725	1,720	11,400	6,050	5,850	2,500	1,400	1,340	1,780	3,670	725
11	950	950	2,380	12,600	4,230	5,030	2,680	1,340	1,340	1,620	2,740	860
12	995	635	2,500	11,400	3,600	4,470	2,680	1,290	1,450	1,450	1,960	815
13	815	725	2,260	9,150	3,460	3,600	3,040	1,240	1,450	1,190	1,780	770
14	770	770	2,080	7,370	3,600	3,340	3,100	1,240	1,450	1,090	1,720	680
15	725	905	2,020	6,850	3,460	3,100	2,800	1,290	1,560	1,040	1,840	770
16	770	860	2,320	7,050	3,400	2,920	2,500	1,190	2,260	950	2,560	770
17	725	770	2,260	7,050	3,460	2,860	2,320	1,090	2,620	950	3,280	860
18	725	815	2,140	6,550	3,400	2,980	2,260	1,090	2,860	950	2,740	770
19	815	860	2,140	5,350	3,460	3,460	2,140	1,240	2,920	995	2,740	770
20	680	860	2,140	4,230	3,530	3,670	2,140	1,450	3,160	1,560	3,600	590
21	635	950	2,320	3,600	3,530	3,600	2,260	1,670	2,740	1,840	4,550	590
22	680	950	2,500	3,280	3,880	3,340	2,260	1,900	2,860	1,900	4,630	590
23	680	995	3,220	3,160	5,270	3,530	2,260	1,900	2,620	1,560	3,950	635
24	635	995	4,470	3,040	6,750	4,160	2,320	1,840	2,020	1,400	3,100	725
25	680	950	5,510	2,920	8,590	3,600	2,320	1,780	1,720	1,240	2,620	950
26	680	950	6,250	2,920	9,990	3,160	2,080	1,720	1,900	1,140	2,140	995
27	635	950	6,550	3,100	9,850	3,100	2,020	2,080	2,020	1,040	1,670	905
28	635	950	5,750	3,600	8,210	3,100	2,020	2,500	1,900	1,140	1,560	860
29	635	950	3,740	4,230	6,150	3,280	2,260	3,040	1,960	2,620	1,340	1,040
30	725	905	2,920	4,230	------	3,600	2,380	3,040	2,440	2,740	1,190	1,040
31	725	------	2,680	4,230	------	3,400	------	2,680	------	2,320	1,140	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,140	635	743	0.254	0.29
November	995	635	838	.287	.32
December	6,550	950	2,590	.887	1.02
January	12,600	2,920	5,930	2.03	2.34
February	9,990	3,400	5,420	1.86	2.01
March	6,450	2,860	3,790	1.30	1.50
April	4,470	2,020	2,740	.938	1.05
May	3,040	1,090	1,790	.613	.71
June	3,160	1,240	1,970	.675	.75
July	4,470	950	1,900	651	.75
August	4,630	1,140	2,630	.901	1.04
September	1,140	590	859	.294	.33
The year	12,600	590	2,600	.890	12.11

FLINT RIVER AT OAKFIELD, GA.

LOCATION.—Water-stage recorder at Georgia Southwestern and Gulf Railroad bridge 1 mile southwest of Oakfield, Worth County.
DRAINAGE AREA.—3,840 square miles.
RECORDS AVAILABLE.—January 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 13,200 second-feet Jan. 14 (gage height, 11.75 feet); minimum, 532 second-feet Oct. 16 (gage height, 1.37 feet). 1930–32: Maximum discharge, 20,200 second-feet Nov. 23, 1930 (gage height, 16.33 feet); minimum, 320 second-feet July 14, 1930 (gage height, 0.98 foot).
REMARKS.—Records good. Discharge estimated July 17, 18, 26, Aug. 30 to Sept. 8. Considerable diurnal fluctuation caused by operations at Crisp County Power Co.'s dam 8 miles above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	1,060	740	4,600	5,380	9,980	7,200	2,660	3,600	4,340	3,720	
2	782	1,020	747	4,210	5,380	8,370	5,380	2,770	3,360	6,030	3,120	
3	1,110	1,110	761	4,730	5,250	6,160	4,860	2,500	2,940	6,940	2,770	
4	1,190	1,150	726	5,900	4,990	4,860	5,120	2,600	2,660	6,940	2,550	
5	1,230	1,190	852	7,070	4,990	4,340	5,250	2,550	2,440	6,680	2,970	1,930
6	677	1,270	1,450	8,240	5,380	4,470	5,120	2,380	2,380	5,900	3,600	
7	990	1,230	1,840	8,890	5,770	4,470	4,600	2,120	2,330	4,600	4,320	
8	2,170	1,040	1,770	9,150	6,810	5,380	4,080	1,820	2,170	3,720	5,120	
9	1,500	1,190	2,810	9,020	7,980	7,200	3,720	2,070	1,360	3,060	5,250	1,820
10	1,070	1,190	2,170	10,100	9,150	8,500	3,480	2,020	1,820	2,820	5,370	1,680
11	1,110	1,190	1,770	10,800	9,560	8,240	3,360	1,970	2,660	2,770	5,120	1,580
12	768	1,190	2,500	12,100	8,370	7,850	3,240	1,870	2,550	2,440	4,320	1,450
13	1,360	1,190	3,240	12,600	6,550	7,200	3,240	1,820	2,500	2,170	3,330	1,320
14	1,500	1,150	2,770	12,980	5,250	6,160	3,480	1,680	2,720	2,020	2,770	1,320
15	1,270	1,090	2,500	11,000	4,730	5,380	3,720	1,090	2,380	1,970	2,970	1,360
16	894	1,150	3,000	10,100	4,470	5,380	3,480	1,150	3,000	1,770	2,970	1,500
17	1,320	1,190	2,660	9,560	4,340	4,730	3,180	1,500	3,600	1,700	3,000	1,540
18	1,150	1,190	2,770	8,760	4,080	4,340	3,000	1,630	3,960	1,690	3,420	1,400
19	1,320	1,150	3,060	8,500	4,080	4,210	2,880	1,770	4,340	1,870	3,720	1,400
20	691	1,070	2,720	7,590	4,210	4,210	2,720	2,770	4,470	2,440	3,840	1,400
21	915	733	2,600	6,420	4,340	4,990	2,660	2,720	4,470	2,220	4,270	1,400
22	1,270	1,060	2,660	5,380	4,730	4,990	2,660	1,770	4,340	2,330	4,730	1,450
23	1,270	1,150	3,180	3,360	5,120	4,600	2,660	3,780	4,080	2,440	5,250	1,450
24	1,450	1,230	3,720	4,080	5,770	4,340	2,660	5,120	3,840	2,380	5,370	1,450
25	4,220	1,230	5,500	3,480	6,940	4,600	2,720	3,840	3,360	2,120	4,830	1,400
26	1,490	1,150	6,160	4,480	7,720	3,770	2,770	3,600	2,940	1,940	4,080	1,500
27	754	1,110	5,900	6,290	8,890	1,970	2,660	3,480	2,720	1,970	3,360	1,540
28	775	1,100	6,680	5,120	10,100	2,170	2,550	3,600	2,720	2,170	2,880	1,580
29	3,380	1,030	7,590	4,600	10,400	2,170	2,550	3,840	2,770	2,880	2,370	1,920
30	2,510	1,040	7,330	4,860	-------	3,850	2,600	3,960	3,360	3,600	1,980	2,020
31	1,040	-------	5,770	5,120	-------	6,420	-------	3,840	-------	4,080		-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,220	677	1,360	0.354	0.41
November	1,270	733	1,130	.294	.33
December	7,590	740	3,160	.823	.95
January	12,900	3,360	7,390	1.92	2.21
February	10,400	4,080	6,230	1.62	1.75
March	9,980	1,970	5,330	1.39	1.60
April	7,200	2,550	3,590	.935	1.04
May	5,120	1,090	2,590	.674	.78
June	4,470	1,360	3,060	.797	.89
July	6,940	1,690	3,230	.841	.97
August	5,380	1,930	3,720	.969	1.12
September	2,020	1,320	1,630	.424	.47
The year	12,900	677	3,530	.919	12.52

FLINT RIVER AT ALBANY, GA.

LOCATION.—Water-stage recorder at Georgia Northern Railway bridge in Albany, Dougherty County. Zero of gage is 150.04 feet above mean sea level.

DRAINAGE AREA.—5,160 square miles.

RECORDS AVAILABLE.—February 1897 to June 1921; September 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 16,400 second-feet Jan. 14 (gage height, 13.50 feet); minimum, 363 second-feet Oct. 4 (gage height, 1.44 feet).

1897–1921, 1929–32: Maximum gage height, 32.4 feet (United States Weather Bureau datum) Mar. 25, 1897 (discharge not determined); minimum discharge, 284 second-feet Sept. 7, 1930 (gage height, 1.26 feet).

Maximum stage known, 37.84 feet (present datum) Mar. 21, 1925 (discharge, 92,000 second-feet).

REMARKS.—Records good. Considerable diurnal fluctuation caused by power plants above station.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,230	1,400	1,440	4,750	6,670	11,200	9,460	2,720	4,750	6,670	6,670	3,050
2	1,770	1,180	1,440	4,580	5,260	10,400	7,010	4,920	4,250	8,020	6,670	3,190
3	1,470	1,370	985	5,260	7,010	6,840	5,440	5,620	4,010	10,200	6,500	3,050
4	430	1,470	1,020	6,670	6,670	6,670	6,840	1,620	3,770	10,100	4,250	3,930
5	1,250	1,180	985	7,350	4,750	5,440	5,620	2,600	3,330	8,500	4,580	3,260
6	1,220	1,470	1,360	9,300	6,670	6,500	7,350	2,860	3,050	8,500	5,440	3,770
7	1,150	1,410	2,140	10,200	6,840	6,670	5,090	2,420	2,980	7,520	7,180	4,410
8	2,180	1,180	2,360	11,300	7,350	7,350	5,440	2,300	2,980	4,920	7,690	4,090
9	2,500	1,340	2,480	10,800	8,180	9,460	4,580	2,600	2,790	4,250	8,020	3,930
10	1,440	1,480	3,400	12,100	10,200	10,200	4,410	2,600	2,600	4,580	7,520	3,260
11	965	1,480	2,790	13,000	11,000	10,500	4,580	2,480	3,190	3,470	7,860	950
12	1,690	1,410	2,240	15,100	9,910	10,100	4,250	2,420	3,540	3,620	7,010	1,920
13	1,340	1,440	3,400	14,900	7,180	9,300	4,250	2,300	2,920	3,400	5,260	1,750
14	1,970	1,500	3,120	15,100	6,840	7,690	4,250	2,140	3,540	3,400	4,920	1,440
15	1,840	1,040	3,400	13,400	5,440	7,350	4,580	1,970	3,770	2,790	4,250	1,570
16	1,400	1,550	2,360	12,100	5,800	5,980	4,580	1,750	3,770	1,750	4,580	2,540
17	1,950	1,580	3,400	11,500	5,260	7,180	3,930	1,750	5,800	1,520	5,440	2,080
18	893	1,520	2,910	10,200	5,800	4,750	4,410	2,240	5,440	1,860	4,580	1,860
19	1,940	1,450	3,470	10,200	4,750	6,160	4,090	2,480	6,160	2,190	5,260	1,860
20	1,150	1,490	3,400	9,610	5,620	5,800	4,090	3,540	6,500	3,260	6,330	1,920
21	1,110	1,530	3,260	8,500	6,160	7,010	3,540	3,850	5,260	3,400	4,250	2,420
22	1,190	1,020	2,600	6,160	5,620	6,500	3,620	2,540	5,980	2,920	5,260	2,020
23	1,230	1,480	3,050	5,980	7,010	5,980	3,470	2,980	4,580	2,920	3,850	1,920
24	1,770	1,400	3,540	5,090	6,670	5,620	2,920	6,160	4,750	3,050	3,850	1,700
25	2,790	1,410	5,510	5,440	8,340	5,980	3,470	4,920	4,410	3,050	3,850	1,620
26	3,030	1,530	6,880	4,410	9,910	5,980	3,700	4,250	4,090	2,540	4,090	1,920
27	1,340	1,550	6,500	7,010	9,760	2,920	3,470	4,580	3,930	2,600	6,330	2,080
28	968	1,630	7,070	5,800	11,000	3,050	3,850	4,580	3,700	3,120	6,330	2,190
29	1,730	1,800	7,770	6,670	11,900	3,400	3,930	5,620	3,470	3,930	2,660	2,190
30	3,300	1,540	8,280	4,410	-------	3,850	3,190	4,750	3,620	5,800	2,980	2,540
31	1,390	-------	7,070	6,670	-------	8,020	-------	5,440	-------	7,010	3,050	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,300	430	1,600	0.310	0.36
November	1,800	1,020	1,430	.277	.31
December	8,280	985	3,540	.686	.79
January	15,100	4,410	8,820	1.71	1.97
February	11,900	4,750	7,360	1.43	1.54
March	11,200	2,920	6,900	1.34	1.54
April	9,460	2,920	4,650	.901	1.01
May	6,160	1,620	3,320	.643	.74
June	6,500	2,600	4,100	.795	.89
July	10,200	1,520	4,540	.880	1.01
August	8,020	2,660	5,370	1.04	1.20
September	4,410	950	2,480	.481	.54
The year	15,100	430	4,510	.874	11.90

FLINT RIVER AT BAINBRIDGE, GA.

LOCATION.—Water-stage recorder at Decatur County Memorial Highway Bridge in Bainbridge, Decatur County. Zero of gage is 58.06 feet above mean sea level.

DRAINAGE AREA.—7,290 square miles.

RECORDS AVAILABLE.—January 1908 to December 1913; December 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 16,500 second-feet Jan. 15 (gage height, 16.03 feet); minimum, 2,300 second-feet Dec. 7 (gage height, 3.80 feet).

1908–13, 1928–32: Maximum discharge, 83,200 second-feet Mar. 21, 1929 (gage height, 37.73 feet); minimum, that of Dec. 7, 1931.

Maximum stage known, 40.9 feet (present datum) Jan. 24, 1925 (discharge, 101,000 second-feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,720	3,100	2,450	7,260	8,270	12,400	8,390	5,130	7,480	5,830	8,150	5,630
2	2,660	2,720	2,550	6,380	8,630	12,200	9,880	4,730	6,930	7,260	8,390	5,130
3	2,660	2,600	2,550	5,830	8,150	11,600	9,110	5,530	6,160	8,630	8,390	5,030
4	2,840	2,550	2,450	6,050	8,630	9,750	8,030	7,040	5,940	10,000	8,270	4,930
5	2,600	2,720	2,350	6,820	8,750	8,990	8,510	4,230	5,630	10,700	7,260	4,530
6	2,450	2,550	2,350	7,590	7,920	8,150	8,150	3,830	5,430	10,400	6,930	4,530
7	2,600	2,600	2,300	8,870	8,270	8,750	8,750	4,730	5,030	10,100	7,260	4,430
8	2,600	2,600	2,660	10,000	8,510	9,110	7,810	4,330	5,030	9,490	8,150	3,930
9	2,780	2,550	3,100	11,200	8,750	9,620	7,370	4,030	4,930	8,030	8,990	3,930
10	3,340	2,500	3,180	11,600	9,230	11,000	7,370	3,930	4,730	7,040	9,360	3,930
11	3,180	2,550	3,630	12,800	10,400	11,900	6,710	4,130	5,530	6,930	9,360	3,830
12	2,780	2,600	3,830	14,300	11,400	12,400	6,820	4,030	4,630	6,160	9,360	3,430
13	2,720	2,600	3,340	15,900	10,800	12,100	6,490	3,930	5,130	5,830	8,750	3,340
14	2,720	2,600	3,830	16,500	9,490	11,500	6,490	3,830	5,030	5,630	7,590	3,730
15	2,900	2,600	3,930	16,500	8,750	10,500	6,380	3,430	5,430	5,430	6,820	3,430
16	2,960	2,550	4,030	15,700	8,150	9,880	6,490	3,530	5,830	4,930	6,270	3,260
17	2,840	2,500	4,130	14,600	7,920	8,990	6,490	3,030	5,940	4,430	6,270	3,630
18	2,720	2,600	4,230	13,900	7,260	9,360	6,160	3,030	6,820	3,630	6,820	3,730
19	2,840	2,600	3,830	12,800	7,810	8,390	6,160	3,260	7,260	3,340	6,270	3,530
20	2,660	2,600	4,230	12,200	6,930	8,630	6,050	3,630	8,030	3,830	6,600	3,430
21	2,720	2,600	4,230	11,800	7,480	8,510	5,940	4,530	8,510	4,430	7,040	3,430
22	2,550	2,600	4,230	10,800	7,590	9,110	5,630	5,230	8,030	4,930	7,590	3,630
23	2,500	2,500	4,030	9,230	7,920	8,990	5,530	5,030	7,920	4,630	7,370	3,830
24	2,550	2,450	3,730	8,630	8,270	8,510	5,430	4,830	7,150	4,630	7,920	3,530
25	2,600	2,550	4,330	7,810	8,750	8,270	5,130	6,710	6,820	4,730	8,630	3,530
26	3,180	2,500	5,130	7,700	9,490	7,920	5,030	6,930	6,600	4,730	8,990	3,260
27	3,930	2,550	6,380	7,150	10,700	8,150	5,530	6,380	6,270	4,430	8,990	3,530
28	2,960	2,600	6,270	8,030	11,000	6,490	5,230	6,490	6,050	4,430	7,920	3,730
29	2,600	2,600	6,820	8,150	11,600	5,830	5,430	6,820	5,940	4,730	7,260	3,730
30	2,500	2,550	7,150	8,510	-------	5,940	5,530	7,480	5,730	5,430	6,600	3,930
31	3,430	-------	7,810	7,700	-------	6,380	-------	7,480	-------	6,820	5,940	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,930	2,450	2,810	0.385	0.44
November	3,100	2,450	2,590	.355	.40
December	7,810	2,300	4,030	.553	.64
January	16,500	5,830	10,400	1.43	1.65
February	11,600	6,930	8,860	1.22	1.32
March	12,400	5,830	9,330	1.28	1.48
April	9,880	5,030	6,730	.923	1.03
May	7,480	3,030	4,880	.669	.77
June	8,510	4,630	6,200	.850	.95
July	10,700	3,340	6,180	.848	.98
August	9,360	5,940	7,730	1.06	1.22
September	5,630	3,260	3,920	.538	.60
The year	16,500	2,300	6,140	.842	11.48

CHOCTAWHATCHEE RIVER BASIN

CHOCTAWHATCHEE RIVER AT CARYVILLE, FLA.

LOCATION.—Water-stage recorder in T. 4 N., R. 16 W., at highway bridge 300 feet below Louisville & Nashville Railroad bridge and three quarters of a mile west of Caryville, Holmes County. Zero of gage is 39.03 feet above mean sea level.
DRAINAGE AREA.—3,490 square miles.
RECORDS AVAILABLE.—August 1929 to September 1932.
EXTREMES.—Maximum discharge during year, 23,400 second-feet Jan. 16 (gage height, 12.19 feet); minimum, 865 second-feet Oct. 28 (gage height, 0.11 foot).
1929–32: Maximum discharge, 49,100 second-feet Oct. 4, 1929 (gage height, 14.83 feet); minimum, that of Oct. 28, 1931.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	925	895	1,060	2,830	5,350	5,500	3,310	1,990	4,380	3,520	4,480	3,230
2	925	895	1,100	3,590	5,500	4,570	4,060	2,560	3,600	4,110	4,480	4,480
3	895	895	1,100	3,730	5,070	4,060	4,460	2,830	3,160	4,380	4,680	6,010
4	895	895	1,100	3,380	4,690	3,730	4,150	2,440	2,760	4,480	4,580	6,470
5	895	925	1,100	3,310	4,460	3,590	3,730	2,140	2,410	4,380	4,380	5,350
6	895	925	1,140	3,450	4,460	3,890	3,450	1,900	2,190	4,020	4,110	4,110
7	925	895	1,180	5,070	4,570	4,940	3,250	1,760	1,990	3,930	5,350	3,300
8	1,220	895	1,220	7,500	4,350	5,970	3,130	1,630	1,990	3,760	6,810	2,830
9	1,720	895	1,360	9,380	4,150	5,970	3,010	1,540	2,040	3,300	7,680	2,410
10	1,900	895	1,810	11,000	4,060	5,070	2,890	1,450	2,190	2,900	6,810	2,140
11	1,760	895	2,190	11,800	3,810	4,810	2,830	1,400	2,900	2,520	6,160	1,940
12	1,630	955	2,090	11,400	3,730	4,460	2,830	1,400	3,840	2,240	4,020	1,760
13	1,400	955	1,940	10,000	3,660	4,150	3,010	1,320	4,780	1,990	3,440	1,720
14	1,220	955	1,810	10,300	3,590	4,060	2,890	1,220	4,890	1,810	3,090	1,720
15	1,140	955	1,680	16,100	3,520	3,810	2,720	1,220	5,000	1,630	3,760	1,760
16	1,100	955	1,630	22,600	3,380	3,590	2,560	1,100	6,160	1,450	4,580	1,760
17	1,060	955	1,680	21,100	3,310	3,450	2,390	1,060	7,680	1,400	4,290	1,760
18	1,020	955	1,680	16,100	3,250	3,450	2,240	1,360	7,860	1,360	4,020	1,580
19	990	990	1,680	11,800	3,380	3,970	2,190	2,610	7,680	1,270	3,680	1,540
20	955	1,060	1,680	9,180	3,810	4,250	2,240	4,570	7,320	1,320	4,020	1,540
21	925	1,100	1,860	7,320	4,460	3,970	2,390	6,640	6,160	1,450	4,890	2,040
22	925	1,180	2,660	6,130	5,210	3,660	2,500	8,220	5,110	1,540	4,890	3,370
23	925	1,180	3,730	5,350	5,970	3,380	2,340	9,380	4,290	1,630	3,930	3,760
24	925	1,180	4,250	4,940	6,980	3,250	2,140	9,580	3,760	1,540	3,520	3,160
25	925	1,100	3,730	4,810	7,860	3,190	1,990	9,380	3,370	1,720	4,380	2,640
26	895	1,100	3,380	4,690	7,860	3,130	1,990	9,180	3,230	1,900	5,870	2,410
27	895	1,100	3,310	4,810	7,320	3,010	1,810	8,790	2,900	2,040	6,010	2,830
28	895	1,060	3,010	4,810	6,640	2,950	1,760	8,220	2,700	3,370	5,350	3,930
29	895	1,060	2,720	4,940	6,300	3,010	1,810	7,320	2,580	4,680	4,480	4,580
30	895	1,060	2,500	4,940	------	3,190	1,760	6,640	2,830	6,010	3,760	5,110
31	895	------	2,440	4,940	------	3,130	------	5,600	------	5,870	3,230	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,900	895	1,080	0.309	0.36
November	1,180	895	992	.284	.32
December	4,250	1,060	2,060	.590	.68
January	22,600	2,830	8,110	2.32	2.68
February	7,860	3,250	4,850	1.39	1.50
March	5,970	2,950	3,970	1.14	1.31
April	4,460	1,760	2,730	.782	.87
May	9,580	1,060	4,080	1.17	1.35
June	7,860	1,990	4,060	1.16	1.29
July	6,010	1,270	2,820	.808	.93
August	7,680	3,090	4,670	1.34	1.54
September	6,470	1,540	3,040	.871	.97
The year	22,600	895	3,540	1.01	13.80

ESCAMBIA RIVER BASIN

CONECUH RIVER NEAR ANDALUSIA, ALA.

LOCATION.—Water-stage recorder in T. 3 N., R. 15 E., at Simmons Bridge, 7½ miles southwest of Andalusia.

DRAINAGE AREA.—1,300 square miles.

RECORDS AVAILABLE.—August 1904 to December 1919; September 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 6,640 second-feet Jan. 6 (gage height, 17.42 feet); minimum, 65 second-feet Oct. 26 (gage height, 0.3? foot).

1904–19, 1929–32: Maximum discharge (estimated), 26,000 second-feet Mar. 18, 1913; minimum, 61 second-feet July 7, 1930.

Maximum stage known, 47.64 feet Mar. 15, 1929 (discharge, 154,000 second-feet).

REMARKS.—Records good except those estimated Mar. 1–7, 13–19, Apr. 17–26, 28–30, which are fair. Flow regulated by power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	218	80	237	1,640	2,360		2,880	1,300	2,000	1,060	790	2,800
2	227	104	251	1,800	2,440		2,760	1,240	1,270	1,160	920	2,840
3	213	264	213	1,680	2,400		1,440	955	1,100	1,020	1,720	990
4	89	193	299	1,240	1,800		1,680	1,020	625	850	1,800	1,410
5	100	208	206	1,480	1,880	3,400	1,720	1,270	445	820	580	2,160
6	222	195	244	4,380	1,880		1,840	955	475	2,280	490	1,600
7	272	190	319	5,200	2,200		1,440	775	640	1,840	227	1,270
8	225	87	460	4,700	2,120	1,760	1,480	610	655	760	505	1,100
9	251	272	610	4,200	2,200	1,720	1,440	550	685	1,020	625	820
10	266	210	580	4,080	1,380	1,720	1,440	745	1,160	328	595	745
11	114	152	550	3,400	1,640	1,640	1,440	580	1,380	430	2,160	430
12	135	237	610	2,600	1,560	1,680	1,440	595	955	388	685	565
13	232	304	364	4,880	1,480		955	505	1,800	346	565	730
14	251	227	520	5,060	1,270		885	640	2,600	346	400	700
15	209	124	760	3,880	1,380		885	424	2,320	370	505	790
16	256	130	745	3,720	1,240	1,400	655	535	2,280	397	670	850
17	186	182	730	3,320	1,380			670	2,000	388	2,760	760
18	106	505	775	2,920	1,380			670	1,600	445	1,720	412
19	94	885	685	2,600	1,600			550	1,600	595	3,000	370
20	171	790	475	2,760	1,840	1,100		850	1,160	322	2,080	820
21	199	745	715	2,240	1,720	820	640	700	1,100	430	1,680	595
22	208	328	1,840	2,160	3,240	955		1,720	955	580	885	790
23	251	490	2,000	1,920	5,640	1,480		3,040	745	550	1,160	775
24	215	394	1,760	1,920	5,920	1,340		2,440	790	173	2,280	580
25	83	282	1,920	2,440	5,820	1,200		2,440	1,100	195	1,560	195
26	82	266	2,160	1,920	5,240	1,160		2,320	745	361	2,480	364
27	213	201	2,480	2,640	4,160	1,380	610	2,320	920	565	3,000	550
28	234	186	1,680	2,520	4,430	1,600		2,160	775	403	1,300	535
29	190	99	1,130	2,080	5,200	1,020	700	2,120	1,560	920	625	550
30	213	156	1,100	2,120	-------	1,160		1,880	2,160	655	715	490
31	144	-------	1,200	2,000	-------	2,080	-------	1,800	-------	670	790	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	272	82	189	0.145	0.17
November	885	80	283	.218	.24
December	2,480	206	891	.685	.79
January	5,200	1,240	2,890	2.22	2.56
February	5,920	1,240	2,650	2.04	2.20
March	-------	820	1,850	1.42	1.64
April	2,880	-------	1,120	.862	.96
May	3,040	424	1,240	.954	1.10
June	2,600	445	1,250	.962	1.07
July	2,280	173	667	.513	.59
August	3,000	400	1,270	.977	1.13
September	2,840	195	920	.708	.79
The year	5,920	80	1,260	.969	13.24

MOBILE RIVER BASIN

COOSA RIVER AT GADSDEN, ALA.

LOCATION.—Water-stage recorder in T. 12 S., R. 6 E., at highway bridge in Gadsden, 700 feet below Louisville & Nashville Railroad. Zero of gage is 485.16 feet above mean sea level.

DRAINAGE AREA.—5,800 square miles.

RECORDS AVAILABLE.—October 1926 to March 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 51,000 second-feet Feb. 5 (gage height, 23.86 feet); minimum, 1,180 second-feet Oct. 24 (gage height, 0.16 foot).

1926–32: Maximum discharge, 58,100 second-feet Nov. 17, 1929 (gage height, 25.76 feet); minimum, that of Oct. 24, 1931.

REMARKS.—Records good. No appreciable regulation.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1,440	2,850	2,220	13,000	48,200	11,600	16	1,280	1,440	32,000	22,100	35,300	6,980
2	1,360	2,440	2,670	16,700	47,800	10,800	17	1,240	1,480	35,300	16,800	39,700	6,820
3	1,320	2,000	2,730	17,000	49,200	10,300	18	1,210	1,480	37,400	12,700	40,000	6,980
4	1,280	1,750	4,880	13,700	50,200	9,920	19	1,210	1,480	37,200	10,600	38,500	7,300
5	1,240	1,560	11,400	10,900	50,600	10,900	20	1,210	1,610	36,100	9,240	35,000	7,140
6	1,280	1,520	17,400	16,800	48,500	12,000	21	1,210	1,950	34,800	8,420	32,700	7,300
7	1,280	1,480	16,700	25,300	46,500	12,700	22	1,210	3,530	35,000	7,780	35,000	10,100
8	1,280	1,480	10,100	29,300	43,900	12,300	23	1,210	3,270	35,800	7,300	37,700	14,300
9	1,280	1,440	6,820	29,500	38,500	10,900	24	1,210	2,440	34,200	7,620	37,400	16,700
10	1,280	1,440	7,460	26,500	26,900	9,580	25	1,210	2,060	30,000	7,940	35,000	15,500
11	1,280	1,440	9,070	19,500	16,500	8,740	26	1,210	1,950	21,900	8,260	29,300	11,600
12	1,240	1,440	10,300	14,500	15,500	8,260	27	1,240	1,850	14,600	12,100	20,100	8,740
13	1,280	1,440	8,100	16,300	18,000	7,780	28	1,280	1,750	10,900	17,400	15,000	7,940
14	1,280	1,440	12,500	21,500	21,100	7,460	29	2,060	1,700	9,240	23,600	12,800	8,260
15	1,280	1,480	26,200	24,200	28,300	7,300	30	3,030	1,800	8,100	38,500	-------	10,400
							31	2,730	-------	9,410	47,100	-------	18,600

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,030	1,210	1,390	0.240	0.28
November	3,530	1,440	1,830	.316	.35
December	37,400	2,220	18,400	3.17	3.66
January	47,100	7,300	17,800	3.07	3.54
February	50,600	12,800	34,200	5.90	6.36
March	18,600	6,820	10,200	1.76	2.03

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 1932.

EXTREMES.—Maximum discharge during year, 71,700 second-feet Feb. 3 (gage height, 17.85 feet); minimum, 1,500 second-feet Oct. 19–27, 29–30.

1914–32: Maximum discharge, 121,000 second-feet July 11, 1916; maximum gage height, 24.84 feet Mar. 16, 1929; minimum discharge, 1,300 second-feet in September 1925.

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

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,770	2,770	2,160	16,900	68,400	17,700	60,900	26,200	7,320	13,700	5,780	4,170
2	1,770	3,000	2,260	18,500	64,600	16,100	56,200	32,300	6,620	14,600	5,520	4,050
3	1,770	3,000	2,890	20,800	71,100	15,000	52,100	37,200	6,200	17,700	5,130	4,170
4	1,770	2,770	4,890	20,400	69,400	16,100	47,200	37,700	5,920	20,400	4,890	5,130
5	1,770	2,460	8,350	16,900	65,100	15,000	43,700	36,400	5,650	16,100	5,390	4,530
6	1,770	2,060	12,800	34,100	62,000	15,400	35,400	32,800	5,520	14,300	7,320	4,170
7	1,770	2,060	19,300	37,200	58,800	16,100	22,800	25,800	5,390	14,300	7,320	3,810
8	1,770	1,960	19,300	40,000	55,600	16,100	16,100	16,900	5,520	26,600	7,320	3,570
9	1,680	1,860	14,100	40,800	52,100	15,400	14,300	12,300	5,520	37,700	6,620	3,570
10	1,680	1,770	10,200	38,200	45,700	13,900	13,500	10,600	5,390	41,800	6,760	3,450
11	1,590	1,770	9,420	33,200	31,800	12,400	13,400	9,740	5,520	39,500	6,340	3,220
12	1,590	1,770	10,600	25,400	23,300	11,400	13,200	9,100	5,920	32,800	5,920	3,110
13	1,590	1,770	11,800	27,400	24,200	10,800	12,100	8,500	6,900	19,700	5,390	3,000
14	1,590	1,680	10,800	28,300	27,800	10,200	11,300	8,200	10,600	11,800	7,460	3,000
15	1,590	1,680	17,300	30,000	46,200	9,900	10,400	7,900	10,900	9,100	8,650	3,000
16	1,590	1,680	31,000	29,200	57,800	9,580	9,740	7,600	9,580	8,050	8,800	2,890
17	1,590	1,680	40,400	27,800	63,500	9,580	9,260	7,320	11,100	7,460	10,200	2,890
18	1,590	1,860	48,200	21,600	65,100	10,800	9,100	7,040	13,500	6,900	9,740	2,770
19	1,500	1,860	46,700	16,500	58,800	10,200	8,800	6,900	13,500	6,340	11,300	2,770
20	1,500	1,960	45,200	13,900	56,200	10,100	8,800	7,900	11,300	6,900	12,800	2,770
21	1,500	1,960	48,200	12,100	57,800	10,200	8,800	9,580	11,100	7,180	11,400	2,890
22	1,500	2,060	55,600	11,100	68,400	18,100	8,650	10,800	11,100	7,040	8,800	3,220
23	1,500	2,260	53,100	10,400	65,100	18,500	8,350	10,900	12,100	6,620	7,320	3,930
24	1,500	3,690	48,600	11,100	57,200	20,000	8,050	11,600	11,300	6,200	6,340	11,900
25	1,500	3,450	43,700	11,400	51,100	21,200	8,350	13,000	10,200	6,200	5,650	11,600
26	1,500	2,770	36,800	11,900	45,700	19,300	9,420	13,500	11,100	6,060	5,130	7,320
27	1,500	2,460	26,600	16,100	37,700	15,400	11,400	12,100	10,100	5,650	5,130	5,010
28	1,590	2,260	18,100	19,300	26,600	13,900	13,500	9,900	8,350	7,040	5,780	4,410
29	1,500	2,260	13,900	25,800	20,400	11,400	14,600	9,260	8,050	6,340	5,130	4,410
30	1,500	2,260	11,800	58,800	-------	11,300	16,500	8,950	8,050	5,920	4,530	4,170
31	1,680	-------	13,000	70,600	-------	47,700	-------	8,350	-------	5,920	4,170	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,770	1,500	1,610	0.192	0.22
November	3,690	1,680	2,230	.266	.30
December	55,600	2,160	23,800	2.84	3.27
January	70,600	10,400	25,700	3.06	3.53
February	71,100	20,400	51,600	6.15	6.63
March	47,700	9,580	15,100	1.80	2.08
April	60,900	8,050	19,200	2.29	2.56
May	37,700	6,900	15,000	1.79	2.06
June	13,500	5,390	8,640	1.03	1.15
July	41,800	5,650	14,100	1.68	1.94
August	12,800	4,170	7,030	.838	.97
September	11,900	2,770	4,300	.513	.57
The year	71,100	1,500	15,600	1.86	25.28

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 confluence 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 1932.

EXTREMES.—Maximum discharge during year, 106,000 second-feet Jan. 6 (gage height, 25.0 feet); minimum, 70 second-feet at times (gage height, 1.95 feet). 1912–14; 1925–32: Maximum discharge, 207,000 second-feet Mar. 15, 1929 (gage height, 38.6 feet); minimum, 70 second-feet at times in 1930–32.

REMARKS.—Records good. Flow almost completely regulated during low and medium stages by hydroelectric plants at Lock 12 and Mitchell Dam. Records collected by the Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,340	2,430	2,940	18,800	73,700	20,400	72,100	29,300	12,200	11,800	6,090	8,100
2	85	5,980	2,910	22,700	72,400	15,800	65,700	36,300	7,490	26,900	214	10,200
3	70	2,540	3,060	19,400	79,000	19,700	55,900	40,900	8,050	19,400	435	7,730
4	3,450	2,390	4,760	26,300	76,600	17,200	44,200	41,200	7,470	25,100	779	6,720
5	5,420	2,470	6,490	20,100	69,300	19,200	49,500	39,400	6,930	25,000	4,630	6,310
6	2,560	2,360	6,300	78,400	66,700	18,100	35,900	32,700	7,600	20,000	8,900	238
7	2,930	2,360	13,600	49,600	61,800	20,600	32,700	30,900	7,160	13,500	6,430	1,300
8	2,690	2,540	13,800	43,600	60,100	17,100	22,900	25,400	7,470	22,500	13,900	1,480
9	1,990	4,400	10,400	45,800	54,600	17,300	13,600	16,600	7,310	35,800	12,600	1,690
10	983	2,210	13,000	45,000	49,700	17,400	13,500	11,000	6,120	40,800	11,300	2,520
11	2,850	2,060	10,900	37,900	38,800	15,000	18,800	12,000	1,680	41,000	13,600	3,990
12	5,760	2,060	8,570	30,900	31,900	12,100	16,100	9,760	2,590	37,200	13,400	6,570
13	178	2,050	8,360	35,500	26,200	12,800	14,400	8,260	7,330	27,600	8,990	5,070
14	1,270	2,010	17,100	37,100	27,000	14,200	12,400	8,520	4,360	18,400	6,760	5,140
15	1,960	2,690	13,600	35,800	52,800	10,300	12,500	7,760	8,040	12,800	6,190	5,330
16	1,890	4,040	23,400	32,100	61,300	10,600	11,800	9,430	14,700	9,750	143	5,320
17	90	2,360	42,400	34,400	69,500	12,000	10,500	10,400	10,100	9,030	479	1,060
18	3,250	1,970	52,700	26,500	71,800	10,300	11,300	7,370	13,500	8,840	12,200	116
19	4,990	2,030	52,400	20,000	64,700	13,900	10,800	6,760	19,700	9,050	11,800	5,270
20	1,860	2,290	48,100	17,500	62,400	8,790	10,700	7,130	20,600	5,700	14,400	3,360
21	1,750	2,480	63,900	15,100	71,700	16,000	11,400	11,600	7,810	10,200	15,400	2,840
22	1,740	2,790	72,900	15,700	91,500	22,200	11,000	14,000	14,900	11,700	13,300	3,500
23	1,730	3,520	60,300	13,300	75,600	24,200	8,060	15,700	9,080	10,800	10,500	7,070
24	1,970	3,120	54,700	10,400	63,700	20,900	8,700	16,700	8,910	8,470	10,800	6,730
25	3,670	3,300	50,800	17,000	57,200	21,500	9,890	15,900	13,500	13,300	9,390	6,630
26	5,610	3,030	40,800	15,400	48,900	22,400	13,800	15,700	13,400	13,200	8,640	6,670
27	1,780	2,990	32,700	18,500	45,100	20,900	14,400	11,600	11,900	9,360	8,770	6,230
28	1,440	2,940	23,100	23,300	32,600	22,300	13,200	7,880	10,800	9,510	6,810	3,280
29	1,390	3,290	18,400	24,900	25,100	15,300	13,600	9,400	10,500	6,680	9,970	3,280
30	1,490	4,090	15,600	87,300	-------	11,200	19,300	13,300	6,350	4,980	10,200	3,780
31	1,400	-------	14,400	79,000	-------	61,200	-------	10,300	-------	6,350	9,870	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,760	70	2,240	0.220	0.25
November	5,980	1,970	2,830	.277	.31
December	72,900	2,910	25,900	2.54	2.93
January	87,300	10,400	32,200	3.16	3.64
February	91,500	25,100	58,000	5.69	6.14
March	61,200	8,790	18,100	1.77	2.04
April	72,100	8,060	22,000	2.16	2.41
May	41,200	6,760	17,200	1.69	1.95
June	20,600	1,680	9,580	.939	1.05
July	41,000	4,980	16,900	1.66	1.91
August	15,400	143	8,610	.844	.97
September	10,200	116	4,580	.449	.50
The year	91,500	70	18,000	1.76	24.10

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 1932. At Montgomery from January 1899 to December 1903.

EXTREMES.—Maximum discharge during year, 93,300 second-feet Feb. 24 (gage height, 34.0 feet); minimum, 4,840 second-feet Nov. 20 (gage height, 0.37 foot). 1899–1903, 1927–32: Maximum discharge, 209,000 second-feet Mar. 17, 1929 (gage height, 59.6 feet); minimum, that of Nov. 20, 1931.

REMARKS.—Records good. Flow regulated by hydroelectric plants on Tallapoosa and Coosa Rivers. Records collected by the Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,920	5,270	5,420	21,300	77,200	37,900	70,900	30,800	12,800	16,300	9,030	10,400
2	7,380	6,040	5,720	25,700	76,200	27,200	83,900	43,000	12,800	29,400	9,410	13,000
3	6,040	6,700	5,420	26,600	75,400	26,000	84,600	50,300	10,900	32,800	8,840	12,300
4	5,720	6,360	5,880	26,300	78,400	23,500	77,000	52,300	12,600	33,100	8,460	10,000
5	7,560	6,360	7,380	26,300	78,700	24,500	68,300	51,100	9,790	36,500	8,650	8,280
6	6,700	6,360	7,920	44,600	76,200	29,400	56,800	43,500	8,770	34,500	13,700	7,740
7	6,700	6,360	7,920	67,800	72,800	32,200	47,700	37,300	7,980	28,600	10,400	8,100
8	7,380	6,360	12,800	63,500	68,900	32,200	72,300	34,500	10,200	26,600	9,890	8,460
9	7,560	5,720	13,200	58,200	64,700	29,200	28,300	28,600	11,600	33,100	15,900	9,030
10	7,920	6,700	11,200	54,800	59,300	29,200	20,400	19,500	12,100	40,100	14,400	9,600
11	7,040	6,200	13,200	51,700	53,100	26,600	22,200	15,700	9,580	41,500	14,900	9,800
12	7,040	5,880	10,800	44,100	42,400	22,500	25,400	14,400	7,240	41,000	15,400	9,220
13	6,870	5,880	9,220	41,300	35,600	20,100	24,500	12,300	7,240	36,200	13,000	9,220
14	6,870	5,880	10,600	47,700	30,800	19,800	19,800	10,900	8,570	25,700	10,000	12,500
15	8,100	5,880	15,800	47,700	38,400	16,800	18,300	10,000	10,000	18,200	8,100	13,000
16	8,460	6,040	17,300	44,900	53,400	14,100	17,400	8,960	20,100	13,000	8,460	14,000
17	7,920	6,040	28,800	41,800	60,700	15,700	16,000	11,100	22,500	10,600	8,840	13,000
18	5,880	6,040	40,300	38,400	67,500	15,200	14,100	11,600	19,200	10,400	16,200	9,800
19	7,040	5,270	47,400	30,500	69,700	18,600	13,600	9,580	23,200	9,800	22,600	7,740
20	6,200	5,120	47,400	21,600	68,100	17,400	17,400	10,200	26,300	14,700	22,000	9,600
21	5,720	5,270	49,400	18,600	67,200	19,200	17,400	13,600	16,000	15,200	23,700	12,500
22	5,720	5,420	63,500	17,400	81,700	21,600	16,600	26,000	9,370	15,700	22,300	12,300
23	5,720	5,570	69,300	15,400	91,500	32,000	13,600	26,600	14,900	13,700	20,600	12,800
24	5,720	5,720	65,500	13,800	93,000	35,900	10,700	27,800	9,370	11,200	20,400	12,100
25	5,720	5,420	59,900	13,800	89,800	35,100	10,700	22,200	10,400	10,600	20,400	9,410
26	7,040	5,270	52,300	18,900	83,900	33,100	12,300	22,800	14,600	15,700	17,700	7,920
27	6,530	5,270	41,800	18,300	75,400	28,300	20,400	20,100	11,800	13,000	17,700	9,220
28	5,720	5,420	32,800	26,000	65,000	27,500	24,800	12,600	12,800	13,700	15,900	9,410
29	5,420	5,420	23,200	28,000	48,600	31,100	21,300	10,900	17,400	11,200	11,200	7,920
30	5,420	5,270	18,600	47,200	-------	26,600	22,800	13,600	20,100	10,600	13,200	7,740
31	5,420	-------	16,300	72,800	-------	32,000	-------	15,200	-------	9,600	11,700	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,460	5,420	6,660	0.441	0.51
November	6,700	5,120	5,820	.385	.43
December	69,300	5,420	26,300	1.74	2.01
January	72,800	13,800	36,000	2.38	2.74
February	93,000	30,800	67,000	4.44	4.79
March	37,900	14,100	25,800	1.71	1.97
April	84,600	10,700	32,300	2.14	2.39
May	52,300	8,960	23,100	1.53	1.76
June	26,300	7,240	13,300	.881	.98
July	41,500	9,600	21,700	1.44	1.66
August	23,700	8,100	14,300	.947	1.09
September	14,000	7,740	10,200	.675	.75
The year	93,000	5,120	23,400	1.55	21.08

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 1932.

EXTREMES.—Maximum discharge during year, 93,800 second-feet Feb. 25 (gage height, 37.08 feet); minimum, 5,560 second-feet Nov. 22 (gage height, 0.46 foot).

1899–1913, 1928–32: Maximum discharge, 204,000 second-feet Mar. 19, 1929 (gage height, 55.52 feet); 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. Discharge estimated May 5, 6. Flow regulated by power plants on Coosa and Tallapoosa Rivers.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,780	5,670	5,780	22,500	70,800	51,000	47,000	25,000	15,100	20,000	10,700	12,600
2	7,640	5,670	5,780	25,500	74,800	39,500	68,200	34,000	13,800	19,200	10,500	12,800
3	7,100	6,000	5,890	28,500	75,800	29,200	77,800	43,500	13,200	29,500	9,960	15,700
4	6,110	6,710	5,890	27,800	76,000	27,500	80,500	48,500	11,800	32,000	9,600	15,700
5	6,000	6,590	6,230	28,500	76,500	25,800	77,500	46,500	12,800	34,200	9,280	12,000
6	6,840	6,590	7,230	43,000	76,000	28,000	70,800	44,500	11,000	36,200	9,440	9,600
7	6,710	6,590	7,640	62,200	73,500	32,500	60,000	42,500	9,960	34,200	12,800	8,640
8	6,590	6,470	8,340	69,800	70,000	34,800	49,500	37,200	9,600	28,800	12,000	8,640
9	7,100	6,470	12,600	67,800	66,500	33,500	40,000	33,500	11,200	27,500	12,000	8,960
10	7,230	6,230	13,400	64,000	62,500	31,200	29,500	27,200	12,800	32,800	15,700	9,440
11	7,500	6,230	12,200	60,000	57,500	30,000	22,500	20,000	13,200	38,500	15,300	9,960
12	7,100	6,230	13,000	53,800	51,200	27,000	24,000	16,400	11,600	40,000	15,500	10,100
13	6,840	6,000	11,200	48,800	44,000	23,500	25,800	14,800	9,600	39,500	15,700	9,600
14	6,970	6,000	9,780	50,000	37,200	21,200	24,500	13,200	9,780	34,800	13,600	9,780
15	6,840	6,000	11,600	52,800	36,000	20,800	21,000	11,800	10,900	26,200	11,200	12,200
16	7,780	6,000	15,900	51,500	42,200	18,000	19,200	11,200	12,400	19,000	9,960	13,200
17	8,200	6,110	19,500	48,000	53,000	15,900	18,000	10,300	20,000	13,800	9,960	14,000
18	8,060	6,350	40,000	44,800	60,500	17,300	16,800	11,800	21,800	11,400	11,000	13,200
19	6,710	6,470	42,500	39,800	65,800	17,100	15,300	12,200	20,500	10,900	18,500	10,500
20	6,470	5,890	48,200	32,000	68,000	19,800	14,800	11,000	23,200	10,500	23,500	8,480
21	6,350	5,670	50,200	25,500	68,500	18,800	17,800	11,400	25,000	13,800	24,200	9,780
22	6,000	5,560	56,200	21,200	75,500	21,200	18,300	16,200	18,300	15,300	24,500	12,200
23	6,000	5,670	64,000	20,200	85,100	25,200	17,300	25,500	13,200	15,300	23,200	12,600
24	6,000	5,670	66,800	19,200	92,000	33,000	14,600	28,000	14,400	13,800	21,500	12,600
25	5,890	5,780	64,200	17,800	93,500	36,200	12,400	28,000	11,400	11,800	20,800	12,200
26	5,890	5,890	59,800	20,000	90,200	35,500	12,600	25,000	11,800	11,200	20,800	10,100
27	6,590	5,780	52,200	24,000	83,900	32,800	15,100	24,800	14,600	15,100	18,800	8,640
28	6,590	5,670	43,200	26,000	75,500	28,800	21,800	21,800	13,400	13,800	18,000	9,280
29	5,890	5,780	34,000	30,800	64,800	29,000	24,500	14,800	14,200	13,800	16,200	9,780
30	5,780	5,780	26,000	38,200	-------	30,500	22,500	12,600	19,000	12,000	12,400	8,480
31	5,670	-------	23,000	60,000	-------	30,200	-------	14,400	-------	11,000	12,600	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,200	5,670	6,720	0.393	0.45
November	6,710	5,560	6,050	.354	.40
December	66,800	5,780	27,200	1.59	1.83
January	69,800	17,800	39,500	2.31	2.66
February	93,500	36,000	67,800	3.96	4.27
March	51,000	15,900	27,900	1.63	1.88
April	80,500	12,400	32,700	1.91	2.13
May	48,500	10,300	23,800	1.39	1.60
June	25,000	9,600	14,300	.836	.93
July	40,000	10,500	22,100	1.29	1.49
August	24,500	9,280	15,100	.883	1.02
September	15,700	8,480	11,000	.643	.72
The year	93,500	5,560	24,400	1.43	19.38

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 1932.
EXTREMES.—Maximum discharge during year, 108,000 second-feet Feb. 27 (gage height, 39.84 feet); minimum, 5,800 second-feet Nov. 3–4.
1928–32: Maximum discharge, 269,000 second-feet Mar. 23, 1929 (gage height, 55.83 feet); minimum, that of Nov. 3–4, 1931.
REMARKS.—Records good. Flow regulated by power plants upstream.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,920	5,940	6,220	33,300	68,800	86,700	42,900	26,800	16,000	18,800	13,100	14,800
2	7,650	5,800	6,220	30,700	77,400	71,500	53,300	28,300	16,800	20,900	12,000	25,500
3	7,950	5,800	6,220	30,200	83,000	56,100	69,700	34,100	16,200	21,500	11,700	31,900
4	7,950	5,800	6,500	31,200	86,700	43,400	81,000	42,400	15,400	27,300	11,100	28,800
5	7,350	6,500	6,640	31,600	88,500	36,400	87,400	47,800	14,000	32,400	10,600	23,300
6	6,640	6,920	6,780	63,700	88,500	33,600	88,800	50,000	14,000	35,100	10,400	17,800
7	6,640	6,920	7,500	79,000	87,400	34,600	84,300	49,100	13,500	37,400	10,400	14,200
8	7,200	6,920	8,870	82,300	84,900	36,100	74,000	45,200	12,200	36,900	12,000	11,800
9	7,200	6,920	9,890	84,600	81,300	37,200	62,300	40,300	11,500	33,300	13,500	10,400
10	7,500	6,920	12,900	83,300	77,000	36,700	50,200	35,900	12,000	30,200	12,700	9,890
11	8,100	6,780	15,400	79,300	72,100	34,600	39,000	30,700	14,800	31,900	14,400	10,100
12	8,100	6,500	15,000	73,700	67,300	32,600	30,400	24,600	17,800	35,900	15,600	10,400
13	7,950	6,640	14,800	69,700	62,300	30,200	27,600	19,800	17,400	38,500	15,400	10,800
14	7,500	6,500	15,600	67,000	53,900	27,100	27,800	17,400	14,600	39,000	15,600	10,800
15	7,350	6,360	14,800	64,000	46,000	24,400	26,600	15,800	12,600	35,900	15,600	10,200
16	7,200	6,220	14,200	62,600	40,300	23,300	24,400	14,200	12,900	30,000	14,200	11,500
17	7,350	6,220	18,800	60,000	44,700	21,500	22,200	13,300	15,400	23,300	14,000	12,900
18	8,100	6,500	24,000	55,600	55,800	19,400	20,900	12,400	19,200	18,000	13,500	13,800
19	8,550	6,920	31,200	50,500	65,500	19,400	19,600	12,600	22,000	14,200	14,000	14,000
20	7,950	7,060	43,200	46,300	75,000	19,800	18,400	13,800	21,800	14,000	18,400	12,900
21	7,060	6,920	57,500	37,700	80,300	20,900	17,600	13,600	22,900	11,500	23,100	10,800
22	6,780	6,360	65,800	30,900	92,400	21,500	18,800	14,800	25,300	12,600	23,700	9,720
23	6,500	6,080	69,100	26,200	99,300	22,900	20,200	20,000	22,900	14,600	24,000	11,300
24	6,220	6,080	72,400	25,500	103,000	27,600	20,000	29,000	17,800	15,800	23,300	12,700
25	6,220	6,080	74,400	28,500	106,000	33,300	18,200	33,100	16,600	15,200	22,600	12,900
26	6,220	6,080	73,100	27,300	107,000	36,700	16,200	32,400	15,600	13,800	22,200	13,100
27	6,080	6,080	68,200	28,300	108,000	36,700	16,200	31,600	14,200	12,700	21,500	12,200
28	6,360	6,220	60,600	31,400	104,000	36,400	18,600	30,900	15,600	14,400	20,200	10,800
29	6,920	6,220	51,400	31,900	97,700	32,800	23,100	26,800	16,800	15,800	19,200	10,600
30	6,640	6,080	41,900	45,000	-------	31,900	25,900	21,500	16,800	15,200	18,200	10,900
31	6,220	------	34,800	58,900	-------	36,900	-------	17,200	-------	14,400	15,600	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,550	6,080	7,170	0.338	0.39
November	7,060	5,800	6,410	.302	.34
December	74,400	6,220	30,800	1.45	1.67
January	84,600	25,500	50,000	2.36	2.72
February	108,000	40,300	79,500	3.75	4.04
March	86,700	19,400	34,300	1.62	1.87
April	88,800	16,200	38,200	1.80	2.01
May	50,000	12,400	27,300	1.29	1.49
June	25,300	11,500	16,500	.778	.87
July	39,000	11,500	23,600	1.11	1.28
August	24,000	10,400	16,200	.764	.88
September	31,900	9,720	14,000	.660	.74
The year	108,000	5,800	28,500	1.34	18.30

ALABAMA RIVER AT CLAIBORNE, ALA.

LOCATION.—Water-stage recorder in sec. 25, T. 7 N., R. 5 E., at toll bridge in Claiborne. Zero of gage is at mean sea level.
DRAINAGE AREA.—22,000 square miles.
RECORDS AVAILABLE.—April 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 114,000 second-feet Feb. 27 (gage height, 40.90 feet); minimum, 6,200 second-feet Nov. 3, 4.
1928–32: Maximum discharge, that of Feb. 27, 1932; minimum, that of Nov. 3, 4, 1931.
REMARKS.—Records good. Discharge estimated Mar. 20–25. Flow regulated by power plants on Coosa and Tallapoosa Rivers.

Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,850	6,590	6,590	37,900	65,600	104,000	40,900	26,700	17,400	17,400	14,200	17,200
2	7,130	6,330	6,720	35,300	74,600	90,800	48,100	27,400	17,000	19,600	13,500	31,000
3	7,850	6,200	6,720	33,000	81,300	74,600	62,000	30,200	16,900	20,800	12,600	35,500
4	8,000	6,200	6,850	32,400	86,700	58,100	75,000	36,800	16,100	23,900	11,900	32,700
5	7,850	6,330	6,990	33,000	90,300	45,900	83,700	43,500	15,200	29,000	11,400	27,600
6	7,410	6,850	7,130	53,500	92,500	41,200	89,200	47,700	14,200	32,200	11,100	22,300
7	6,990	7,130	7,270	76,800	93,000	37,600	90,300	49,200	14,100	34,700	10,800	18,000
8	7,410	7,130	8,300	83,700	92,500	37,900	85,700	47,000	13,400	35,800	10,900	14,800
9	7,550	7,270	9,580	87,700	89,800	38,500	75,400	42,200	12,300	34,200	12,600	12,400
10	7,550	7,270	11,300	88,700	85,700	38,500	62,800	37,900	12,800	31,200	13,200	11,400
11	7,850	7,130	13,900	86,700	81,300	37,100	49,500	33,700	14,200	30,700	13,400	11,100
12	8,150	7,130	15,000	83,200	75,900	35,500	37,900	28,600	17,200	33,200	15,000	10,900
13	8,150	6,990	15,000	79,500	70,600	33,700	32,200	23,400	18,600	36,000	15,300	11,100
14	8,000	6,990	15,700	75,900	62,800	31,400	30,200	19,600	17,400	37,400	15,300	11,300
15	7,700	6,850	16,300	71,900	53,500	28,300	29,000	17,000	14,800	36,300	15,300	11,100
16	7,550	6,720	15,200	69,000	45,900	26,100	27,200	15,300	13,900	32,700	15,000	11,100
17	7,410	6,720	16,700	65,600	44,200	24,500	24,700	13,900	15,000	27,400	14,600	12,100
18	7,700	6,990	21,300	61,600	51,700	22,300	22,800	11,300	17,000	22,100	14,200	13,200
19	8,300	7,270	26,300	56,200	61,600	20,800	20,800	12,600	20,200	17,600	14,200	14,100
20	8,460	7,410	35,300	50,600	71,100	20,600	19,400	13,900	21,900	14,600	15,500	14,600
21	7,850	7,550	51,700	43,500	79,000	21,600	18,000	14,400	22,300	12,800	19,800	11,400
22	7,270	7,270	64,800	36,800	92,000	22,400	17,800	15,300	23,900	12,300	22,500	11,400
23	6,990	6,850	70,200	31,700	101,000	24,600	16,900	19,400	24,300	13,500	23,200	11,100
24	6,720	6,590	73,600	28,800	107,000	28,600	16,300	26,100	20,800	15,200	23,400	12,100
25	6,590	6,460	76,800	30,000	110,000	32,900	16,900	31,400	17,800	15,900	23,200	13,000
26	6,590	6,460	77,700	30,200	113,000	34,500	18,600	32,400	17,000	15,000	22,800	13,400
27	6,590	6,460	75,000	30,200	113,000	35,800	19,600	32,700	16,100	13,900	22,300	13,200
28	6,590	6,590	69,000	32,400	113,000	35,500	19,000	32,400	15,500	13,700	21,300	12,300
29	6,850	6,590	60,400	33,200	110,000	34,000	16,100	30,000	16,500	15,300	20,000	11,400
30	7,130	6,590	50,200	39,600	-------	32,200	24,300	25,400	16,700	15,700	19,000	13,000
31	6,990	-------	42,200	54,300	-------	35,000	-------	20,600	-------	15,200	17,400	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,460	6,590	7,420	0.337	0.39
November	7,550	6,200	6,830	.310	.35
December	77,700	6,590	31,600	1.44	1.66
January	88,700	28,800	53,300	2.42	2.79
February	113,000	44,200	83,100	3.78	4.08
March	104,000	20,600	38,200	1.74	2.01
April	90,300	16,100	39,700	1.80	2.01
May	49,200	11,300	27,700	1.26	1.45
June	24,300	12,300	17,000	.773	.86
July	37,400	12,300	23,400	1.06	1.22
August	23,400	10,800	16,300	.741	.85
September	35,500	10,900	15,500	.705	.79
The year	113,000	6,200	29,800	1.35	18.46

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 April 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 7,090 second-feet Jan. 30 (gage height, 8.62 feet); no flow Oct. 1 to Nov. 29.

1928–32: Maximum discharge, 9,430 second-feet Mar. 14, 1929 (gage height, 10.40 feet); no flow several days during July and September 1930 and Sept. 17 to Nov. 29, 1931.

REMARKS.—Records good except those above 6,000 second-feet, which are fair.

Discharge, in second-feet, 1931–32

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1	0	10	544	984	164	1,420	16	0	676	442	1,180	89	------
2	0	8	410	1,610	141	834	17	0	1,020	345	1,290	173	------
3	0	6	317	2,640	157	578	18	0	1,290	304	1,180	179	------
4	0	37	251	1,470	641	430	19	0	738	251	850	92	------
5	0	85	246	1,010	585	------	20	0	520	222	698	80	------
6	0	63	1,290	722	448	------	21	0	1,500	186	975	96	------
7	0	41	906	532	345	------	22	0	1,960	144	1,420	810	------
8	0	36	898	454	290	------	23	0	966	134	906	532	------
9	0	186	754	400	246	------	24	0	648	242	627	390	------
10	0	222	514	335	201	------	25	0	502	251	472	308	------
11	0	125	390	286	168	------	26	0	375	308	370	251	------
12	0	92	340	1,110	151	------	27	0	299	818	304	213	------
13	0	287	1,160	866	131	------	28	0	246	627	242	255	------
14	0	3,570	810	620	114	------	29	0	194	2,980	194	194	------
15	0	1,420	578	890	98	------	30	5	164	4,680	------	179	------
							31	------	390	1,660	------	2,570	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
November	5	0	0.2	0.0017	0.002
December	3,570	6	570	4.71	5.43
January	4,680	134	742	6.13	7.07
February	2,640	194	850	7.02	7.57
March	2,570	80	327	2.70	3.11
April 1–4	1,420	430	816	6.74	1.00

NOTE.—No flow during October.

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.

RECORDS AVAILABLE.—August 1903 to February 1908; May 1929 to March 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 4,450 second-feet Jan. 31 (gage height, 8.35 feet); minimum, 26 second-feet Oct. 9 (gage height, 1.40 feet).

1903–8, 1929–32: Maximum gage height, 14.30 feet Mar. 7, 1930 (discharge not determined); minimum discharge, 26 second-feet Oct. 24–30, Nov. 1–2, 1904, and Oct. 9, 1931 (gage height, 1.40 feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	71	56	78	695	2,070	521	16	71	68	312	605	2,070	312
2	73	66	87	521	1,040	479	17	73	50	695	479	2,560	605
3	71	91	120	401	1,310	440	18	54	53	1,040	420	1,930	650
4	40	87	521	365	1,420	521	19	42	233	995	383	1,360	521
5	46	89	479	365	1,200	479	20	68	150	542	329	1,260	383
6	59	77	280	1,720	795	479	21	71	91	1,140	312	1,860	401
7	56	82	263	2,150	605	460	22	59	78	2,560	312	3,120	1,200
8	48	73	248	1,860	563	401	23	56	84	2,830	312	2,920	895
9	37	84	383	945	500	365	24	46	75	1,140	329	1,540	563
10	30	66	542	695	440	347	25	48	77	605	365	1,040	460
11	40	64	329	563	420	347	26	40	78	329	329	845	401
12	40	80	248	542	695	329	27	43	82	440	563	695	401
13	40	75	190	1,260	695	312	28	64	70	329	563	650	695
14	45	66	280	1,200	845	312	29	71	66	312	795	563	605
15	61	58	329	895	1,720	296	30	71	71	312	2,000	------	695
							31	71	------	650	3,640	------	2,560

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	73	30	55.0	0.201	0.23
November	233	50	81.3	.297	.33
December	2,830	78	600	2.19	2.52
January	3,640	312	836	3.05	3.52
February	3,120	420	1,270	4.64	5.00
March	2,560	296	562	2.05	2.36

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 1932.
EXTREMES.—Maximum discharge during year, 28,700 second-feet Dec. 2[illegible] (gage height, 17.60 feet); minimum, 60 second-feet Oct. 2 (gage height, 2.2 feet).
1923–32: Maximum discharge, 46,900 second-feet Jan. 18, 1925 (gage height, 26.3 feet); minimum, 60 second-feet on 8 days during September 1925 and Oct. 2, 1931 (gage height, 2.2 feet).
REMARKS.—Records good. Slight diurnal regulation during extremely low water caused by small mills upstream. Records collected by Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	110	280	7,010	10,200	2,890	14,800	13,200	1,120	4,040	2,680	740
2	70	110	280	5,380	4,480	2,750	12,300	10,200	990	3,890	1,250	1,520
3	80	110	280	3,310	15,500	2,610	5,080	6,640	990	3,100	1,050	920
4	110	110	5,740	2,400	8,100	3,600	3,600	3,310	990	3,100	1,720	1,860
5	90	110	5,560	1,930	5,380	3,240	3,100	2,540	990	2,890	1,320	1,050
6	80	110	2,540	15,200	4,040	4,180	2,820	2,330	990	2,330	1,950	800
7	80	110	920	10,900	3,240	3,890	2,610	2,060	990	1,930	2,610	680
8	80	110	1,250	6,640	2,960	3,600	2,540	1,930	1,050	3,460	3,600	620
9	110	110	9,140	4,480	2,750	2,960	2,540	1,790	1,050	3,030	2,050	500
10	110	110	5,390	3,170	2,610	2,540	2,400	1,650	990	1,790	1,450	500
11	80	110	2,960	2,610	2,470	2,400	2,330	1,650	920	1,250	1,520	500
12	80	150	1,860	2,200	4,180	2,330	2,270	1,520	860	1,050	1,120	500
13	80	110	2,130	6,640	5,700	2,270	2,200	1,520	7,370	990	920	500
14	80	150	6,290	8,690	4,480	2,200	2,060	1,380	2,680	860	4,180	380
15	80	150	6,490	5,380	7,730	2,060	1,930	1,380	2,540	860	4,130	500
16	80	150	3,600	3,460	8,890	2,060	1,930	1,380	1,930	740	4,100	380
17	80	150	8,280	2,610	8,500	2,130	1,930	1,380	6,320	740	5,850	380
18	80	210	9,770	2,270	7,190	3,600	1,930	1,380	2,610	1,990	4,770	380
19	80	3,890	7,070	2,060	5,080	3,030	1,930	1,380	1,520	1,050	6,130	380
20	80	1,180	4,530	1,930	4,770	2,540	1,860	1,450	1,320	1,050	5,090	560
21	80	620	14,400	1,790	10,200	2,330	1,790	1,790	5,380	1,650	7,370	2,750
22	80	380	26,100	1,720	19,100	10,500	1,790	1,860	4,770	1,050	3,090	4,480
23	80	380	19,900	1,650	13,000	8,890	1,790	1,650	1,860	2,680	1,790	1,790
24	80	380	13,900	2,130	7,190	5,700	1,650	1,520	1,380	1,180	1,390	1,250
25	80	380	6,000	2,130	5,230	4,330	2,130	1,380	1,380	2,270	1,120	1,120
26	90	280	3,600	1,990	4,180	3,030	5,850	1,380	2,750	1,450	990	2,200
27	110	280	2,540	5,380	3,600	2,610	4,480	1,450	3,890	4,180	990	1,120
28	80	280	2,270	4,620	3,310	5,700	3,100	2,130	1,790	5,850	1,790	1,120
29	80	280	1,860	3,170	3,100	4,480	2,400	1,450	1,590	4,180	990	2,130
30	80	280	1,720	15,000	-------	3,170	2,330	1,250	1,650	2,400	870	1,590
31	90	-------	6,000	12,300	-------	12,000	-------	1,120	-------	1,790	710	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	110	70	84.5	0.051	0.06
November	3,890	110	363	.219	.24
December	26,100	280	5,890	3.55	4.09
January	15,200	1,650	4,840	2.92	3.37
February	19,100	2,470	6,450	3.89	4.20
March	12,000	2,060	3,860	2.33	2.69
April	14,800	1,650	3,320	2.00	2.23
May	13,200	1,120	2,490	1.50	1.73
June	7,370	860	2,160	1.30	1.45
July	5,850	740	2,220	1.34	1.54
August	7,370	740	2,530	1.52	1.75
September	4,480	380	1,110	.669	.75
The year	26,100	70	2,940	1.77	24.10

TALLAPOOSA RIVER BELOW TALLASSEE, ALA.

LOCATION.—Water-stage recorder in T. 18 N., R. 22 E., 1½ miles below highway bridge at Tallassee. Zero of gage is 162.03 feet above mean sea level.

DRAINAGE AREA.—3,320 square miles.

RECORDS AVAILABLE.—July 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 25,700 second-feet Apr. 1 (gage height, 20.6 feet); minimum, 30 second-feet for several hours at times during year (gage height, −1.0 foot).

1928–32: Maximum discharge, 115,000 second-feet Mar. 15, 1929 (gage height, 51.35 feet); minimum, 10 second-feet June 3–4, 1930, and at times during 1931 (gage height, −1.2 feet).

REMARKS.—Records good. Considerable regulation caused by operation of power plants upstream. Records collected by Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,230	122	2,340	1,790	720	2,760	24,000	10,900	1,490	8,640	5,650	4,250
2	4,910	3,950	2,340	1,260	690	2,250	15,700	15,100	4,850	8,010	7,610	[a]1,630
3	4,850	3,720	2,300	230	715	444	12,700	9,080	2,880	8,120	[a]6,430	[a]1,380
4	219	3,800	1,220	821	1,070	1,830	8,210	8,590	3,240	7,260	[a]6,410	[a]130
5	3,660	3,640	70	664	757	5,860	2,980	[a]2,100	107	8,050	[a]3,950	[a]4,870
6	3,970	3,780	55	[a]1,840	477	6,850	4,550	[a]1,090	1,590	8,310	[a]220	[a]7,360
7	3,900	3,600	55	[a]2,490	527	6,840	5,140	3,360	3,820	8,480	[a]250	[a]6,710
8	4,530	960	55	[a]860	730	6,470	4,160	2,820	5,640	3,820	[a]1,570	7,540
9	6,030	4,090	95	[a]630	480	6,750	3,830	4,160	5,100	895	[a]1,660	7,400
10	4,780	3,450	390	394	535	5,560	3,070	2,640	4,360	352	[a]1,770	7,750
11	180	3,500	58	773	431	5,480	5,470	2,600	6,210	524	[a]550	421
12	4,450	3,410	86	615	288	3,670	4,840	2,220	1,140	495	[a]520	5,990
13	6,640	3,370	255	[a]2,290	508	2,620	3,750	1,760	1,200	464	[a]220	7,950
14	6,380	3,430	863	[a]2,280	430	2,030	4,200	330	7,760	448	[a]150	8,460
15	6,210	975	386	1,010	661	1,890	2,960	150	8,450	523	[a]5,410	8,620
16	6,070	3,730	[a]1,480	825	753	2,480	3,220	2,230	8,520	141	[a]7,200	8,750
17	4,910	2,340	69	549	769	2,420	560	1,950	8,420	72	[a]9,000	8,460
18	159	2,410	30	642	381	4,790	1,680	2,210	5,820	1,670	10,000	4,600
19	3,680	2,330	30	523	284	4,730	5,970	3,000	1,090	7,670	9,010	6,400
20	3,630	2,520	30	573	219	4,800	5,410	4,740	1,340	8,210	7,280	9,480
21	3,800	2,580	[a]1,080	432	[a]750	3,420	4,010	10,300	477	2,940	7,230	9,200
22	3,600	1,040	[a]3,100	252	[a]6,370	4,430	1,750	8,600	546	915	9,010	6,660
23	3,640	2,980	1,380	177	[a]9,980	10,300	518	3,510	523	290	8,680	4,280
24	3,600	2,200	920	270	[a]9,000	11,500	187	1,630	426	105	8,630	690
25	155	2,320	301	634	[a]10,200	7,410	1,680	2,380	130	1,660	8,420	111
26	3,610	2,350	710	608	[a]10,000	2,260	5,630	1,270	142	1,790	8,410	4,320
27	3,660	2,360	182	528	[a]8,910	3,060	10,400	1,320	1,690	2,000	6,980	4,180
28	3,710	2,260	151	551	[a]7,010	9,150	6,030	1,510	8,810	2,460	1,090	3,940
29	3,680	985	644	472	6,860	9,580	4,440	3,250	9,380	3,940	2,060	3,780
30	3,490	2,600	43	639	-------	3,230	5,630	2,520	8,030	2,610	1,130	530
31	3,640	-------	1,100	825	-------	11,800	-------	1,480	-------	1,070	2,020	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,640	155	3,900	1.17	1.35
November	4,090	122	2,690	.810	.90
December	3,100	30	704	.212	.24
January	2,490	177	853	.257	.30
February	10,200	219	2,780	.873	.90
March	11,800	444	5,050	1.52	1.75
April	24,000	187	5,420	1.63	1.82
May	15,100	150	3,830	1.15	1.33
June	9,380	107	3,770	1.14	1.27
July	8,640	72	3,290	.991	1.14
August	10,000	150	4,790	1.44	1.66
September	9,480	111	5,190	1.56	1.74
The year	24,000	30	3,520	1.06	14.40

[a] Discharge determined from kilowatt output and spillway discharge at Thurlow Dam.

CAHABA RIVER AT CENTERVILLE, ALA.

LOCATION.—Staff gage in T. 23 N., R. 9 E., a quarter of a mile west of Centerville. Zero of gage is 181.6 feet above mean sea level.

DRAINAGE AREA.—1,030 square miles.

RECORDS AVAILABLE.—August 1901 to February 1908; May 1929 to March 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 37,600 second-feet Mar. 31 (gage height, 30.1 feet); minimum, 123 second-feet Nov. 12–14 (gage height, 0.79 foot).

1901–8, 1929–32: Maximum discharge, 70,100 second-feet Mar. 28, 1902 (gage height, 35.55 feet, present datum); minimum, 90 second-feet Oct. 24–29, 1904 (gage height, −0.35 foot, present datum).

Maximum stage known, 36.20 feet, present datum, July 8, 1916 (discharge, 74,200 second-feet).

REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb	Mar.
1	130	130	171	3,900	7,960	1,620	16	130	130	742	2,200	10,900	742
2	130	130	171	2,380	4,380	1,450	17	130	130	1,710	1,840	9,230	814
3	130	130	180	1,620	6,120	1,410	18	130	162	3,100	1,540	8,520	888
4	130	130	396	1,240	5,700	2,710	19	130	171	2,150	1,290	6,540	964
5	130	130	1,040	1,120	3,480	2,060	20	130	171	2,330	1,120	4,920	814
6	130	130	814	16,900	2,610	1,620	21	130	180	6,820	1,040	7,540	850
7	154	130	318	12,800	2,060	1,370	22	130	180	9,320	964	15,800	4,200
8	171	130	294	7,380	1,920	1,160	23	130	171	5,980	964	12,300	2,750
9	154	130	670	4,200	1,620	1,120	24	130	154	2,610	1,620	7,170	1,790
10	154	130	814	2,800	1,450	1,040	25	130	154	1,790	1,620	4,200	1,450
11	154	130	606	2,150	1,290	964	26	130	146	1,410	1,450	3,000	1,330
12	146	123	423	1,840	1,880	926	27	130	146	1,040	2,610	2,470	1,580
13	146	123	318	5,460	2,100	888	28	130	146	888	2,710	2,100	2,330
14	146	123	606	4,680	1,790	850	29	130	146	814	2,330	1,840	1,330
15	138	130	814	2,900	8,440	814	30	130	146	742	14,600	------	1,200
							31	130	------	2,240	14,000	------	28,300

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	171	130	136	0.132	0.15
November	180	123	142	.138	.15
December	9,320	171	1,660	1.61	1.86
January	16,900	964	3,980	3.86	4.45
February	15,800	1,290	5,150	5.00	5.39
March	28,300	742	2,300	2.23	2.57

EAST FORK OF TOMBIGBEE RIVER NEAR FULTON, MISS.

LOCATION.—Chain gage in T. 9 S., R. 8 E., at highway bridge 2 miles west of Fulton.

DRAINAGE AREA.—650 square miles.

RECORDS AVAILABLE.—August 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 19,600 second-feet Sept. 28 (gage height, 18.52 feet); minimum, 26 second-feet Oct. 2 (gage height, 1.13 feet).

1928–32: Maximum discharge, that of Sept. 28, 1932; minimum, 14 second-feet Aug. 12, 1930 (gage height, 0.87 foot).

REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	60	511	1,420	5,150	1,030	2,170	1,820	137	850	138	154
2	28	54	511	1,400	3,570	880	2,870	1,700	130	1,360	122	370
3	29	51	696	1,270	5,380	805	2,270	1,640	130	9,600	99	1,380
4	30	51	1,360	977	7,430	1,340	1,720	1,540	122	4,170	130	2,020
5	32	54	1,500	896	4,340	1,460	1,440	1,190	114	3,200	92	4,520
6	31	54	1,400	1,460	2,690	1,440	1,080	777	103	3,320	85	2,530
7	35	51	1,250	2,000	2,000	1,360	791	522	90	3,070	78	1,520
8	40	51	1,290	2,390	1,700	1,150	960	401	114	2,870	68	820
9	38	54	1,640	1,930	1,520	912	1,520	360	122	2,530	68	390
10	38	57	2,170	1,640	1,360	722	1,640	370	170	2,000	64	197
11	35	57	3,320	1,340	1,210	610	1,870	320	137	1,640	64	138
12	50	60	2,690	1,030	1,320	577	1,720	280	122	1,170	60	122
13	35	60	3,600	2,040	1,340	533	1,460	260	103	683	60	106
14	33	64	8,980	11,500	1,440	511	1,100	251	90	401	60	92
15	35	60	13,300	5,640	2,230	489	777	233	92	270	197	88
16	35	60	6,810	3,320	4,520	467	577	215	122	215	412	82
17	34	64	3,720	2,690	5,900	478	500	206	130	188	401	82
18	35	197	2,870	2,170	7,740	544	670	179	103	162	412	92
19	34	300	2,390	1,780	5,150	511	835	179	92	138	912	78
20	34	445	1,870	1,600	2,390	467	722	188	82	130	850	179
21	34	709	1,700	1,360	2,970	445	588	197	103	122	456	577
22	34	500	1,560	1,140	4,720	588	489	206	114	114	233	456
23	33	270	1,460	1,310	6,810	683	423	215	82	106	162	233
24	38	179	1,500	1,750	3,440	511	401	215	77	99	130	162
25	38	154	2,140	2,530	2,390	434	709	206	77	215	146	130
26	38	138	4,170	2,390	1,820	401	1,340	206	122	300	154	434
27	40	130	3,320	2,690	1,620	423	1,580	320	142	260	522	1,430
28	54	260	2,270	3,720	1,420	709	1,870	310	154	290	696	12,700
29	74	290	1,750	3,440	1,230	683	1,930	233	143	270	489	14,600
30	106	390	1,480	5,380	-------	622	1,870	179	260	170	242	5,380
31	88	-------	1,290	10,800	-------	1,460	-------	154	-------	138	179	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	106	28	40.6	0.062	0.07
November	709	51	164	.252	.28
December	13,300	511	2,730	4.20	4.84
January	11,500	896	2,740	4.22	4.86
February	7,740	1,210	3,270	5.03	5.42
March	1,460	401	750	1.15	1.33
April	2,870	401	1,260	1.94	2.16
May	1,820	154	486	.748	.86
June	260	78	121	.186	.21
July	9,600	99	1,290	1.98	2.28
August	912	60	251	.386	.44
September	14,600	78	1,700	2.62	2.92
The year	14,600	28	1,230	1.89	25.67

TOMBIGBEE RIVER AT ABERDEEN, MISS.

LOCATION.—Chain gage at St. Louis-San Francisco Railway bridge in Aberdeen, Monroe County, half a mile below Matubby Creek.

DRAINAGE AREA.—2,210 square miles.

RECORDS AVAILABLE.—August 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 33,100 second-feet Dec. 16 (gage height, 39.61 feet); minimum, 94 second-feet Oct. 1–4 (gage height, 1.64 feet).

1928–32: Maximum discharge, that of Dec. 16, 1931; minimum discharge, 61 second-feet Aug. 8, 1930.

Maximum stage known, 44.0 feet Apr. 20, 1892 (discharge not determined).

REMARKS.—Records good except those for low stages, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	190	944	7,660	19,600	7,060	11,200	3,940	502	1,480	1,570	554
2	94	203	1,050	7,360	18,700	5,160	11,800	3,390	450	5,910	762	1,670
3	94	177	1,860	5,820	21,200	3,980	10,300	3,460	424	7,360	606	7,610
4	94	156	4,670	4,430	23,000	4,670	8,860	3,530	398	8,150	632	7,710
5	101	136	4,990	4,090	20,200	6,520	7,710	3,320	398	8,260	606	7,820
6	101	129	3,610	7,260	16,600	6,610	6,570	2,890	372	9,160	424	7,110
7	114	129	3,030	9,040	14,500	5,120	4,750	2,430	346	10,500	346	5,330
8	123	131	3,390	9,720	13,000	3,900	4,130	1,990	346	16,400	333	4,430
9	141	143	7,360	8,320	11,100	3,350	3,940	1,390	346	19,600	307	3,680
10	125	146	8,800	6,860	9,340	2,990	3,140	1,070	346	18,500	268	2,960
11	105	141	9,660	5,770	7,710	2,640	2,920	970	450	15,800	268	2,090
12	106	138	8,740	5,290	6,710	2,300	2,850	970	606	13,200	255	1,160
13	123	148	8,440	7,210	6,370	2,060	2,780	840	554	10,700	255	814
14	114	141	14,900	10,700	6,140	1,930	2,810	736	476	8,740	242	736
15	114	156	24,900	15,800	9,590	1,800	2,740	684	372	5,510	632	528
16	105	159	32,600	15,700	13,800	1,730	2,530	632	320	2,570	762	502
17	103	146	31,600	14,400	20,200	1,670	2,160	606	424	1,360	1,360	450
18	101	229	28,600	13,400	22,200	1,670	1,730	580	346	1,020	1,360	424
19	101	450	23,600	11,800	22,200	1,640	1,860	554	450	840	3,070	398
20	101	476	18,100	10,200	19,800	1,640	1,800	554	372	710	2,090	892
21	103	314	14,500	8,320	18,700	1,540	1,800	580	294	632	1,770	2,230
22	101	1,050	12,500	6,470	21,400	1,540	1,700	606	320	580	1,130	1,640
23	99	866	10,800	6,090	24,300	1,640	1,420	606	307	528	918	1,540
24	101	710	9,850	8,860	20,900	1,610	1,240	684	307	476	580	1,070
25	103	476	10,400	9,100	16,400	1,540	1,540	710	268	502	450	762
26	103	398	10,500	8,980	14,200	1,360	2,960	710	684	558	502	632
27	108	333	9,850	9,660	12,500	1,360	2,530	788	1,700	1,210	866	4,510
28	125	320	8,260	11,100	10,600	1,770	2,330	1,020	1,050	1,990	1,210	7,610
29	125	346	7,210	13,000	8,860	1,830	2,230	866	710	2,090	1,050	9,980
30	177	658	6,370	15,000	-------	3,140	2,780	762	866	1,190	1,130	10,700
31	177	-------	6,140	18,700	-------	8,740	-------	606	-------	1,610	814	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	177	94	112	0.051	0.06
November	1,050	129	323	.146	.16
December	32,600	944	11,200	5.07	5.84
January	18,700	4,090	9,550	4.32	4.98
February	24,300	6,140	15,500	7.01	7.56
March	8,740	1,360	3,050	1.38	1.59
April	11,800	1,240	3,900	1.76	1.96
May	3,940	554	1,370	.620	.71
June	1,700	268	493	.223	.25
July	19,600	476	5,720	2.59	2.99
August	3,070	242	857	.388	.45
September	10,700	398	3,250	1.47	1.64
The year	32,600	94	4,580	2.07	28.19

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 1932.

EXTREMES.—Maximum discharge during year, 54,700 second-feet Dec. 20 (gage height, 26.74 feet); minimum, 275 second-feet Oct. 1–4 (gage height, −3.50 feet).

1900–12, 1928–32: Maximum gage height recorded, 30.6 feet Mar. 31, 1902 (discharge not determined); minimum discharge not determined.

Maximum stage known, 38.6 feet Apr. 8, 1892 (discharge not determined).

REMARKS.—Records fair.

Discharge, in second-feet, 1928–29, 1931–32

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1928			1928			1928		
1	-------	1,110	11	-------	1,000	21	-------	560
2	-------	}	12	-------	1,000	22	-------	560
3	-------	a3,200	13	-------	900	23	-------	a 560
4	-------	}	14	-------	850	24	-------	560
5	-------	5,200	15	-------	760	25	-------	560
6	-------	2,750	16	-------	a 760	26	-------	560
7	-------	2,000	17	-------	760	27	-------	560
8	-------	1,590	18	-------	760	28	2,000	560
9	-------	a 1,300	19	-------	640	29	2,000	560
10	-------	1,000	20	-------	640	30	2,000	560
						31	1,410	-------

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1928–29												
1	560	760	1,000	950	8,680	14,800	18,400	7,750	2,510	2,280	1,590	360
2	a 560	760	950	900	6,450	14,100	13,400	9,660	1,790	1,590	1,790	345
3	560	760	900	1,000	4,450	11,200	8,400	10,900	1,650	1,230	1,720	345
4	640	a 700	850	1,050	3,470	10,800	6,060	10,800	1,470	1,530	1,350	345
5	760	640	1,050	1,170	3,020	10,900	5,560	11,200	1,350	1,470	1,000	345
6	760	640	1,170	1,590	2,930	11,200	4,650	11,600	1,410	1,790	760	345
7	a 700	640	1,110	2,000	2,750	11,300	4,550	11,900	1,350	1,530	680	405
8	640	640	1,000	2,070	2,750	9,800	4,250	9,940	1,170	1,230	720	455
9	a 600	760	950	2,070	2,590	7,750	4,050	8,400	1,110	1,230	640	525
10	560	760	900	2,750	2,590	7,100	3,650	9,380	1,170	1,290	600	1,000
11	560	a 760	850	3,470	2,670	5,800	5,560	9,940	1,170	1,000	1,350	1,110
12	560	760	850	4,050	2,590	5,200	5,800	7,880	1,230	1,170	2,430	1,230
13	560	760	850	3,290	2,350	7,750	7,100	7,750	1,110	1,650	2,280	1,230
14	a 560	680	960	3,020	2,210	20,300	5,090	8,680	1,000	1,350	2,000	1,290
15	560	640	1,000	2,350	3,650	28,000	4,760	9,100	950	1,050	1,410	2,430
16	560	680	1,170	2,000	4,980	36,900	5,560	6,970	1,110	1,050	1,000	2,000
17	560	680	1,290	1,790	5,200	45,500	7,220	6,710	1,110	1,050	880	2,070
18	680	850	1,290	2,280	5,560	50,500	6,580	5,800	950	1,350	a 760	2,350
19	1,230	1,050	1,410	2,510	4,250	44,700	5,680	5,320	850	1,350	680	2,000
20	1,110	1,530	1,530	2,750	3,950	38,300	4,760	7,100	800	1,170	680	2,070
21	a1,060	2,750	1,650	3,020	9,380	32,700	4,650	8,140	1,000	1,350	525	1,860
22	1,000	2,430	1,590	3,950	13,500	31,600	4,550	6,580	950	1,410	525	1,350
23	1,000	2,000	1,410	3,650	14,400	36,600	4,150	5,320	900	1,290	490	1,170
24	900	1,530	1,290	5,320	13,200	50,500	3,650	4,150	1,080	1,000	455	900
25	1,290	1,170	1,170	11,200	11,900	75,000	4,250	3,200	1,350	900	405	760
26	1,110	1,050	1,050	15,000	9,520	83,000	8,680	2,670	1,650	850	405	560
27	1,000	1,000	1,050	16,200	11,200	63,500	10,600	2,590	4,550	800	405	1,000
28	a1,000	850	1,000	15,600	14,100	50,500	8,680	2,840	3,950	900	405	1,000
29	1,000	1,000	1,000	15,300	-------	38,900	6,060	3,020	4,050	1,000	375	1,000
30	850	1,000	1,000	14,100	-------	31,300	5,930	3,020	3,470	1,230	375	800
31	760	-------	1,000	11,500	-------	23,800	-------	2,750	-------	1,290	360	-------

a Estimated.

Discharge, in second-feet, of Tombigbee River at Columbus, Miss., 1928–29, 1931–32—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1931–32												
1	275	525	3,380	14,700	32,700	20,000	21,600	4,450	1,290	1,530	2,510	1,290
2	275	525	4,250	15,800	33,600	14,000	25,900	5,800	1,110	6,840	2,580	4,550
3	275	490	4,760	16,000	35,100	9,800	28,200	5,800	1,000	9,940	1,790	16,500
4	275	455	8,820	14,600	34,800	7,750	28,400	5,440	950	12,900	1,230	20,600
5	288	375	11,100	11,600	34,600	9,660	25,200	4,980	900	14,800	1,350	22,500
6	300	375	12,200	14,600	35,600	11,600	18,500	4,450	900	14,800	1,110	23,200
7	330	375	8,960	17,000	33,900	12,500	12,900	3,750	800	14,800	900	21,900
8	455	390	8,270	21,100	31,300	10,100	8,960	3,200	760	17,900	900	16,500
9	525	390	14,600	21,300	26,600	7,230	7,100	2,750	760	19,000	800	9,240
10	680	390	16,800	20,800	22,400	6,190	6,580	2,140	900	21,900	800	5,090
11	900	390	18,400	18,500	18,200	5,320	5,800	2,000	950	23,800	760	4,150
12	680	390	19,000	14,600	14,800	4,760	4,980	1,930	1,050	25,200	720	3,020
13	525	390	19,000	14,200	13,000	4,150	4,760	1,590	1,230	24,400	680	2,070
14	455	390	19,000	15,200	12,900	3,950	4,650	1,470	1,230	19,800	640	1,590
15	390	390	19,700	17,100	23,500	3,750	4,550	1,350	1,050	13,200	640	1,350
16	360	390	23,300	20,300	27,700	3,560	4,250	1,290	950	7,750	900	1,230
17	330	390	30,900	22,900	32,500	3,470	3,850	1,270	800	3,200	1,000	1,110
18	330	455	41,200	23,000	36,900	3,380	3,470	1,110	1,000	2,140	2,510	1,050
19	375	490	51,700	20,600	41,500	3,380	3,200	1,110	1,110	1,790	4,650	1,050
20	375	800	53,500	17,900	45,500	3,380	3,200	1,110	1,110	1,530	5,800	1,650
21	375	1,050	46,500	14,800	48,000	3,290	3,200	1,290	850	1,350	6,190	3,380
22	360	1,590	39,800	12,600	50,500	3,200	3,110	1,410	800	1,230	5,800	4,550
23	315	1,410	33,900	10,500	51,700	3,290	2,840	1,410	800	1,230	4,550	4,550
24	300	1,170	27,800	21,300	49,000	3,470	2,510	1,350	720	1,110	2,140	3,200
25	345	1,000	22,200	22,200	45,500	3,650	2,280	1,350	900	1,050	1,350	2,140
26	330	800	19,300	23,500	40,100	3,380	2,280	1,470	800	1,110	1,110	1,650
27	330	720	17,900	24,900	34,800	3,020	4,250	1,470	1,590	1,470	1,230	2,140
28	288	640	15,900	25,900	28,800	2,840	3,950	1,650	3,470	2,210	2,000	11,600
29	360	640	13,500	27,100	23,300	3,470	3,650	2,350	3,470	2,930	2,280	13,600
30	455	1,010	12,000	28,800	-------	3,950	3,470	2,140	2,280	3,110	2,070	14,100
31	490	-------	12,300	30,900	-------	14,000	-------	1,290	-------	2,590	1,720	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
1928					
September	5,200	560	1,270	0.283	0.32
1928–29					
October	1,290	560	782	.174	.20
November	2,750	640	1,010	.225	.25
December	1,650	850	1,110	.247	.28
January	16,200	900	5,090	1.13	1.30
February	14,400	2,210	6,220	1.39	1.45
March	83,000	5,200	29,300	6.53	7.53
April	18,400	3,650	6,410	1.43	1.60
May	11,900	2,590	7,130	1.59	1.83
June	4,550	800	1,610	.359	.40
July	2,280	800	1,270	.283	.33
August	2,430	360	936	.208	.24
September	2,430	345	1,090	.243	.27
The year	83,000	345	5,190	1.16	15.68
1931–32					
October	900	275	398	.089	.10
November	1,590	375	626	.139	.16
December	53,500	3,380	21,000	4.68	5.40
January	30,900	10,500	19,200	4.28	4.93
February	51,700	12,900	33,100	7.37	7.95
March	20,000	2,840	6,310	1.41	1.63
April	28,400	2,280	8,590	1.91	2.13
May	5,800	1,110	2,390	.532	.61
June	3,470	720	1,180	.263	.29
July	25,200	1,050	8,920	1.99	2.29
August	6,190	640	2,020	.450	.52
September	23,200	1,050	7,350	1.64	1.83
The year	53,500	275	9,170	2.04	27.84

NOTE.—Records of discharge Aug. 28, 1928, to Sept. 30, 1929, supersede those published in Water-Supply Papers 662 and 682.

TOMBIGBEE RIVER NEAR COATOPA, ALA.

LOCATION.—Chain gage in T. 17 N., R. 1 E., at Moscow Memorial Bridge, 2 miles above Sucarnoochee Creek and 5 miles southeast of Coatopa.
DRAINAGE AREA.—15,500 square miles.
RECORDS AVAILABLE.—August 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 124,000 second-feet Feb. 29, Mar. 1 (gage height, 46.8 feet); minimum, 371 second-feet Oct. 1 (gage height, 2.32 feet).

1928–32: Maximum discharge, 179,000 second-feet Mar. 29, 1929 (gage height, 51.4 feet); minimum, that of Oct. 1, 1931.
REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	382	773	2,050	52,400	81,100	124,000	53,200	23,600	7,890	9,700	7,620	6,510
2	424	825	4,340	48,000	83,700	122,000	62,600	30,000	6,510	9,200	6,510	15,000
3	444	1,030	7,890	45,200	86,900	116,000	69,100	32,600	5,140	12,800	5,680	23,800
4	478	1,250	9,950	42,700	89,800	111,000	73,900	33,800	4,080	22,200	5,410	32,200
5	582	1,410	11,900	40,200	91,800	103,000	77,500	30,900	3,820	29,200	4,340	35,800
6	512	1,250	17,500	47,500	92,300	93,900	79,100	24,500	3,560	33,600	4,340	37,400
7	536	1,100	21,800	57,100	93,400	83,300	78,300	17,300	3,180	36,600	4,340	37,400
8	786	1,030	20,800	62,800	93,900	71,300	75,300	12,800	2,810	38,800	4,340	35,600
9	1,030	1,100	17,900	65,000	94,400	59,000	68,700	11,400	3,050	39,600	4,340	33,600
10	1,250	1,100	17,300	67,100	93,900	49,400	60,500	9,700	3,050	40,600	3,820	30,400
11	1,330	1,180	23,800	68,400	92,300	41,300	49,400	8,430	3,820	40,700	3,560	24,300
12	1,330	1,100	27,100	68,700	88,800	32,900	40,700	7,620	4,340	40,300	3,050	13,900
13	1,950	960	27,500	68,700	84,200	23,000	32,600	6,790	4,870	37,500	2,470	7,890
14	1,580	960	27,300	66,800	79,100	16,300	23,900	6,230	5,680	34,700	2,360	5,950
15	1,500	960	27,600	63,100	73,900	13,700	18,100	5,410	5,950	32,800	2,050	4,870
16	1,250	1,100	32,600	60,200	70,700	12,600	14,800	4,870	5,410	31,100	2,150	4,080
17	1,180	1,180	39,300	57,300	70,300	12,400	13,500	4,340	4,870	27,100	4,340	3,560
18	1,100	1,330	44,300	53,800	73,600	11,900	12,400	4,080	4,870	17,700	5,410	3,180
19	1,030	1,250	47,500	49,600	77,500	11,700	11,400	3,560	5,410	9,200	8,950	2,810
20	799	1,580	51,800	45,400	81,600	11,900	10,400	4,340	4,870	6,510	15,400	3,050
21	747	1,500	56,400	42,700	87,400	11,900	9,950	5,680	4,340	5,140	18,900	4,080
22	734	1,580	60,500	39,900	95,400	15,600	9,950	7,070	3,820	4,870	20,800	5,410
23	695	2,360	64,200	37,200	102,000	16,100	9,700	8,700	3,560	3,820	14,800	8,430
24	547	2,580	66,500	38,000	107,000	16,500	9,450	12,800	3,180	2,930	11,400	10,200
25	670	2,930	69,100	40,400	111,000	17,500	8,700	14,800	2,810	3,820	9,700	8,950
26	786	2,810	70,700	44,000	114,000	16,300	8,700	12,400	3,300	4,870	7,620	7,350
27	747	2,580	70,700	49,200	119,000	13,900	8,950	13,000	4,080	4,340	5,950	6,230
28	852	2,260	69,400	54,000	122,000	12,600	10,200	17,300	7,070	4,600	5,410	5,950
29	825	1,950	65,600	59,000	124,000	11,700	11,700	18,300	9,200	5,140	7,070	9,450
30	825	1,950	60,500	68,400	-------	11,200	15,000	15,600	10,200	6,510	7,350	16,700
31	812	-------	56,400	77,200	-------	37,000	-------	11,200	-------	7,620	6,510	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,950	382	894	0.058	0.07
November	2,930	773	1,500	.097	.11
December	70,700	2,050	38,400	2.48	2.86
January	77,200	37,200	54,200	3.50	4.04
February	124,000	70,300	92,200	5.95	6.42
March	124,000	11,200	42,000	2.71	3.12
April	79,100	8,700	34,300	2.21	2.47
May	33,800	3,560	13,500	.871	1.00
June	10,200	2,810	4,820	.311	.35
July	40,700	2,930	19,500	1.26	1.45
August	20,800	2,050	6,970	.450	.52
September	37,400	2,810	14,800	.955	1.07
The year	124,000	382	26,700	1.72	23.48

TOMBIGBEE RIVER NEAR LEROY, ALA.

LOCATION.—Staff gage just above Lock 1, in T. 7 N., on St. Stephens meridian, 6 miles northwest of Leroy. Zero of gage is 4.69 feet below mean sea level.
DRAINAGE AREA.—19,100 square miles.
RECORDS AVAILABLE.—October 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 120,000 second-feet Mar. 5–6 (gage height, 40.80 feet); minimum, 800 second-feet (estimated) Oct. 14.
1928–32: Maximum discharge, 190,000 second-feet Apr. 2, 1929 (gage height, 46.0 feet); minimum not determined.
REMARKS.—Records good for high stages and fair for low and medium stages. Discharge estimated Oct.4–6.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	1,060	2,250	72,700	79,700	108,000	33,100	25,000	17,200	12,300	9,370	8,850
2	1,020	1,060	2,510	71,500	76,400	113,000	45,500	28,200	12,300	12,300	9,9[illegible]	16,500
3	1,040	1,100	4,830	67,400	78,400	116,000	52,700	30,000	9,370	11,600	8,8[illegible]	28,800
4	800	1,340	10,500	63,600	80,400	118,000	58,000	32,000	7,870	17,200	7,870	33,100
5	1,000	1,660	16,500	59,500	82,400	120,000	62,500	33,100	6,050	24,400	7,400	37,300
6	1,200	1,880	19,000	67,400	83,800	120,000	66,800	32,800	5,220	28,000	6,9[illegible]	38,200
7	1,280	1,880	22,900	75,200	84,600	117,000	70,300	30,000	4,830	30,500	6,050	38,500
8	1,060	1,880	25,300	77,800	85,400	111,000	72,700	25,600	4,830	33,400	5,630	38,500
9	1,100	1,880	26,800	77,100	86,200	104,000	74,500	20,100	4,640	36,100	6,050	37,900
10	1,340	1,880	26,200	75,800	87,900	96,800	75,800	15,800	5,220	38,200	6,050	36,100
11	1,660	1,770	25,600	75,200	88,800	88,800	75,800	12,900	8,350	39,900	5,220	34,000
12	1,880	1,660	27,100	75,200	89,700	78,400	72,100	11,000	9,910	40,600	4,2[illegible]	30,000
13	2,120	1,660	28,800	75,800	89,700	65,200	65,200	9,910	9,910	41,300	3,73[illegible]	23,300
14	2,380	1,660	30,200	77,100	89,700	51,900	55,300	8,850	7,870	40,600	3,40[illegible]	13,600
15	2,380	1,550	31,800	77,100	89,700	40,600	45,500	7,870	7,870	38,500	3,00[illegible]	8,850
16	2,000	1,440	32,000	77,100	88,800	32,500	36,700	6,940	7,870	36,700	3,00[illegible]	6,940
17	1,660	1,440	35,800	75,200	85,400	27,400	29,600	6,490	8,350	34,600	4,0[illegible]	6,050
18	1,440	1,440	41,300	73,300	83,800	22,000	24,400	6,050	8,350	31,800	6,0[illegible]	4,830
19	1,340	1,550	45,200	70,900	83,100	19,000	19,000	6,050	7,870	26,800	7,87[illegible]	4,450
20	1,240	1,550	48,300	67,400	83,100	17,800	16,500	6,050	7,870	17,800	11,0[illegible]	4,450
21	1,240	1,770	52,300	63,600	83,800	17,200	15,100	7,870	8,850	9,910	19,0[illegible]	5,020
22	1,240	1,770	56,200	59,500	88,800	19,000	13,600	12,300	6,940	7,870	22,50[illegible]	6,050
23	1,210	2,000	61,000	54,800	92,600	22,000	12,900	21,600	6,050	6,050	23,30[illegible]	8,850
24	1,130	2,790	64,100	53,100	96,800	22,900	12,300	22,000	5,630	5,630	20,600	12,300
25	1,060	3,090	66,300	52,700	97,900	22,500	12,300	24,400	4,830	5,630	16,500	12,900
26	1,060	2,790	68,000	52,300	99,000	22,500	11,600	24,700	4,450	6,050	12,300	11,000
27	1,060	2,790	69,700	52,700	101,000	21,600	11,600	24,400	4,450	6,940	11,000	9,370
28	1,060	2,790	70,900	55,300	104,000	20,100	11,600	24,400	5,630	6,940	7,870	8,350
29	1,060	2,510	72,100	58,500	106,000	18,400	12,900	25,300	8,850	6,940	7,400	8,850
30	1,060	2,250	72,700	63,600	-------	17,200	19,000	25,000	11,600	7,870	7,870	13,600
31	1,060	-------	73,300	68,500	-------	20,600	-------	22,900	-------	8,850	8,850	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,380	800	1,330	0.070	0.08
November	3,090	1,060	1,860	.097	.11
December	73,300	2,250	39,700	2.08	2.40
January	77,800	52,300	67,300	3.52	4.06
February	106,000	76,400	88,500	4.63	4.99
March	120,000	17,200	57,800	3.03	3.49
April	75,800	11,600	39,500	2.07	2.31
May	33,100	6,050	19.000	.995	1.15
June	17,200	4,450	7,630	.399	.45
July	41,300	5,630	21,700	1.14	1.31
August	23,300	3,090	9,130	.478	.55
September	38,500	4,450	18,200	.953	1.06
The year	120,000	800	30,800	1.61	21.96

BUTTAHATCHIE RIVER NEAR CALEDONIA, MISS.

LOCATION.—Staff gage in T. 16 S., R. 17 W., at highway bridge 2 miles northwest of Caledonia and 12 miles above mouth.

DRAINAGE AREA.—830 square miles.

RECORDS AVAILABLE.—August 1928 to May 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 13,100 second-feet Feb. 18 (gage height, 15.30 feet); minimum, 87 second-feet Oct. 1–3 (gage height, 2.42 feet).

1928–32: Maximum discharge, 29,600 second-feet Nov. 15, 1929 (gage height, 17.30 feet); minimum, 87 second-feet Sept. 30, Oct. 1–3, 1931 (gage height, 2.42 feet).

REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	89	266	870	2,100	6,870	2,220	3,340	1,120
2	87	216	1,400	2,680	7,030	1,920	7,350	1,600
3	89	190	1,400	3,340	6,280	1,700	8,690	1,360
4	89	178	1,500	4,010	5,490	1,700	5,490	940
5	91	178	1,800	3,420	6,870	1,860	3,830	765
6	93	176	2,160	2,960	7,030	2,280	2,680	670
7	123	173	1,920	3,030	5,370	2,100	1,980	640
8	240	170	1,320	3,920	4,290	1,650	1,650	580
9	550	168	1,360	5,370	3,420	1,400	1,500	550
10	550	173	1,750	5,250	2,820	1,320	1,650	520
11	316	170	2,890	3,660	2,280	1,200	1,450	490
12	228	176	3,340	2,470	2,160	1,120	1,320	460
13	190	178	2,960	2,280	2,280	1,080	1,240	430
14	168	178	1,860	2,470	3,420	1,040	1,080	430
15	158	190	2,610	3,030	4,590	1,010	1,010	403
16	153	190	7,710	3,500	5,250	975	975	378
17	148	190	8,690	2,960	8,890	975	905	366
18	146	253	7,030	2,160	12,300	975	870	366
19	133	316	5,490	1,800	8,890	1,010	870	353
20	140	640	5,250	1,650	7,710	940	870	390
21	130	490	5,250	1,450	7,030	905	800	430
22	130	378	4,190	1,280	6,140	975	800	460
23	136	378	3,030	1,980	6,140	1,160	730	430
24	143	353	2,610	3,180	8,290	1,360	700	460
25	138	303	2,340	3,740	6,720	1,160	670	460
26	140	278	2,400	7,890	5,020	975	730	640
27	140	278	2,890	7,710	3,920	905	835	730
28	150	278	2,680	5,740	3,100	940	765	835
29	170	290	1,860	5,130	2,610	1,240	640	765
30	240	550	1,500	5,870	-------	1,280	800	550
31	366	-------	1,890	5,740	-------	2,470	-------	430

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	550	87	183	0.220	0.25
November	640	168	265	.319	.36
December	8,690	870	3,030	3.65	4.21
January	7,890	1,280	3,610	4.35	5.02
February	12,300	2,160	5,590	6.73	7.26
March	2,470	905	1,350	1.63	1.88
April	8,690	640	1,870	2.25	2.51
May	1,600	353	613	.739	.85

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 March 1932 (discontinued).
EXTREMES.—Maximum discharge during period, 7,090 second-feet Feb. 22 (gage height, 12.31 feet); minimum, 29 second-feet Oct. 3 (gage height, 0.27 foot).
1928–32: Maximum discharge, 15,500 second-feet Nov. 17, 1929 (gage height, 14.10 feet); minimum discharge, that of Oct. 3, 1931.
REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb	Mar.
1	33	45	224	1,680	5,070	2,030	16	58	60	975	1,780	3,170	499
2	31	55	418	1,440	4,350	1,780	17	55	62	1,360	2,030	4,010	481
3	29	71	481	1,300	3,710	1,590	18	50	71	2,030	1,900	4,350	508
4	31	65	517	1,010	3,170	1,510	19	48	97	2,510	1,900	6,250	499
5	31	62	553	910	3,710	1,440	20	45	112	3,170	1,780	6,670	508
6	33	60	571	1,360	3,710	1,240	21	42	144	3,430	1,900	5,830	490
7	35	60	581	1,900	2,330	1,010	22	40	168	3,710	1,680	7,090	499
8	80	58	591	2,030	3,710	910	23	45	176	4,010	1,510	5,830	481
9	136	55	656	2,030	3,170	830	24	42	176	4,690	1,440	5,070	472
10	136	52	707	2,030	1,510	805	25	42	160	3,170	1,300	3,710	463
11	128	52	745	2,170	2,170	765	26	45	152	2,510	1,180	3,430	463
12	120	58	785	2,510	1,900	689	27	45	128	2,330	1,360	3,710	571
13	90	60	830	2,930	1,780	641	28	48	104	2,170	1,780	2,710	602
14	71	60	910	2,710	1,590	571	29	48	112	2,170	2,710	2,330	614
15	65	58	975	2,330	2,930	562	30	45	112	1,900	4,690	-------	591
							31	45	------	1,900	5,450	-------	672

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	136	30	57.8	0.112	0.13
November	176	45	90.2	.175	.20
December	4,690	224	1,660	3.22	3.71
January	5,450	910	2,020	3.92	4.52
February	7,090	1,510	3,760	7.30	7.87
March	2,030	463	800	1.55	1.79

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 May 1932 (discontinued).
EXTREMES.—Maximum discharge during period, 7,410 second-feet Feb. 22 (gage height, 26.6 feet); minimum, 38 second-feet Oct. 1–6.
1928–32: Maximum discharge, 10,200 second-feet May 20, 1930 (gage height, 29.58 feet); minimum, 38 second-feet Sept. 29, 30, Oct. 1–6, 1931.
Maximum stage known, 31.5 feet July 1892.
REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	38	48	556	2,030	4,650	710	6,570	499
2	38	48	575	2,150	3,780	537	5,350	443
3	38	50	750	1,660	3,300	518	4,900	389
4	38	50	871	1,470	2,880	830	4,300	371
5	38	56	1,260	2,050	2,530	a 840	3,900	299
6	38	50	1,210	4,480	1,970	850	3,100	247
7	56	46	850	4,500	1,550	770	1,340	188
8	196	46	651	4,500	1,330	613	670	156
9	172	48	1,320	3,590	976	518	613	135
10	247	46	1,780	2,990	670	425	613	116
11	a 188	43	1,800	2,640	480	389	690	104
12	a 128	43	1,420	2,240	1,550	353	670	99
13	68	48	1,630	2,000	2,180	335	480	94
14	62	46	1,750	1,990	2,900	299	407	89
15	53	48	1,340	1,580	4,350	281	353	a 89
16	53	46	1,280	1,300	4,820	264	299	89
17	50	43	3,250	1,130	6,100	264	281	89
18	46	46	3,300	850	6,680	264	264	104
19	43	48	2,780	790	6,100	264	247	443
20	43	53	2,550	575	5,800	264	247	1,190
21	43	59	2,420	407	7,080	264	247	1,480
22	43	a 74	2,500	353	7,180	264	247	1,350
23	46	89	2,880	1,240	6,200	264	230	913
24	48	80	2,300	3,270	5,600	247	222	613
25	48	72	1,630	5,180	5,200	247	204	632
26	48	65	1,210	5,300	4,500	230	264	730
27	46	72	1,040	5,660	3,600	213	480	1,040
28	46	80	913	5,800	2,740	247	594	1,130
29	46	264	850	5,200	1,370	371	651	913
30	48	407	556	5,000	-------	4,950	575	690
31	50	-------	1,130	4,850	-------	5,800	-------	443

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	247	38	69.2	0.085	0.10
November	407	43	73.8	.091	.10
December	3,300	556	1,560	1.92	2.21
January	5,800	353	2,800	3.45	3.98
February	7,180	480	3,730	4.59	4.95
March	5,800	213	732	.901	1.04
April	6,570	204	1,300	1.60	1.78
May	1,480	89	489	.602	.69

a Estimated.

MULBERRY FORK OF BLACK WARRIOR RIVER NEAR GARDEN CITY, ALA.

LOCATION.—Chain gage in T. 12 S., R. 2 W., at highway bridge 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 1932.

EXTREMES.—Maximum discharge during year not determined; minimum, 3 second-feet Oct. 1, 3–6.

1928–32: Maximum discharge, 30,400 second-feet Nov. 14, 1929 (gage height, 17.96 feet); minimum, 3 second-feet Sept. 28–30, Oct. 1, 3–6, 1931 (gage height, 1.88 feet).

REMARKS.—Records good. No records April to June.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	July	Aug.	Sept.
1	3	37	785	1,320	2,070	752	7,370	118	84
2	4	27	358	885	3,960	660	1,770	87	72
3	3	22	500	785	5,710	600	1,030	72	194
4	3	15	5,380	690	3,890	1,030	3,570	135	236
5	3	12	1,150	1,360	2,630	690	3,010	118	95
6	3	11	690	6,610	1,870	540	3,290	100	66
7	38	9	485	2,630	1,500	485	5,710	71	54
8	380	8	660	1,870	1,320	430	2,870	57	43
9	32	7	1,500	1,410	1,070	405	1,680	47	38
10	18	6	850	1,150	990	358	1,230	37	34
11	14	6	660	990	885	358	955	32	31
12	9	6	540	1,060	1,770	335	720	28	29
13	7	6	512	3,290	1,500	312	570	25	26
14	6	6	8,660	1,500	1,680	290	485	25	24
15	6	6	2,270	1,230	5,170	270	405	312	22
16	5	6	1,500	1,070	4,850	250	312	112	22
17	5	6	4,800	920	6,070	290	270	76	21
18	5	44	3,150	885	4,050	290	240	6,370	21
19	5	98	1,770	720	3,010	243	198	2,740	19
20	5	44	1,500	660	2,510	226	512	630	1,100
21	5	34	3,290	600	5,350	232	212	385	458
22	5	28	4,050	570	4,530	1,860	162	290	144
23	5	23	2,170	690	2,750	485	187	250	87
24	6	20	1,680	1,590	1,970	335	177	210	67
25	5	17	1,500	1,030	1,590	290	138	177	53
26	5	14	1,230	1,500	1,320	250	118	208	56
27	5	14	1,150	2,070	1,070	270	358	752	87
28	80	12	955	2,170	955	430	512	229	76
29	720	19	818	3,290	818	290	218	132	54
30	147	2,280	720	7,370	-------	250	135	102	45
31	69	-------	1,980	3,010	-------	6,600	243	93	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	720	3	51.8	0.142	0.16
November	2,280	6	94.8	.260	.29
December	8,660	358	1,850	5.07	5.84
January	7,370	570	1,770	4.85	5.59
February	6,070	818	2,650	7.26	7.83
March	6,600	226	649	1.78	2.05
July	7,370	118	1,250	3.42	3.94
August	6,370	25	455	1.25	1.44
September	1,100	19	112	.307	.34

BLACK WARRIOR RIVER AT LOCK 17, NEAR BESSEMER, ALA.

LOCATION.—Staff gage in T. 18 S., R. 8 W., at Lock 17, 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 1932.

EXTREMES.—Maximum discharge during year, 64,600 second-feet Feb. 16 (gage height, 75.88 feet); no flow over dam Oct. 1–10, 20–29.

1928–32: Maximum discharge, 133,000 second-feet Nov. 15, 1929 (gage height, 79.94 feet); no flow over dam Sept. 29 to Oct. 10, Oct. 20–29, 1931. Maximum stage known, 80.3 feet July 9, 1916.

REMARKS.—Records fair. Daily discharge not sufficiently accurate for publication. Flow regulated by storage above Lock and Dam 17. Records do not include leakage and flow through small power plant which probably amount to 20 second-feet. By-pass valve, which discharges 150 additional second-feet, open Oct. 1, 2, 20.

Discharge, in second-feet, 1931–32

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	280	0	19.7	0.0049	0.006
November	380	16	95.7	.024	.03
December	34,800	1,840	11,400	2.86	3.30
January	57,600	3,860	18,300	4.60	5.30
February	64,600	6,620	29,600	7.44	8.02
March	39,600	1,890	4,860	1.22	1.41
April	54,800	1,760	7,040	1.77	1.98
May	23,400	680	4,010	1.01	1.16
June	7,780	440	1,760	.442	.49
July	27,600	1,090	7,370	1.85	2.13
August	12,900	440	2,480	.623	.72
September	6,260	240	1,470	.369	.41
The year	64,600	0	7,300	1.83	24.96

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 1932.

EXTREMES.—Maximum discharge during year, 78,000 second-feet Feb. 17 (gage height, 54.8 feet); minimum, 60 second-feet Oct. 2 (gage height, 18.14 feet). 1889–1905; 1928–32: Maximum discharge, 215,000 second-feet Apr. 18, 1900 (gage height, 67.7 feet); minimum (estimated), 50 second-feet Aug. 26, 1929.

REMARKS.—Records fair except those for Feb. 2, 6–10, 19, 24–29, Mar. 1–8, which are poor. Discharge determined by using rate of change in stage as a factor.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	556	2,610	12,900	43,000	6,100	58,300	27,200	1,800	7,900	2,750	1,400
2	119	487	4,600	10,900	23,700	5,500	42,400	22,600	1,500	22,600	1,910	3,710
3	94	430	3,420	9,180	34,000	5,400	29,600	15,800	1,310	25,700	1,400	7,900
4	94	385	5,430	7,260	45,200	5,500	22,400	11,000	1,260	15,500	1,140	9,440
5	94	421	9,830	10,700	31,500	5,500	17,100	6,790	1,010	29,400	1,500	6,790
6	175	349	8,500	46,000	18,300	5,400	13,900	5,330	918	27,100	1,600	4,000
7	255	349	5,110	47,700	13,600	5,300	9,050	4,300	996	19,400	2,130	2,880
8	440	349	4,000	38,000	11,200	5,200	6,790	3,570	1,040	23,000	1,600	1,910
9	332	323	7,900	26,000	9,900	4,300	6,420	3,150	902	21,500	1,010	1,500
10	264	314	9,180	20,400	9,000	4,300	6,420	2,750	1,090	15,100	856	1,210
11	289	272	7,260	16,200	10,600	4,000	5,690	2,500	1,700	10,200	713	1,010
12	272	323	5,730	12,100	12,400	3,710	5,330	2,370	2,880	6,050	661	949
13	272	298	4,210	25,800	21,100	3,430	4,300	2,130	3,710	4,620	613	856
14	280	280	8,100	24,900	29,600	3,290	3,710	1,910	2,750	3,430	637	661
15	255	272	26,900	18,900	69,500	3,150	3,570	1,700	2,250	2,880	2,370	625
16	272	272	21,000	15,200	74,500	3,150	3,150	1,600	1,910	2,250	4,620	613
17	255	272	31,100	10,500	75,800	3,020	2,880	1,500	1,910	2,020	4,970	625
18	280	358	38,800	8,950	60,400	3,710	2,750	1,400	1,910	1,910	12,900	554
19	255	421	39,800	7,760	45,000	3,710	2,620	1,400	1,800	2,020	18,900	661
20	223	440	20,200	6,760	48,000	3,290	2,620	1,400	1,700	1,800	15,300	1,800
21	207	556	21,400	6,510	51,600	2,880	3,020	1,910	1,700	1,600	8,660	4,620
22	199	578	32,000	6,000	71,200	6,050	3,150	2,370	1,800	1,500	3,430	4,300
23	231	516	30,300	6,000	51,300	11,200	2,880	2,880	1,240	1,310	2,130	2,620
24	231	478	22,000	13,100	30,200	9,050	2,500	3,290	1,010	1,290	1,800	1,600
25	223	468	18,500	22,600	18,800	6,050	2,370	2,880	1,500	2,130	1,700	1,240
26	247	440	14,200	20,100	12,800	4,970	3,290	2,750	3,020	1,910	1,310	1,400
27	207	385	10,000	33,000	9,900	4,300	4,970	4,970	8,660	1,700	3,710	1,190
28	231	403	8,260	31,400	8,300	4,300	4,000	4,970	7,160	2,020	4,970	2,020
29	207	421	7,010	35,800	7,200	4,970	3,290	4,000	5,330	2,500	3,570	1,800
30	207	525	6,260	60,100	-------	5,690	13,200	3,020	4,970	2,370	2,500	1,400
31	403	-------	8,000	62,700	-------	50,100	-------	2,250	-------	1,910	1,800	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	440	94	233	0.048	0.06
November	578	272	398	.082	.09
December	39,800	2,610	14,200	2.94	3.39
January	62,700	6,000	21,700	4.49	5.18
February	75,800	7,200	32,700	6.77	7.30
March	50,100	2,880	6,340	1.31	1.51
April	58,300	2,370	9,720	2.01	2.24
May	27,200	1,400	5,020	1.04	1.20
June	8,660	902	2,360	.489	.55
July	29,400	1,290	8,540	1.77	2.04
August	18,900	613	3,650	.756	.87
September	9,440	554	2,380	.493	.55
The year	75,800	94	8,870	1.84	24.98

BLACK WARRIOR RIVER NEAR EUTAW, ALA.

LOCATION.—Water-stage recorder in SE¼ sec. 6, T. 21 N., R. 3 E., at highway bridge between Eutaw and Wedgworth, 1¼ miles below mouth of Big Creek and 4 miles southeast of Eutaw.

DRAINAGE AREA.—5,820 square miles.

RECORDS AVAILABLE.—May to September 1932.

EXTREMES.—Maximum discharge during period, 25,400 second-feet July 7 (gage height, 33.01 feet); minimum, 850 second-feet Sept. 18, 19 (gage height, 19.30 feet).

REMARKS.—Records good. Discharge determined by using surface slope as a factor.

Discharge, in second-feet, 1932

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	------	2,620	5,200	2,490	2,300	16	------	2,650	3,550	2,820	1,080
2	------	2,110	8,100	2,600	4,270	17	------	2,380	2,880	4,880	980
3	------	1,860	16,800	2,030	7,200	18	------	2,170	2,600	5,400	915
4	------	1,730	20,600	1,690	9,200	19	------	2,170	2,530	13,100	928
5	------	1,600	19,800	1,640	9,100	20	------	2,130	2,510	17,500	1,080
6	------	1,460	22,800	1,840	7,800	21	------	2,010	2,210	16,700	2,380
7	------	1,430	25,200	2,420	5,120	22	------	2,170	1,880	9,600	4,270
8	------	1,480	24,700	2,400	3,550	23	------	1,970	1,910	4,750	4,150
9	------	1,460	23,300	2,010	2,400	24	------	1,640	1,840	2,950	2,900
10	------	1,430	23,200	1,570	1,930	25	------	1,740	2,030	2,620	2,030
11	------	1,620	19,200	1,270	1,580	26	------	2,230	2,280	2,400	1,800
12	------	2,050	11,000	1,090	1,410	27	------	4,750	2,230	2,280	1,650
13	------	3,020	7,700	1,010	1,290	28	5,800	7,100	2,380	3,670	1,880
14	------	3,550	5,500	902	1,240	29	5,380	6,400	2,620	4,750	2,380
15	------	3,020	4,270	1,320	1,210	30	4,630	5,000	2,810	3,910	2,280
						31	3,550	------	2,580	2,850	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June	7,100	1,430	2,560	0.440	0.49
July	25,200	1,840	8,910	1.53	1.76
August	17,500	902	4,080	.701	.81
September	9,200	915	3,010	.517	.58

SIPSEY FORK OF MULBERRY FORK OF BLACK WARRIOR RIVER NEAR SIPSEY, ALA.

LOCATION.—Staff gage in T. 13 S., R. 5 W., 200 feet below Lieth Creek, 3½ miles northeast of Sipsey, and 5 miles above mouth.
DRAINAGE AREA.—1,020 square miles.
RECORDS AVAILABLE.—September 1928 to September 1932.
EXTREMES.—Maximum discharge during year not determined; minimum, 23 second-feet Oct. 4, 7 (gage height, 3.47 feet).
1928–32: Maximum discharge, 50,400 second-feet Nov. 14, 1929 (gage height, 56.30 feet); minimum, 5 second-feet June 30, 1930 (gage height, 2.99 feet).
REMARKS.—Records fair. No records April to June.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	July	Aug.	Sept.
1	24	131	2,390	3,430	5,600	1,720	4,470	495	84
2	24	95	550	2,570	5,520	1,520	8,300	272	236
3	24	73	1,200	1,720	12,600	1,390	3,460	212	2,390
4	23	60	6,300	1,320	8,700	1,580	5,100	190	1,780
5	24	57	3,650	3,210	6,600	2,340	9,200	86	825
6	24	54	1,460	14,300	4,400	2,120	5,100	190	440
7	23	50	825	9,400	3,700	1,520	4,900	229	286
8	31	47	940	5,400	3,130	1,130	7,800	174	222
9	47	49	4,790	3,740	2,730	1,000	3,850	142	190
10	84	47	3,210	3,040	2,340	1,000	2,480	121	177
11	68	45	2,050	2,520	2,180	880	1,780	97	147
12	57	48	1,260	2,290	3,260	880	1,130	91	139
13	53	49	1,200	6,000	4,450	770	770	86	121
14	45	48	9,220	4,610	9,000	770	632	162	113
15	43	46	6,600	3,240	14,800	770	522	688	111
16	42	48	3,340	2,800	17,500	770	415	1,720	106
17	40	46	6,930	2,390	14,800	770	365	550	97
18	38	82	10,400	2,050	10,300	825	495	1,290	93
19	37	208	5,000	1,780	7,200	770	318	4,440	86
20	36	259	3,310	1,390	6,200	715	246	2,180	187
21	34	201	3,540	1,320	10,500	1,200	226	495	2,440
22	34	156	8,900	1,200	14,000	3,640	222	365	415
23	32	139	5,600	1,530	7,600	3,460	198	259	243
24	31	111	3,670	9,200	5,400	2,240	340	212	204
25	31	97	4,160	4,840	3,860	1,580	318	86	156
26	36	86	3,210	6,400	3,210	1,320	282	162	147
27	38	82	2,610	10,300	2,830	1,260	825	318	825
28	34	76	2,050	8,200	2,440	2,290	605	440	365
29	68	78	1,650	12,600	2,050	1,720	390	272	277
30	272	880	1,390	15,200	-------	2,250	254	88	229
31	142	-------	1,780	9,300	-------	15,800	1,720	174	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	272	23	49.6	0.049	0.06
November	880	45	115	.113	.13
December	10,400	550	3,650	3.58	4.13
January	15,200	1,200	5,070	4.97	5.73
February	17,500	2,050	6,790	6.66	7.18
March	15,800	715	1,940	1.90	2.19
July	9,200	198	2,150	2.11	2.43
August	4,440	86	525	.515	.59
September	2,440	84	438	.429	.48

LOCUST FORK OF BLACK WARRIOR RIVER AT TRAFFORD, ALA.

LOCATION.—Chain gage in T. 14 S., R. 2 W., at highway bridge three quarters of a mile northwest of Trafford and 1½ miles east of Coaldale.
DRAINAGE AREA.—622 square miles.
RECORDS AVAILABLE.—September 1930 to September 1932.
EXTREMES.—Maximum discharge during year not determined; minimum, 8 second-feet Oct. 2, 19–21 (gage height, 2.39 feet).
1930–32: Maximum discharge not determined; minimum that of Oct. 2, 19–21, 1931.
REMARKS.—Records good. No records April to June.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	July	Aug.	Sept.
1	10	78	673	2,980	4,720	1,120	4,010	199	162
2	10	76	268	1,720	5,060	1,020	5,110	202	147
3	16	53	187	1,240	10,700	915	1,980	159	236
4	14	34	178	1,020	7,220	950	3,240	153	985
5	14	36	221	1,020	4,940	950	7,290	284	540
6	22	27	236	7,430	3,460	775	4,400	171	252
7	27	24	178	4,720	2,640	673	7,080	135	178
8	63	22	196	3,040	2,120	606	8,030	135	135
9	58	18	412	2,260	1,800	540	3,140	129	106
10	39	20	412	1,760	1,560	508	1,900	117	103
11	36	20	300	1,480	1,400	444	1,400	100	89
12	30	20	221	1,280	3,570	428	1,020	89	84
13	27	24	215	4,550	2,840	412	810	89	73
14	14	25	5,470	3,040	2,640	380	639	1,020	66
15	10	25	5,060	2,160	1,160	364	540	1,060	63
16	14	30	1,900	1,640	13,100	332	428	364	58
17	18	27	4,130	1,360	8,830	364	364	428	53
18	12	32	5,470	1,200	6,940	444	380	2,480	50
19	10	41	2,880	1,060	5,110	428	364	4,120	48
20	8	60	1,850	915	5,110	332	540	985	364
21	10	70	2,580	810	6,800	348	476	428	915
22	18	56	7,290	741	9,710	1,440	268	284	236
23	22	43	3,790	950	5,290	2,840	268	221	150
24	20	32	2,540	2,680	4,670	606	573	190	120
25	20	27	2,440	2,340	2,640	476	300	165	97
26	24	30	1,360	2,080	2,160	428	196	252	129
27	24	27	1,400	3,460	1,800	412	199	2,340	108
28	27	27	1,160	2,680	1,520	673	880	810	92
29	46	36	1,020	10,600	1,320	476	573	396	70
30	53	218	915	20,400	-------	396	300	268	92
31	58	-------	2,230	12,700	-------	8,450	218	193	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	63	8	25.0	0.040	0.05
November	218	18	41.9	.067	.07
December	7,290	178	1,840	2.96	3.41
January	20,400	741	3,400	5.47	6.31
February	13,100	1,320	4,870	7.83	8.44
March	8,450	332	920	1.48	1.71
July	8,030	196	1,840	2.96	3.41
August	4,120	89	580	.932	1.07
September	985	48	193	.310	.35

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 March 1932 (discontinued).

EXTREMES.—Maximum discharge during period, 24,500 second-feet Jan. 30 (gage height, 23.35 feet); minimum, 17 second-feet Oct. 2 (gage height, 1.94 feet).

1928–32: Maximum discharge, 53,300 second-feet Nov. 15, 1929 (gage height, 40.10 feet); minimum, 17 second-feet Sept. 28 and Oct. 2, 1931 (gage height, 1.94 feet).

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	19	56	600	4,250	7,810	1,460	16	31	27	2,520	2,130	20,100	500
2	19	63	475	2,220	5,650	1,300	17	27	32	5,410	1,700	15,300	550
3	20	68	273	1,540	12,500	1,300	18	23	40	7,810	1,540	12,100	600
4	19	59	334	1,230	10,100	1,300	19	20	38	3,920	1,300	8,290	628
5	19	63	273	1,160	7,210	1,230	20	23	59	2,320	1,160	8,410	525
6	19	52	293	9,910	4,930	1,020	21	22	56	2,620	1,020	9,450	475
7	25	44	237	7,810	3,700	955	22	23	72	8,540	890	15,900	1,300
8	43	35	255	4,360	2,930	830	23	23	72	5,770	1,020	8,670	1,780
9	67	32	600	3,150	2,320	770	24	24	67	3,370	3,480	5,410	890
10	65	31	525	2,420	1,950	710	25	22	56	3,040	3,260	3,920	740
11	59	31	450	1,860	1,700	655	26	22	49	2,220	2,720	3,040	655
12	46	31	334	1,540	4,250	628	27	25	49	1,700	4,810	2,420	600
13	38	30	273	5,770	4,690	600	28	23	61	1,380	4,140	2,040	628
14	35	30	3,930	4,690	3,810	550	29	22	51	1,230	11,500	1,700	830
15	32	30	7,210	2,930	18,100	525	30	27	95	1,020	22,600	-------	655
							31	41	------	2,300	20,600	-------	1,000

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	67	19	29.8	0.034	0.04
November	95	27	49.3	.057	.06
December	8,540	237	2,300	2.66	3.07
January	22,600	890	4,470	5.17	5.96
February	20,100	1,700	7,190	8.31	8.96
March	11,000	475	1,170	1.35	1.56

PASCAGOULA RIVER BASIN

PASCAGOULA RIVER AT MERRILL, MISS.

LOCATION.—Staff gage in T. 1 S., R. 7 W., St. Stephen's base and meridian, at highway bridge half a mile below confluence of Leaf and Chickasawhay Rivers and half a mile west of Merrill. Zero of gage is 24.1 feet above mean sea level.
DRAINAGE AREA.—6,600 square miles.
RECORDS AVAILABLE.—December 1930 to September 1932.
EXTREMES.—Maximum discharge during year, 46,100 second-feet Jan. 9, 10 (gage height, 23.20 feet); minimum, 1,000 second-feet Oct. 30, Nov. 4, 8–12.
1930–32: Maximum and minimum discharges, same as given above.
REMARKS.—Records fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,120	1,120	1,590	13,500	38,800	30,800	9,600	15,100	10,700	2,250	2,440	3,670
2	1,120	1,120	1,900	16,100	39,400	25,700	11,300	17,300	8,640	1,900	2,440	11,800
3	1,180	1,060	2,160	15,500	38,800	20,200	15,100	16,400	5,830	1,980	2,340	22,100
4	1,180	1,000	2,340	13,300	36,400	15,200	17,000	14,900	4,530	1,900	2,540	23,200
5	1,180	1,060	2,840	12,500	34,400	12,300	18,600	13,300	4,110	1,900	2,540	17,200
6	1,240	1,060	2,840	25,100	30,800	11,800	20,400	10,100	4,000	1,980	5,640	13,300
7	1,310	1,060	3,670	40,100	27,100	11,900	19,400	7,200	3,830	2,250	4,110	11,500
8	1,520	1,000	4,800	44,500	23,800	11,800	18,100	6,120	3,830	2,250	3,340	10,300
9	1,520	1,000	9,120	46,100	19,400	11,300	17,200	4,800	3,670	2,340	3,040	8,760
10	1,450	1,000	10,100	46,100	15,900	10,400	15,700	3,670	3,450	3,240	2,640	6,240
11	1,380	1,000	9,240	45,300	12,100	9,240	13,300	2,840	3,240	3,040	2,160	4,680
12	1,310	1,000	8,160	43,700	10,200	8,160	8,520	2,640	3,450	2,840	1,820	3,140
13	1,660	1,060	7,440	41,500	9,240	7,800	6,240	2,540	3,240	2,540	1,590	2,640
14	1,740	1,060	7,440	37,600	9,240	7,440	5,760	2,070	3,450	2,160	1,450	2,340
15	1,520	1,060	9,600	33,400	9,600	6,960	5,520	1,900	3,670	1,740	1,380	2,250
16	1,380	1,060	11,800	29,200	9,360	6,240	5,040	1,740	3,730	1,520	1,520	1,900
17	1,240	1,060	12,100	25,100	9,240	6,000	4,330	1,310	3,530	1,590	3,040	1,740
18	1,180	1,120	14,300	21,000	9,120	5,760	3,890	2,250	3,240	1,740	5,280	1,590
19	1,180	1,240	17,000	16,400	9,360	5,640	3,780	6,000	3,310	1,900	4,440	1,450
20	1,120	1,520	19,400	12,800	10,800	5,640	3,670	10,100	3,730	1,740	3,450	1,590
21	1,060	1,900	20,700	10,300	14,300	5,520	3,450	16,800	4,110	1,450	3,040	1,740
22	1,060	2,250	22,400	9,000	21,500	5,520	3,240	17,900	4,440	1,450	2,250	1,820
23	1,060	2,440	23,200	8,040	32,100	5,280	3,040	25,100	4,530	1,380	1,660	1,900
24	1,060	2,250	22,900	9,720	36,400	6,000	2,840	28,900	4,220	1,380	1,590	1,900
25	1,060	2,160	21,200	15,200	38,800	6,720	2,640	27,100	3,730	1,450	1,660	1,980
26	1,060	1,980	20,400	19,000	40,100	6,480	2,640	23,200	3,310	1,520	1,590	2,160
27	1,120	1,900	18,100	22,900	40,800	5,760	2,440	19,400	2,840	1,590	1,520	2,160
28	1,060	1,740	14,900	26,100	40,100	5,280	2,160	18,600	2,540	1,740	1,450	2,070
29	1,060	1,590	11,200	29,200	36,400	4,680	2,840	18,600	2,540	1,900	1,310	1,900
30	1,000	1,520	9,240	32,500	-------	4,560	8,160	16,600	2,440	2,250	1,180	1,740
31	1,060	-------	8,880	37,000	-------	6,480	-------	13,600	-------	2,340	1,310	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,740	1,000	1,230	0.186	0.21
November	2,440	1,000	1,380	.209	.23
December	23,200	1,590	11,300	1.71	1.97
January	46,100	8,040	25,700	3.89	4.48
February	40,800	9,120	24,300	3.68	3.97
March	30,800	4,560	9,440	1.43	1.65
April	20,400	2,160	8,530	1.29	1.44
May	28,900	1,310	11,900	1.80	2.08
June	10,700	2,440	4,060	.618	.69
July	3,240	1,380	1,980	.300	.35
August	5,640	1,180	2,440	.370	.43
September	23,200	1,450	5,690	.862	.96
The year	46,100	1,000	8,960	1.36	18.46

PEARL RIVER BASIN

PEARL RIVER AT EDINBURG, MISS.

LOCATION.—Staff gage in T. 11 N., R. 9 E. Choctaw meridian, at new highway bridge at Edinburg. Zero of gage is 341.57 feet above mean sea level.
DRAINAGE AREA.—898 square miles.
RECORDS AVAILABLE.—August 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 8,620 second-feet Feb. 24 (gage height, 22.54 feet); minimum, 6 second-feet Oct. 27.
1928–32: Maximum discharge, 11,300 second-feet May 22, 1929 (gage height, 24.9 feet); minimum, that of Oct. 27, 1931.
Maximum stage known, 29.0 feet Mar. 1, 1902 (discharge not determined).
REMARKS.—Records good except those below 500 second-feet, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	12	363	2,700	5,120	2,700	4,400	331	633	60	100	177
2	8	11	397	2,360	4,340	2,090	5,900	285	595	105	90	1,060
3	8	11	347	2,000	3,920	1,750	7,020	270	520	90	73	1,220
4	9	11	671	1,800	3,540	2,030	7,920	285	431	215	73	1,550
5	9	11	652	2,010	2,840	2,060	7,220	256	380	331	110	1,600
6	10	11	466	3,920	2,320	1,880	5,900	228	300	347	60	1,250
7	13	11	331	5,540	1,970	1,600	4,640	189	148	557	43	1,060
8	22	11	920	6,440	1,750	1,350	3,600	159	105	614	43	940
9	24	12	1,200	6,080	1,580	1,220	2,580	159	86	538	83	861
10	25	12	1,140	6,080	1,420	1,060	2,060	202	202	448	63	823
11	22	12	940	5,540	1,300	1,000	1,780	215	228	380	53	766
12	18	11	766	4,800	1,300	920	1,600	153	202	380	43	690
13	16	11	652	4,120	1,220	880	1,420	115	177	347	43	614
14	15	11	633	3,600	1,200	823	1,300	105	153	315	41	502
15	13	12	614	3,020	1,220	766	1,200	90	159	285	33	315
16	12	12	766	2,430	1,220	690	1,160	68	202	228	30	215
17	12	16	1,970	2,060	1,300	595	1,120	64	189	177	33	120
18	11	33	2,150	1,780	1,350	484	1,180	60	177	148	41	81
19	10	86	2,120	1,600	2,030	448	1,100	100	120	115	60	76
20	10	228	2,000	1,480	2,840	397	980	502	100	95	52	148
21	10	148	1,940	1,350	5,040	380	823	766	81	72	43	177
22	10	86	2,150	1,220	6,920	363	633	861	72	60	33	153
23	10	56	2,430	2,820	8,020	331	484	766	60	76	33	131
24	9	47	2,460	3,780	8,620	315	380	690	50	68	43	131
25	8	42	2,400	4,260	8,520	300	315	595	43	55	43	136
26	7	42	2,180	4,400	7,520	270	285	576	48	53	43	148
27	6	42	2,000	5,360	6,180	256	242	728	42	48	177	131
28	13	45	1,910	6,440	5,040	300	202	880	39	53	202	136
29	21	56	1,780	6,360	3,780	256	202	980	38	72	115	120
30	16	300	1,650	6,180	-------	578	300	633	40	72	115	95
31	15	-------	2,460	5,720	-------	3,920	-------	538	-------	86	123	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	25	6	12.9	0.014	0.02
November	300	11	47.0	.052	.06
December	2,460	331	1,370	1.53	1.76
January	6,440	1,220	3,780	4.21	4.85
February	8,620	1,200	3,570	3.98	4.29
March	3,920	256	1,030	1.15	1.33
April	7,920	202	2,260	2.52	2.81
May	980	60	382	.425	.49
June	633	38	187	.208	.23
July	614	48	209	.233	.27
August	202	36	71.3	.079	.09
September	1,600	76	514	.572	.64
The year	8,620	6	1,110	1.24	16.84

PEARL RIVER AT JACKSON, MISS.

LOCATION.—Staff gage in T. 5 N., R. 1 E. Choctaw meridian, at State highway bridge at Jackson.

DRAINAGE AREA.—3,100 square miles.

RECORDS AVAILABLE.—June 1901 to December 1913; August 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 21,300 second-feet Feb. 28, 29 (gage height, 29.10 feet); minimum, 108 second-feet Oct. 12–15 (gage height, 1.25 feet).

1901–13, 1928–32: Maximum discharge, 36,500 second-feet May 30, 1909; maximum gage height, 37.20 feet Apr. 1, 1902; minimum discharge, 80 second-feet Oct. 26 to Nov. 2, 1904; minimum gage height, 0.20 foot Nov. 4–5, 1911.

REMARKS.—Records good.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	157	122	670	9,580	20,300	20,600	5,580	1,490	1,970	437	567	923
2	140	122	960	9,400	20,100	19,100	7,010	1,450	1,850	437	468	1,070
3	150	122	1,300	9,230	19,600	17,200	8,440	1,420	1,690	437	437	1,070
4	140	122	2,180	8,840	18,600	15,500	9,960	1,380	1,420	390	468	1,040
5	122	122	2,420	8,990	17,200	13,500	11,700	1,340	1,260	406	501	1,420
6	122	122	2,710	11,400	15,700	11,700	13,400	1,230	1,110	534	437	1,970
7	122	122	3,120	12,100	14,200	10,300	15,100	1,040	812	775	406	2,380
8	122	122	4,200	12,200	12,800	8,990	16,200	960	923	1,340	375	2,750
9	122	122	6,110	12,300	11,300	8,010	15,900	886	886	1,610	437	2,960
10	122	122	6,510	12,500	9,860	7,310	15,700	849	886	1,930	468	3,120
11	122	122	6,560	12,900	8,500	6,460	13,700	812	849	1,890	406	3,200
12	108	128	6,510	14,700	7,410	5,260	11,500	775	812	2,050	501	3,040
13	108	136	6,410	20,300	6,160	4,030	10,500	775	998	2,140	501	2,460
14	108	140	6,110	20,100	4,900	3,240	8,770	740	1,230	1,650	501	1,850
15	110	140	5,720	19,300	4,250	2,790	7,160	705	1,190	1,340	468	1,450
16	136	140	5,580	18,200	4,120	2,540	5,670	670	1,150	1,190	406	1,230
17	122	140	6,410	16,800	4,460	2,340	4,330	600	1,040	998	330	1,070
18	122	148	7,360	15,300	5,260	2,220	3,610	567	886	812	390	960
19	122	360	8,210	13,800	6,010	2,140	3,120	567	740	740	437	886
20	122	960	8,840	12,500	7,510	1,970	2,750	567	670	670	406	1,810
21	122	812	9,400	10,900	8,990	1,890	2,540	567	705	600	344	2,090
22	122	775	9,860	9,670	11,900	1,770	2,460	740	775	534	390	1,110
23	122	812	10,100	9,310	14,000	1,690	2,300	1,380	670	468	534	886
24	122	1,040	10,500	11,200	16,800	1,570	2,220	2,090	600	437	740	886
25	122	1,260	10,700	12,200	19,100	1,450	2,010	2,260	567	437	812	923
26	122	1,070	10,900	13,400	20,600	1,420	1,770	3,120	501	468	740	812
27	122	886	10,900	15,100	21,100	1,380	1,610	3,450	468	468	567	740
28	122	740	10,800	15,900	21,300	1,300	1,490	2,870	468	437	468	740
29	122	600	10,200	17,000	21,100	1,230	1,380	2,710	468	567	600	886
30	122	600	9,310	18,600	------	1,230	1,490	2,340	468	812	812	812
31	122	------	9,400	19,600	------	3,860	------	2,420	------	670	849	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	157	108	124	0.040	0.05
November	1,260	122	408	.132	.15
December	10,900	670	6,770	2.18	2.51
January	20,300	8,840	13,700	4.42	5.10
February	21,300	4,120	12,900	4.16	4.49
March	20,600	1,230	5,940	1.92	2.21
April	16,200	1,380	6,980	2.25	2.51
May	3,450	567	1,380	.445	.51
June	1,970	468	935	.302	.34
July	2,140	390	893	.288	.33
August	849	330	509	.164	.19
September	3,200	740	1,550	.500	.56
The year	21,300	108	4,310	1.39	18.95

PEARL RIVER NEAR COLUMBIA, MISS.

LOCATION.—Chain gage at highway bridge 2 miles southwest of Columbia, Marion County.
DRAINAGE AREA.—5,690 square miles.
RECORDS AVAILABLE.—August 1928 to September 1932.
EXTREMES.—Maximum discharge during year, 36,100 second-feet Jan. 27 (gage height, 20.22 feet); minimum, 788 second-feet Oct. 1 (gage height, 1.36 feet).
1928–32: Maximum discharge, 36,700 second-feet Nov. 16, 1929 (gage height, 20.85 feet); minimum, that of Oct. 1, 1931.
REMARKS.—Records good. Discharge estimated June 25, July 1, Sept. 7.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	788	955	1,930	13,900	29,200	22,700	12,800	4,530	4,270	1,500	1,540	1,460
2	955	885	2,180	16,100	27,900	21,700	17,300	3,660	3,660	1,380	1,850	1,540
3	885	885	3,340	17,300	26,200	21,400	19,400	3,340	3,440	1,380	1,850	1,690
4	955	885	4,270	16,500	24,700	22,400	19,400	3,160	3,250	1,380	1,850	1,690
5	955	820	7,100	16,900	24,200	23,200	17,700	3,060	3,060	1,460	2,010	1,770
6	1,020	885	7,900	21,700	23,400	22,200	15,800	2,960	2,880	1,460	2,260	1,770
7	1,020	885	6,940	26,200	22,700	23,900	14,000	2,880	2,700	1,380	1,770	1,810
8	1,100	885	5,980	27,900	22,200	23,700	13,500	2,780	2,520	1,380	1,540	1,850
9	1,100	885	6,300	27,900	21,700	22,900	13,900	2,600	2,430	1,380	1,460	2,260
10	1,020	885	9,820	26,900	22,900	21,200	14,400	2,520	2,340	1,610	1,460	2,700
11	955	820	11,700	25,400	20,300	18,500	15,200	2,430	2,180	2,090	1,460	3,060
12	955	885	11,200	23,400	19,000	15,400	15,800	2,340	2,180	2,880	1,540	3,250
13	955	885	9,980	21,700	17,500	13,000	16,100	2,180	2,180	2,880	1,690	3,440
14	955	820	9,820	21,200	15,800	10,900	16,300	2,180	2,260	2,880	1,460	3,440
15	955	820	9,180	22,700	14,800	9,340	16,100	2,010	2,430	2,780	1,310	3,340
16	955	885	8,700	23,900	13,700	7,900	15,400	2,010	2,960	2,880	1,310	2,960
17	955	955	8,700	24,400	11,400	6,620	14,000	2,090	2,960	2,600	1,240	3,550
18	955	1,100	10,700	24,200	9,660	6,140	12,300	2,180	2,520	2,340	1,380	3,250
19	955	1,310	14,200	22,400	9,980	5,540	9,660	2,180	2,340	2,340	1,380	2,090
20	955	1,850	17,300	22,700	11,700	5,260	7,580	2,260	2,260	2,090	1,310	2,180
21	955	1,930	19,200	21,700	15,000	4,960	6,300	2,430	2,090	1,850	1,380	2,180
22	955	2,960	19,000	21,000	20,100	4,680	5,110	2,700	2,010	1,690	1,380	3,770
23	885	3,250	17,300	22,200	24,900	4,400	4,530	3,060	1,930	1,610	1,240	3,250
24	885	2,520	16,500	23,900	27,900	4,270	4,400	3,440	1,850	1,380	1,240	2,880
25	885	2,090	15,800	28,400	29,200	4,140	4,140	4,270	1,800	1,540	1,240	2,340
26	885	2,010	15,000	33,400	28,900	3,880	4,270	5,840	1,770	1,540	1,160	1,850
27	885	2,180	15,000	36,100	27,700	3,880	4,960	5,980	1,690	1,460	1,240	1,770
28	885	2,090	13,800	35,800	25,700	3,660	4,530	6,300	1,690	1,540	1,460	1,850
29	955	2,010	13,000	34,400	24,200	3,550	3,880	6,620	1,690	1,610	1,610	1,770
30	1,020	1,930	12,600	33,400	-------	3,440	5,260	5,840	1,610	1,690	1,540	1,690
31	1,020	-------	12,600	30,900	-------	4,680	-------	4,960	-------	1,610	1,460	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,100	788	954	0.168	0.19
November	3,250	820	1,410	.248	.28
December	19,200	1,930	10,900	1.92	2.21
January	36,100	13,900	24,700	4.34	5.00
February	29,200	9,660	21,100	3.71	4.00
March	23,900	3,440	11,900	2.09	2.41
April	19,400	3,880	11,500	2.02	2.25
May	6,620	2,010	3,380	.594	.68
June	4,270	1,610	2,430	.427	.48
July	2,880	1,380	1,860	.327	.38
August	2,260	1,160	1,500	.264	.30
September	3,770	1,460	2,420	.425	.47
The year	36,100	788	7,800	1.37	18.65

STRONG RIVER AT DLO, MISS.

LOCATION.—Staff gage in T. 2 N., R. 4 E. Choctaw meridian, half a mile above Gulf & Ship Island Railroad bridge and three quarters of a mile southeast of Dlo.

DRAINAGE AREA.—361 square miles.

RECORDS AVAILABLE.—August 1928 to September 1932.

EXTREMES.—Maximum discharge during year, 6,930 second-feet Jan. 25 (gage height, 18.72 feet); minimum, 23 second-feet Sept. 18, 19 (gage height, 2.32 feet).

1928–32: Maximum discharge, 8,180 second-feet Mar. 15, 1929 (gage height, 21.20 feet); minimum, that of Sept. 18, 19, 1932.

REMARKS.—Records good except those below 100 second-feet, which are fair.

Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	30	131	1,340	1,740	429	5,570	150	90	43	53	42
2	28	29	549	915	1,300	378	5,120	140	84	42	35	90
3	26	33	1,840	549	848	612	4,140	136	74	42	40	80
4	26	32	3,010	344	778	1,380	2,340	127	64	43	57	46
5	25	31	2,840	1,350	580	1,480	549	123	62	57	53	35
6	25	30	1,740	4,300	458	1,480	429	110	55	50	48	35
7	25	30	677	5,120	389	778	350	97	51	46	35	35
8	29	30	1,240	4,540	355	518	301	90	46	97	35	35
9	30	29	2,700	3,920	339	429	248	62	40	140	35	36
10	30	29	1,880	1,790	312	355	198	57	38	123	36	35
11	29	28	1,430	580	285	328	183	55	53	198	46	32
12	35	28	1,100	429	264	317	169	53	123	140	35	30
13	32	31	644	2,800	580	301	198	51	90	77	35	30
14	30	35	339	2,580	710	290	238	50	64	53	35	30
15	29	35	312	1,660	677	274	203	53	53	50	35	30
16	26	32	344	915	518	243	140	51	46	43	35	30
17	30	32	1,660	612	429	218	110	48	43	40	36	31
18	30	62	3,070	488	677	198	154	46	40	38	40	23
19	29	80	3,100	389	1,810	178	140	59	90	36	38	28
20	28	778	2,580	350	4,820	169	118	188	62	35	35	32
21	28	612	1,660	322	5,570	164	101	317	55	35	33	35
22	28	400	1,480	285	6,480	178	87	264	51	35	35	36
23	28	218	1,140	2,700	6,200	238	80	458	50	35	35	33
24	28	118	980	5,980	4,780	228	74	778	64	35	33	32
25	28	77	778	6,730	3,600	193	90	1,100	80	38	35	33
26	26	62	549	6,380	1,380	174	114	1,040	67	33	57	33
27	26	53	389	5,390	333	159	198	915	57	33	59	35
28	29	48	378	3,840	518	150	183	848	57	35	43	35
29	46	45	301	2,840	488	140	164	710	53	80	43	38
30	40	59	238	2,700	------	1,100	159	355	48	64	42	36
31	32	------	518	1,920	------	4,140	------	131	------	280	35	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	46	25	29.3	0.081	0.09
November	778	28	105	.291	.32
December	3,100	131	1,280	3.55	4.09
January	6,730	285	2,390	6.62	7.63
February	6,480	264	1,630	4.52	4.88
March	4,140	140	555	1.54	1.78
April	5,570	74	738	2.04	2.28
May	1,100	46	279	.773	.89
June	123	38	61.7	.171	.19
July	280	33	67.6	.187	.22
August	59	33	40.2	.111	.13
September	90	23	37.0	.102	.11
The year	6,730	23	599	1.66	22.61

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 basins during the year ending September 30, 1932

Streams draining south Atlantic slope

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Oct. 11	Rivanna River	James River	1 mile above Moores Creek, near Charlottesville, Va.		55
11	Moores Creek	Rivanna River	1,000 feet above mouth, near Charlottesville, Va.		6.9
Sept. 12	Chockyot Creek	Roanoke River	100 feet above State highway 48 at Weldon, N.C.		.011
12	Tar River	Pamlico River	Cannady Bridge, 1 mile above intake of Oxford water works, Oxford, N.C.		.082
13	do	do	Bridge on State highway 22 at Rocky Mount, N.C.		18.6
13	do	do	Near Center Bluff landing, 6 miles above Greeneville, N.C.		76.7
14	Tranters Creek	do	Atlantic Coast Line Railroad bridge near Washington, N.C.		41.3
12	Fishing Creek	Tar River	State highway 48 at Oxford, N.C.		.093
Feb. 4	Rockfish Creek	Cape Fear River	Old gaging station near Fayetteville, N.C.	3.74	417
Aug. 31	Abbotts Creek	Yadkin River	500 feet above Thomasville pumping station 5 miles west of Thomasville, N.C.		3.05
Sept. 23	do	do	do		16.4
23	Leonards Creek	Abbotts Creek	50 feet below State highway 10 at Lexington, N.C.		1.88
Nov. 25	Brackett Creek	Broad River	Below municipal dam at Forest City, N.C.	1.08	.81
Dec. 11	do	do	do	1.21	3.58
Jan. 1	do	do	do	1.36	17.3
22	do	do	do	1.21	3.24
Mar. 30	do	do	do	1.21	3.17
Oct. 29	Saluda River	Santee River	Abandoned highway bridge ½ mile below Lake Murray power plant near Columbia, S.C.		3,420
Nov. 6	do	do	do		3,600
Apr. 18	do	do	do		4,800
May 3	Colonels Creek	do	Highway bridge at Cooks Mountain, near Eastover, S.C.		54.4
24	do	do	do		66.2
Jan. 14	Ocmulgee River	Altamaha River	Hawkinsville, Ga	17.01	14,600
15	Oconee River	do	Milledgeville, Ga	10.58	5,140
Mar. 23	do	do	do	10.14	4,320
July 14	St. Johns River	Atlantic Ocean	Near Sanford, Fla		2,030
Aug. 1	do	do	do		1,460
Sept. 6	do	do	do		742
July 13	do	do	Near DeLand, Fla		2,740
Aug. 1	do	do	do		2,130
Sept. 14	do	do	do		1,060
Mar. 7	Green Springs	Lake Monroe	Near Benson Springs, Fla		1.00
8	Wekiva Spring	Wekiva River	Near Apopka, Fla		63.9
8	Rock Spring	do	do		51.9
8	Seminole Spring	St. Johns River	Near Sorrento, Fla		10.2
7	Ponce de Leon Spring.	do	Near DeLand, Fla		20.4
Mar. 3	Silver Glen Spring	Lake George	Near Astor, Fla		95.9
3	Juniper Spring Creek.	do	do		117
3	Salt Spring	do	Lake Kerr, Fla		73.3
14	Helena Run	Lake Harris	Near Okahumpa, Fla		40.2
2	Silver Springs	Oklawaha River	Near Ocala, Fla		317
Aug. 5	Orange Creek	do	Near Orange Springs, Fla		32.1
May 20	Kissimmee River	Lake Okeechobee	Near Florinda, Fla		115
19	Istokpoga Canal	Kissimmee River	Near Fort Bassenger, Fla		91.9
19	Arbuckle Creek	Lake Istokpoga	Near De Soto City, Fla		24.3

Miscellaneous discharge measurements in south Atlantic slope and eastern Gulf of Mexico basins during the year ending September 30, 1932—Continued

Streams draining into eastern Gulf of Mexico

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Nov. 11	Peace Creek	Gulf of Mexico	Near Zolfo Springs, Fla		121
June 10	do	do	do		216
July 8	do	do	do		200
Aug. 3	do	do	do		365
Sept. 8	do	do	do		395
June 9	Hillsboro River	do	Near Zephyrhills, Fla		87.2
July 6	do	do	do		91.7
Aug. 3	do	do	do		57.3
July 6	do	do	Near Thonotosassa, Fla		111
Sept. 9	do	do	do		270
Mar. 15	Chassahowitzka Spring.	do	Near Homosassa, Fla		98.1
15	Homosassa Spring	do	do		177
15	Hunter Spring	Crystal River	Crystal River, Fla		15.6
14	Belton Mill Creek	Withlacoochee River.	Near Coleman, Fla		18.7
15	Big Spring	do	Near Holder, Fla		11.1
16	Blue Spring	Waccasassa River	Near Bronson, Fla		a 8
16	Wekiva Spring	do	Near Gulf Hammock, Fla		55.1
Nov. 14	White Spring	Suwannee River	White Springs, Fla		36.2
Mar. 17	do	do	do		46.4
Apr. 20	do	do	do		43.1
Mar. 16	Suwannee Spring	do	Near Live Oak, Fla		6.13
May 16	Blue Springs	Withlacoochee River.	Near Lee, Fla		a 75
Nov. 6	Swanacoochee Spring.	do	Ellaville, Fla		40.8
Mar. 16	do	do	do		18.3
16	Falmouth Spring	Suwannee River	Near Live Oak, Fla		a 25
15	Branford Spring	do	Branford, Fla		8.85
June 3	Santa Fe River	do	Above Fort White, Fla		301
4	do	do	Below Fort White, Fla		823
4	do	do	At mouth of river near Hildredth, Fla.		1,100
Mar. 14	Poe Spring	Santa Fe River	Near High Springs, Fla		31.2
May 12	Big Cypress Spring.	Suwannee River	Near Bell, Fla		12.4
12	Lumber Camp Spring.	do	do		2.96
Mar. 14	Hart Spring	do	do		a 40
May 12	do	do	do		62.1
12	Little Copper Spring.	do	Near Oldtown, Fla		1.98
Mar. 14	Otter Spring	do	do		a 5
May 12	do	do	do		5.43
12	Copper Spring	do	do		18.8
14	Fannin Spring	do	Near Wilcox, Fla		79.2
14	Manatee Spring	do	Near Chiefland, Fla		149
Sept. 17	North Highlands Tailrace.	Chattahoochee River.	Columbus, Ga	1.49	1,400

a Estimated.

INDEX

174409—33——15