UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
GEOLOGICAL SURVEY
GEORGE OTIS SMITH, Director

Water-Supply Paper 622

SURFACE WATER SUPPLY *of the* UNITED STATES 1926

PART II
SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS

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SURFACE WATER SUPPLY OF SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO DRAINAGE BASINS, 1926

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, 1926.

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, 1895–1927

1895	$12,500.00	1907	$150,000.00	1921–1923	$180,000.00
1896	24,500.00	1908–1910	100,000.00	1924–25	170,000.00
1897–1899	50,000.00	1911–1917	150,000.00	1926	165,000.00
1900	70,000.00	1918	175,000.00	1927	151,000.00
1901–2	100,000.00	1919	148,244.10		
1903–1906	200,000.00	1920	175,000.00		

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

Measurements of stream flow have been made at about 5,250 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1926, 1,730 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements are 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, and 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 depth in inches.

An "acre-foot," equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of a 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 section or sections of the stream below the gage which determine the stage-discharge relation at the gage. It should be noted that the control may not be the same section or sections at all stages.

The "point of zero flow" for a gaging station is that point on the gage—the gage height—at which water ceases to flow over the control.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1925, and ending September 30, 1926. At the beginning of January in most parts of the United States much of the precipitation in

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

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

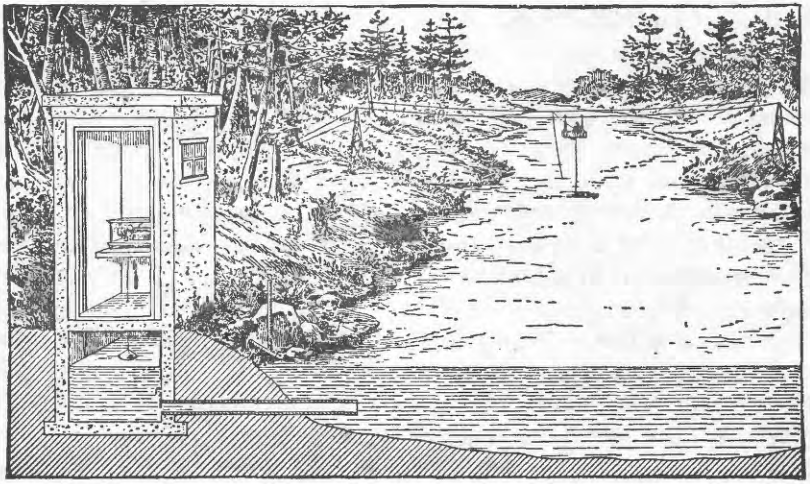

FIGURE 1.—Typical gaging station

Measurements of discharge are made with a current meter. The general methods are outlined in standard textbooks on the measurement of river discharge. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

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

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

If the base data are insufficient to determine the daily discharge, tables giving daily gage heights and results of discharge measurements are published.

The description of the station gives, in addition to statements regarding location and equipment, information in regard to any condition that may affect the permanence of the stage-discharge relation, covering such subjects as the occurrence of ice, the use of the stream for log driving, shifting of control, and the cause and effect of backwater; it gives also information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded stages, and the accuracy of the records.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the mean of the gage heights read each day. At stations on streams subject to sudden or rapid diurnal fluctuations 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 operating on the principle of the planimeter and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the mean flow for the day when the mean gage height was highest. As the gage height is the mean for the day it does not indicate correctly the stage when the water surface was at crest height and the corresponding discharge was consequently larger than given in the maximum column. Likewise, in the column headed "Minimum" the quantity given is the mean flow for the day when the mean gage height was lowest. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow computations recorded in the remaining columns, which are defined on page 2, are based.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

A paragraph in the description of the station gives information regarding the (1) permanence of the stage-discharge relation, (2) precision with which the discharge rating curve is defined, (3) refinement of gage readings, (4) frequency of gage readings, and (5) methods of applying daily gage height to the rating table to obtain the daily discharge.

For the rating tables "well defined" indicates, in general, that the rating is probably accurate within 5 per cent; "fairly well defined," within 10 per cent; "poorly defined," within 15 to 25 per cent. These notes are very general and are based on the plotting of the individual measurements with reference to the mean rating curve.

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. All figures representing "second-feet per square mile" and "run-off in inches" published in the earlier reports by the Geological Survey should be used with caution because of possible inherent but unknown sources of error.

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. To give an idea of the amount of prior appropriations, a paragraph on diversions is presented in each station description. The figures given can not be considered exact but represent the best information available.

The tables of monthly discharge give only a general idea of the flow at the station and should not be used for other than preliminary estimates; the tables of daily discharge allow 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.

PUBLICATIONS

Investigation of water resources by the United States Geological Survey has consisted in large part of measurements of the volume of flow of streams and studies of the conditions affecting that flow, but it has comprised also investigation of such closely allied subjects as irrigation, water storage, water powers, ground 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 monographs, bulletins, professional papers, and annual reports.

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

Part I. North Atlantic slope basins (St. John River to York River).
II. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).
III. Ohio River Basin.
IV. St. Lawrence River Basin.
V. Hudson Bay and upper Mississippi River Basins.
VI. Missouri River Basin.
VII. Lower Mississippi River Basin.
VIII. Western Gulf of Mexico basins.
IX. Colorado River Basin.
X. The Great Basin
XI. Pacific slope basins in California.
XII. North Pacific slope basins, in three parts:
A, Pacific slope basins in Washington and upper Columbia River Basin.
B, Snake River Basin.
C, Pacific slope basins in Oregon and lower Columbia River Basin.

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

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

2. Sets of the reports may be consulted in the libraries of the principal cities of 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., 64 State Capitol.
Albany, N. Y., 506 Broadway-Arcade Building.
Trenton, N. J., 710 Trenton Trust Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 608 City Hall.
Ocala, Fla., Federal Building.
Chattanooga, Tenn., 630 Power Building.
Tuscaloosa, Ala., Post Office Building.
Columbus, Ohio. Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 315 Federal Building.
Lansing, Mich., 320 Old State Office Building.
Chicago, Ill., 1503 Consumers Building.
Madison, Wis., 337N State Capitol.
St. Pau', Minn., 202 Old State Capitol.
Topeka, Kans.. 23 Federal Building.
Rolla, Mo., Rolla Building, School of Mines and Metallurgy.

Fort Smith, Ark., Post Office Building.
Austin, Tex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 415 Power Building.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street.
Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 5,250 points in the United States, and the data obtained have been published in the reports tabulated below:

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

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

Report	Character of data	Year
10th A, pt. 2	Descriptive information only	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to Sept., 1890.
12th A, pt. 2	do	1884 to June 30, 1891.
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893 and 1894.
16th A, pt. 2	Descriptive information only	
B 140	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895 and 1896.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above Junction with Kansas.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings, and gage heights, Arkansas River, and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4	Monthly discharge	1900.
W 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
W 75	Monthly discharge	1901.
W 82 to 85	Complete data	1902.
W 97 to 100	do	1903.
W 124 to 135	do	1904.
W 165 to 178	do	1905.
W 201 to 214	do	1906.
W 241 to 252	do	1907–8.
W 261 to 272	do	1909.
W 281 to 292	do	1910.
W 301 to 312	do	1911.
W 321 to 332	do	1912.
W 351 to 362	do	1913.
W 381 to 394	do	1914.
W 401 to 414	do	1915.
W 431 to 444	do	1916.

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

Report	Character of data	Year
W 451 to 464	Complete data	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.

The records at most of the stations discussed in these reports extend over a series of years, and miscellaneous measurements at many points other than regular gaging stations have been made each year. 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 1925. The data for any particular station will be found in the reports covering the years during which the station was maintained. For example, data for Machias River at Whitneyville, Me., 1903 to 1921, are published in Water-Supply Papers 97, 124, 165, 201, 241, 261, 281, 301, 321, 351, 381, 401, 431, 451, 471, 501, and 521, which contains records for the New England streams from 1903 to 1921. Results of miscellaneous measurements are published by drainage basins.

Numbers of water-supply papers containing results of stream measurements, 1899-1926

[For basins included see p. 6]

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII-A	XII-B	XII-C
1899 [a]	35	[b] 35, 36	36	36	36	[c] 36, 37	37	37	[d] 37, 38	38, [e] 39	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	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	354	455	456	457	458	459	460	461	462	463	464
1918	471	472	473	374	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	636	633	634

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

COOPERATION

Work in Virginia was done in cooperation with Virginia Geological Survey, Wilbur A. Nelson, State geologist. Financial assistance was also rendered by the following organizations and individuals: Virginia Military Institute, University of Virginia, Virginia Public Service Co., Appalachian Power Co., Day & Zimmermann, and J. R. Horsley.

The work in North Carolina was carried on in cooperation with the North Carolina Department of Conservation and Development. Financial assistance was also rendered by Tallassee Power Co., Cliffside Mills, Roanoke River Power Co., and the city of Durham.

Financial assistance for the work in South Carolina, Georgia, Alabama, and Florida was rendered by the following organizations and individuals: Broad River Power Co., Georgia Railway & Power Co., Alabama Power Co., Columbus Electric & Power Co., Houston Power Co., West Florida Power Co., and B. H. Hardaway.

DIVISION OF WORK

Data for stations in Virginia were collected and prepared for publication under the direction of A. H. Horton and J. J. Dirzulaitis, district engineers, assisted by J. H. Hofmann, O. D. Mussey, F. C. Christopherson, and Miss S. F. Norris.

Data for stations in North Carolina, South Carolina, and part of Georgia were collected and prepared for publication under the direction of E. D. Burchard, district engineer, assisted by J. H. Morgan, A. E. Johnson, Karl Jetter, L. J. Hall, F. M. Bell, H. W. Palm, H. A. Taylor, and Mrs. Effie T. Workman.

Data for gaging stations in Alabama, Florida, and on Chattahoochee River in Georgia were collected and prepared for publication under the direction of W. R. King, district engineer, assisted by Warren Withee, J. P. Clawson, D. S. Wallace, P. E. Hanson, Duncan Charlton, M. T. Thomson, and Miss Mary Heird.

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

GAGING-STATION RECORDS

JAMES RIVER BASIN

JACKSON RIVER AT BARBER, VA.

LOCATION.—At Smiths Bridge half a mile from Barber, Alleghany County. Falling Spring Creek enters half a mile above.

DRAINAGE AREA.—409 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 2, 1925, to September 30, 1926.

GAGE.—Chain gage on upstream guard rail of bridge; read by Miss Katherine Smith.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Bed of stream composed of ledge rock and clean gravel. Banks subject to overflow at stage of about 15 feet. Control 250 yards below gage; composed of gravel; subject to shift during high stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during the year, 9.18 feet at 8.30 a. m. January 19 (discharge, 4,640 second-feet); minimum stage, 2.89 feet at 8 a. m. October 1 (discharge, 76 second-feet).

1925–1926: Maximum stage recorded, that of January 19, 1926; minimum, 2.80 feet at 7 a. m. August 28, 1925 (discharge, 72 second-feet).

The flood of March, 1913, reached a stage of about 25.6 feet (discharge not determined).

ICE.—Stage-discharge relation affected by ice during winter.

ACCURACY.—Stage-discharge relation permanent; affected by ice December 27 to January 3 and January 10–14. Rating curve well defined between 80 and 3,200 second-feet and extended beyond these limits. Staff gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage-height to rating table except for periods affected by ice, for which it is estimated. Records good.

Discharge measurements of Jackson River at Barber, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Feb. 15	8.00	3,200	Apr. 15	5.19	870
Feb. 16	6.56	1,760	Aug. 13	2.97	82

Daily discharge, in second-feet, of Jackson River at Barber, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	131	142		814	542	930	340	374	100	129	188
2	87	131	142	110	1,110	610	930	310	357	104	107	188
3	95	142	164		990	564	814	295	295	100	104	200
4	91	131	164	153	814	480	706	280	213	123	100	200
5	91	131	176	176	706	408	564	266	188	176	100	188
6	87	127	357	176	656	357	520	252	266	200	131	239
7	83	127	374	164	610	408	462	239	252	153	131	226
8	80	176	325	153	520	564	444	239	252	153	100	226
9	82	374	280	142	520	520	564	226	226	188	97	176
10	83	340	266		564	462	500	226	200	123	93	176
11	80	280	226		444	444	480	226	188	119	88	226
12	80	480	213	140	426	426	656	213	176	111	85	142
13	88	2,650	188		408	391	814	200	176	109	85	129
14	111	1,170	176		1,430	340	870	200	176	104	107	125
15	127	870	164	200	3,090	357	870	188	176	100	100	119
16	125	520	164	188	1,640	357	760	310	164	97	188	115
17	131	426	153	213	1,170	340	706	408	153	95	200	115
18	142	357	142	3,090	990	340	610	374	142	93	252	102
19	127	310	127	3,890	870	426	990	340	131	90	610	100
20	113	280	131	2,070	930	610	870	310	142	87	930	97
21	104	252	142	1,500	814	706	930	280	131	83	656	100
22	100	226	153	2,350	706	760	1,050	252	127	80	520	93
23	106	200	226	1,570	706	706	930	239	123	80	391	100
24	113	200	200	1,800	610	760	760	226	125	95	374	131
25	164	200	164	1,170	870	706	656	213	131	107	426	164
26	462	200	153	760	1,890	1,290	610	200	123	127	1,360	164
27	310	200		610	1,230	1,640	520	239	119	107	706	153
28	226	176		426	930	1,290	444	610	115	98	500	153
29	176	153	110	295	-------	930	408	480	111	97	310	164
30	153	142		310	-------	760	374	391	107	111	266	153
31	131	-------		374	-------	814	-------	444	-------	131	226	------

Monthly discharge of Jackson River at Barber, Va., for the year ending September 30, 1926

[Drainage area, 409 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	462	77	130	0.318	0.37
November	2,650	127	370	.905	1.01
December	374	----------	183	.447	.52
January	3,890	----------	735	1.80	2.08
February	3,090	408	945	2.31	2.40
March	1,640	340	623	1.52	1.75
April	1,050	374	691	1.69	1.89
May	610	188	291	.711	.82
June	374	107	182	.445	.50
July	200	80	114	.279	.32
August	1,360	85	306	.748	.86
September	239	93	155	.379	.42
The year	3,890	77	390	.954	12.94

JAMES RIVER AT LICK RUN, VA.

LOCATION.—At highway bridge at Lick Run, Botetourt County, 5 miles below Clifton Forge and three-quarters of a mile below junction of Cowpasture and Jackson Rivers.

DRAINAGE AREA.—1,370 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 3, 1925, to September 30, 1926.

GAGE.—Chain gage on upstream side of highway bridge; read by R. G. Lemon.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of bedrock and gravel; permanent. Control is ledge about 25 feet below gage; probably permanent. Point of zero flow, August 28, 1925, at gage height −0.3 foot ±0.2 foot.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 14.47 feet at 7.30 a. m. January 19 (discharge, 20,600 second-feet); minimum, 1.68 feet morning reading of July 22 and morning and afternoon readings July 23 and August 13 (discharge, 204 second-feet).

1925–1926: Maximum stage recorded, that of January 19, 1926; minimum, 1.64 feet at 6.15 a. m. August 31, 1925 (discharge, 192 second-feet).

Flood of September, 1877, reached a stage of 29.1 feet and that of March, 1913, reached a stage of 27.2 feet, determined by leveling to floodmarks.

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation permanent; affected by ice December 27 to January 4 and January 10–14. Rating curve well defined between 200 and 14,000 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except for periods affected by ice, for which it is estimated. Records good.

Discharge measurements of James River at Lick Run, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Feb. 14	6.39	5,470	Apr. 14	5.29	3,780
Feb. 15	9.39	10,700	Aug. 12	1.70	220

Daily discharge, in second-feet, of James River at Lick Run, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	210	348	325		5,030	2,300	3,360	885	755	242	348	438
2	245	325	325	390	4,520	2,160	2,730	818	725	234	370	392
3	265	325	392		3,360	1,900	2,440	785	698	234	348	392
4	245	348	460		2,880	1,550	2,030	755	615	285	285	485
5	245	348	670	460	2,300	1,440	1,660	698	588	305	265	438
6	238	348	725	510	2,160	1,200	1,440	670	615	438	242	415
7	231	325	1,110	510	1,900	1,550	1,340	642	560	510	245	460
8	231	348	990	485	1,780	2,880	1,290	615	535	392	238	535
9	238	392	818	415	1,780	2,300	1,900	588	510	305	231	460
10	228	785	698		2,160	1,780	1,780	588	460	285	228	415
11	217	642	642		1,780	1,550	1,660	615	415	285	217	370
12	224	818	560	380	1,550	1,440	2,580	588	392	265	210	325
13	231	7,270	510		1,340	1,340	2,880	560	392	265	204	285
14	265	3,840	460		5,200	1,200	3,680	535	370	245	224	285
15	392	2,030	460	392	11,600	1,110	3,520	535	348	245	265	285
16	415	1,440	438	370	6,220	1,150	2,880	670	325	242	265	265
17	392	1,150	415	392	3,840	1,110	2,440	955	325	231	285	265
18	370	885	392	7,450	2,880	1,070	2,030	1,030	305	231	325	265
19	348	785	370	18,600	2,580	1,290	2,300	885	305	220	415	245
20	305	698	370	7,630	2,580	1,660	2,300	818	305	217	785	245
21	285	615	392	4,860	2,300	2,030	2,300	755	305	210	1,900	245
22	265	560	460	9,430	2,300	1,900	2,300	670	305	207	1,070	242
23	265	510	725	6,220	1,780	1,780	2,440	615	285	204	818	238
24	265	485	785	3,840	1,660	1,780	2,030	588	285	265	642	245
25	535	460	725	2,580	2,440	1,780	1,660	535	285	231	615	438
26	1,070	415	670	1,900	6,220	1,780	1,440	510	285	285	4,010	392
27	885	415		1,660	4,180	5,030	1,240	560	265	285	2,030	325
28	642	415		1,440	2,880	3,520	1,110	1,070	265	265	1,150	305
29	460	392	490	1,030	-------	2,160	1,030	1,070	265	245	885	285
30	370	370		920	-------	2,160	920	850	242	325	615	305
31	370	-------		1,290	-------	2,440	-------	818	-------	370	510	-------

Monthly discharge of James River at Lick Run, Va., for the year ending September 30, 1926

[Drainage area, 1,370 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	1,070	210	353	0.258	0.30
November	7,270	325	936	.683	.76
December	1,110	325	559	.408	.47
January	18,600	----------	2,450	1.79	2.06
February	11,600	1,340	3,260	2.38	2.48
March	5,030	1,070	1,880	1.37	1.58
April	3,680	920	2,090	1.53	1.71
May	1,070	510	719	.525	.61
June	755	242	411	.300	.33
July	510	204	276	.201	.23
August	4,010	204	653	.477	.55
September	535	238	343	.250	.28
The year	18,600	204	1,150	.839	11.36

JAMES RIVER AT BUCHANAN, VA.

LOCATION.—At highway bridge near Chesapeake & Ohio Railway station, Buchanan, Botetourt County.
DRAINAGE AREA.—2,080 square miles, revised (measured on topographic maps).
RECORDS AVAILABLE.—August 18, 1895, to September 30, 1926.
GAGE.—Chain gage attached to bridge; installed November 21, 1903.
DISCHARGE MEASUREMENTS.—Made from bridge or by wading.
CHANNEL AND CONTROL.—Bed composed of rock, overlain with thick deposit of mud. Banks high; not overflowed except in extreme floods. Control of boulders and gravel several hundred feet below gage. Point of zero flow, October 19, 1924, -0.5 foot ± 0.5 foot.
EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 13.4 feet at 12.20 p. m. January 19 (discharge, 28,700 second-feet); minimum, 1.7 feet October 1–11 (discharge, 310 second-feet).

1898–1926: Maximum stage recorded, 31 feet during night of March 27, 1913, determined October 2, 1914, by levels to floodmarks; discharge not determined); minimum stage, 1.7 feet August 20–22 and September 12–14, 1900 (discharge, 275 second-feet). A discharge of 260 second-feet was reported on April 17 and May 2, 1896, but this is subject to error owing to unreliability of record prior to 1898.

ICE.—Stage-discharge relation affected by ice during severe winters.
ACCURACY.—Stage-discharge relation permanent; not affected by ice. Rating curve well defined between 350 and 32,000 second-feet and extended beyond these limits. Gage read to tenths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records fair.
COOPERATION.—Gage-height record furnished by United States Weather Bureau.

The following discharge measurements were made:
January 19, 1926: Gage height, 13.33 feet; discharge, 28,300 second-feet.
January 22, 1926: Gage height, 7.53 feet; discharge, 10,400 second-feet.

Daily discharge, in second-feet, of James River at Buchanan, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	310	555	555	615	9,000	4,300	4,510	1,420	1,190	450	450	680
2	310	555	555	615	7,240	3,900	3,900	1,420	1,190	450	450	615
3	310	555	750	555	6,060	3,900	3,700	1,420	1,190	450	450	555
4	310	555	915	615	5,370	3,900	3,510	1,420	1,190	450	450	555
5	310	555	830	680	4,510	3,700	3,330	1,300	1,190	450	450	555
6	310	555	830	680	4,100	3,700	3,160	1,300	1,090	1,190	680	555
7	310	555	750	615	4,100	3,510	2,990	1,300	1,000	1,540	615	555
8	310	555	680	615	3,900	3,510	2,830	1,190	915	1,420	555	555
9	310	555	680	615	3,900	3,510	3,510	1,190	915	1,420	555	555
10	310	555	615	615	3,700	3,330	2,830	1,190	830	1,190	500	555
11	310	555	615	615	3,700	3,330	2,370	1,090	830	1,000	500	555
12	355	555	615	615	3,510	3,330	2,370	1,090	750	750	500	555
13	400	5,600	615	615	3,510	3,160	3,510	1,090	750	615	450	500
14	400	6,290	555	615	3,510	3,160	5,830	1,000	680	555	450	500
15	450	5,370	555	615	4,100	3,160	5,600	1,000	680	500	450	500
16	500	4,300	555	615	7,480	2,990	4,510	1,000	615	500	555	450
17	500	3,510	555	615	6,520	2,990	4,100	1,090	615	500	680	450
18	500	2,670	555	1,190	6,520	2,990	3,700	1,540	555	500	830	450
19	500	1,940	555	28,400	3,900	2,830	3,330	1,800	555	500	750	400
20	500	1,190	555	17,700	3,700	2,830	2,990	1,670	555	500	1,090	400
21	500	915	680	12,300	3,510	2,670	2,670	1,540	500	500	2,080	400
22	500	750	615	9,260	3,330	2,670	2,370	1,420	500	500	1,670	400
23	500	750	615	6,520	3,160	2,670	2,220	1,420	500	500	1,540	400
24	500	680	750	4,930	2,990	2,520	2,080	1,300	500	450	1,540	400
25	555	680	750	4,300	2,990	2,520	1,940	1,300	500	450	1,420	400
26	555	615	680	3,700	7,000	2,520	1,800	1,090	500	450	1,670	400
27	555	615	680	3,330	6,520	2,830	1,670	1,090	500	450	1,090	400
28	555	555	680	2,990	5,150	2,830	1,540	1,300	500	450	1,000	400
29	555	555	615	2,830	-------	2,830	1,540	1,300	500	450	915	400
30	555	555	615	2,830	-------	2,830	1,540	1,190	500	450	830	400
31	555	-------	615	4,300	-------	4,300	-------	1,190	-------	450	750	-------

Monthly discharge of James River at Buchanan, Va., for the year ending September 30, 1926

[Drainage area, 2,080 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	555	310	432	0.208	0.24
November	6,290	555	1,470	.707	.79
December	915	555	651	.313	.36
January	28,400	555	3,710	1.78	2.05
February	9,000	2,990	4,750	2.28	2.37
March	4,300	2,520	3,200	1.54	1.78
April	5,830	1,540	3,060	1.47	1.64
May	1,800	1,000	1,280	.615	.71
June	1,190	500	743	.357	.40
July	1,540	450	646	.311	.36
August	2,080	450	836	.402	.46
September	680	400	483	.232	.26
The year	28,400	310	1,750	.841	11.42

JAMES RIVER AT BENT CREEK, VA.

LOCATION.—At highway bridge at Bent Creek, Appomattox County, 1 mile below Gladstone, Nelson County. Bent Creek enters 50 feet above.

DRAINAGE AREA.—3,670 square miles (measured on topographic maps).

RECORDS AVAILABLE.—March 21, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by J. R. Marks.

DISCHARGE MEASUREMENTS.—Made from highway bridge.

CHANNEL AND CONTROL.—Bed composed of ledge rock, boulders, and sand; somewhat rough. Banks low, cultivated, and subject to overflow at high stages. Control is riffle about 150 feet below gage; permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.33 feet at 5.10 p. m. January 19 (discharge, 35,000 second-feet); minimum, 2.42 feet at 8.30 a. m. October 12 (discharge, 408 second-feet).

1925–1926: Maximum stage recorded, that of January 19, 1926; minimum, 2.35 feet at 6.30 p. m. August 31, 1925 (discharge, 350 second-feet).

ICE.—Stage-discharge relation affected by ice during severe winters.

REGULATION.—Considerable fluctuation at low stages owing to operation of power plants near Lynchburg.

ACCURACY.—Stage-discharge relation permanent; slightly affected by ice December 27 to January 2. Rating curve well defined between 600 and 17,000 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good for high stages and fair for low stages.

The following discharge measurements were made:

April 28, 1926: Gage height, 4.42 feet; discharge, 3,680 second-feet.

May 9, 1926: Gage height, 3.40 feet; discharge, 1,670 second-feet.

August 11, 1926: Gage height, 2.72 feet; discharge, 683 second-feet.

Daily discharge, in second-feet, of James River at Bent Creek, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	610	900	1,400	1,480	7,880	6,710	6,160	2,180	2,090	965	747	1,320
2	1,100	965	1,100	1,400	12,200	5,900	7,280	2,090	1,650	769	1,100	1,320
3	1,100	1,320	1,400	1,480	10,400	5,400	6,160	2,370	1,820	900	1,170	1,030
4	780	1,170	1,560	1,400	11,200	5,160	5,160	2,180	1,650	780	840	1,030
5	435	1,100	1,560	1,740	8,180	4,020	4,690	1,650	1,480	660	1,030	1,030
6	1,030	1,030	2,560	1,400	6,710	4,020	4,690	1,560	1,650	2,280	1,320	1,400
7	840	965	2,180	1,320	5,900	3,800	4,240	1,740	1,170	2,180	965	1,170
8	736	1,030	3,160	1,480	5,900	4,920	4,020	1,740	1,650	2,180	840	1,240
9	900	965	3,160	1,560	5,900	6,160	3,580	1,560	1,480	1,480	780	1,100
10	840	1,240	2,090	1,560	5,400	6,160	4,240	1,820	1,320	1,100	840	1,030
11	703	1,030	1,820	1,560	5,400	5,160	4,020	2,090	1,240	1,100	747	1,100
12	426	1,320	1,480	1,480	4,920	4,920	5,650	1,480	1,910	900	681	965
13	703	6,430	1,650	1,320	4,240	4,690	7,580	1,400	1,100	1,320	725	758
14	965	11,200	1,100	1,320	4,460	3,800	8,800	1,650	900	1,030	660	1,240
15	1,100	6,430	1,480	1,400	4,240	3,800	9,120	1,650	1,170	1,560	650	714
16	965	4,020	1,650	1,240	20,200	3,800	8,490	1,820	1,100	1,100	747	840
17	1,100	3,160	1,240	1,820	10,800	3,800	6,710	1,320	780	780	681	840
18	1,100	3,370	1,240	4,920	5,900	3,160	5,900	2,180	1,170	780	1,240	840
19	1,030	1,400	1,170	30,000	6,430	3,160	5,900	2,560	965	769	900	780
20	1,100	1,820	1,170	30,000	5,650	3,370	5,650	2,370	965	736	1,100	600
21	965	1,740	1,100	14,400	6,160	4,020	4,920	2,000	1,030	703	2,760	640
22	965	1,560	1,320	11,200	6,160	4,240	4,920	1,820	965	620	3,160	747
23	840	1,170	2,090	15,200	4,460	5,650	5,160	1,650	1,030	692	2,560	714
24	965	1,400	1,820	9,440	4,240	4,240	4,920	1,400	1,170	900	2,090	747
25	965	1,240	1,910	7,280	5,400	4,690	4,240	1,740	1,100	703	1,650	660
26	1,100	1,320	2,280	5,900	8,180	4,460	3,800	1,400	1,100	725	1,650	681
27	1,320	1,240	1,910	4,690	12,200	4,020	3,800	1,400	965	780	3,580	620
28	1,910	1,320	1,560	4,460	7,880	5,900	3,580	1,480	965	1,560	4,020	1,100
29	1,560	1,100	1,100	3,580	-------	5,900	2,960	1,650	965	965	2,560	1,030
30	1,400	840	1,240	2,370	-------	5,160	2,090	2,560	965	1,170	1,740	900
31	1,320	-------	1,400	3,370	-------	5,160	-------	2,000	-------	769	1,910	------

Monthly discharge of James River at Bent Creek, Va., for the year ending September 30, 1926

[Drainage area, 3,670 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	1,910	426	996	0.271	0.31
November	11,200	840	2,130	.580	.65
December	3,160	1,100	1,670	.455	.52
January	30,000	1,240	5,540	1.51	1.74
February	20,200	4,240	7,380	2.01	2.09
March	6,710	3,160	4,690	1.28	1.48
April	9,120	2,090	5,280	1.44	1.61
May	2,560	1,320	1,820	.496	.57
June	2,090	780	1,250	.341	.38
July	2,280	620	1,060	.289	.33
August	4,020	650	1,470	.401	.46
September	1,400	600	940	.256	.29
The year	30,000	426	2,820	.768	10.43

JAMES RIVER AT SCOTTSVILLE, VA.

LOCATION.—At highway bridge at Scottsville, Albemarle County. Hardware River enters 7 miles below and Rockfish River 12 miles above.

DRAINAGE AREA.—4,570 square miles (measured on topographic maps).

RECORDS AVAILABLE.—February 25, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by L. S. Moore.
DISCHARGE MEASUREMENTS.—Made from bridge or by wading.
CHANNEL AND CONTROL.—Bed composed principally of sand but rocky in places. Banks high and not subject to overflow except at extreme high stages. Control permanent.
EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 15.80 feet at 7 a. m. January 20 (discharge, 42,300 second-feet); minimum, 1.80 feet at 7 a. m. October 2 and 6 (discharge, 510 second-feet).
1925–26: Maximum stage recorded, that of January 20, 1926; minimum, 1.62 feet at 7 a. m. September 30, 1925 (discharge, 400 second-feet).
ICE.—Stage-discharge relation affected by ice during severe winters.
REGULATION.—Fluctuation at low stages caused by operation of power plants at Lynchburg.
ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 700 and 38,000 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good except those for low stages, which are fair.

Discharge measurements of James River at Scottsville, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Jan. 18	5.44	5,700	Jan. 21	10.33	20,300	Aug. 10	2.18	853
Jan. 20	14.63	37,500	Feb. 13	5.30	5,380			

Daily discharge, in second-feet, of James River at Scottsville, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	805	1,400	1,400	2,420	11,000	8,580	6,810	3,160	2,700	1,070	1,070	2,020
2	585	1,240	1,640	2,020	12,900	7,840	6,620	3,320	2,700	1,180	908	1,520
3	1,340	1,520	3,650	2,020	13,200	6,810	7,620	3,000	2,420	960	1,460	1,240
4	1,240	1,760	3,160	2,150	18,900	6,440	7,400	2,560	2,150	1,120	1,290	1,290
5	855	1,240	2,700	2,020	11,600	5,720	6,620	3,320	2,150	1,460	960	1,240
6	510	1,290	5,180	2,280	8,840	5,360	5,900	3,000	2,020	2,020	1,760	1,180
7	1,070	1,240	3,480	2,150	7,620	5,180	5,540	2,700	2,020	1,890	2,150	1,640
8	960	1,120	3,990	1,890	7,000	5,180	4,840	2,280	2,020	2,150	1,120	1,760
9	755	1,020	3,320	1,760	6,810	7,000	5,010	2,560	1,640	2,020	908	1,340
10	855	1,290	3,480	1,890	6,620	7,200	5,540	2,280	2,020	1,640	855	1,460
11	908	1,520	2,420	1,890	6,440	6,260	5,360	2,280	1,640	1,290	805	1,400
12	710	1,290	2,150	2,150	5,900	6,080	5,540	2,420	1,400	1,340	855	1,240
13	548	8,840	2,150	1,640	5,540	5,360	6,440	2,560	1,640	1,400	585	1,120
14	855	9,120	2,150	1,460	5,900	5,180	7,620	2,280	1,520	1,400	710	1,020
15	1,340	9,400	2,020	1,760	10,300	4,330	10,600	2,280	1,340	1,290	585	1,340
16	1,240	4,670	2,280	1,760	27,200	4,670	10,600	2,420	1,070	1,760	1,120	1,120
17	1,290	4,670	1,760	1,520	18,900	4,330	10,000	2,420	1,290	1,460	1,120	960
18	1,240	3,650	2,020	4,840	9,120	4,160	8,840	2,280	1,240	1,070	908	960
19	1,290	3,650	1,520	30,400	8,580	4,160	7,400	2,280	1,020	1,120	1,400	960
20	1,180	3,650	1,520	38,100	8,320	4,160	6,620	2,850	1,240	960	1,290	855
21	1,240	2,020	1,890	22,000	7,620	4,500	6,260	2,850	1,240	855	2,020	710
22	1,120	2,280	1,640	13,200	7,000	4,840	6,080	2,560	1,180	855	3,000	908
23	1,070	2,150	3,160	14,900	6,620	5,180	5,900	2,420	1,290	710	3,000	908
24	960	1,400	3,160	13,500	6,080	5,010	5,900	2,280	1,180	908	2,850	755
25	1,400	1,760	2,560	8,320	6,440	4,840	5,900	2,020	1,290	1,020	2,560	805
26	1,890	1,760	2,280	7,200	9,700	4,840	5,540	2,420	1,240	1,020	2,420	755
27	1,640	1,520	2,420	6,810	13,500	5,010	4,840	2,150	1,240	755	2,020	665
28	1,890	1,640	1,760	5,360	11,900	5,180	4,670	2,150	1,290	855	4,670	855
29	2,280	1,460	2,150	5,180	-------	7,000	4,160	2,020	1,020	1,460	3,480	1,180
30	1,760	1,520	1,640	4,500	-------	6,440	3,820	2,020	805	1,120	2,420	1,240
31	1,760	-------	1,760	4,330	-------	5,900	-------	2,020	-------	1,400	2,150	-------

Monthly discharge of James River at Scottsville, Va., for the year ending September 30, 1926

[Drainage area, 4,570 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	2,280	510	1,180	0.258	0.30
November	9,400	1,020	2,700	.591	.66
December	5,180	1,400	2,460	.538	.62
January	38,100	1,460	6,820	1.49	1.72
February	27,200	5,540	9,980	2.18	2.27
March	8,580	4,160	5,570	1.22	1.41
April	10,600	3,820	6,470	1.42	1.58
May	3,320	2,020	2,490	.545	.63
June	2,700	805	1,570	.344	.38
July	2,150	710	1,280	.280	.32
August	4,670	585	1,690	.370	.43
September	2,020	665	1,150	.252	.28
The year	38,100	510	3,570	.781	10.60

JAMES RIVER AT CARTERSVILLE, VA.

LOCATION.—At highway bridge between Pemberton and Cartersville, Cumberland County, 1 mile below Willis River and 7 miles below Rivanna River.

DRAINAGE AREA.—6,240 square miles, revised (measured on topographic maps).

RECORDS AVAILABLE.—January 1, 1899, to September 30, 1926.

GAGE.—Chain gage on bridge; read by A. F. Moon, jr.

DISCHARGE MEASUREMENTS.—Made from bridge.

CHANNEL AND CONTROL.—Bed composed of rocks and sand; shifts during floods. Banks high; left bank is overflowed at a stage of about 20 feet.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 15.25 feet at 5.45 p. m. January 20 (discharge, 45,300 second-feet); minimum stage, 0.49 foot at 6 p. m. October 7 (discharge, 606 second-feet).

1899–1926: Maximum stage recorded, 26.7 feet at 6 p. m. December 30, 1901 (discharge, about 106,000 second-feet); minimum, 0.33 foot at 10 a. m. October 27, 1921 (discharge not determined).

ICE.—Stage-discharge relation affected by ice during severe winters.

REGULATION.—Low-water flow regulated at different points on James River and its tributaries.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 900 and 50,000 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good for medium and high stages and fair for low stages.

Discharge measurements of James River at Cartersville, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Jan. 19	12.83	35,300	Jan. 21	11.18	29,400
Jan. 20	14.93	44,900	Jan. 22	8.28	19,500

Daily discharge, in second-feet, of James River at Cartersville, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	662	1,700	1,620	2,380	11,700	12,900	9,710	3,980	3,610	1,300	1,780	3,070
2	850	1,540	2,040	2,720	16,900	11,400	10,200	3,980	3,790	1,220	1,780	2,550
3	1,300	1,460	7,360	2,720	16,900	9,960	10,200	4,170	3,070	1,460	1,460	2,210
4	1,620	1,460	9,960	2,720	27,000	8,720	9,210	4,170	2,720	2,720	1,870	1,780
5	1,140	1,540	6,320	3,070	20,400	7,800	7,800	4,360	2,550	2,380	1,960	1,780
6	1,060	1,380	5,720	3,430	15,000	7,150	7,150	3,250	2,720	2,890	1,870	1,780
7	648	1,380	5,120	2,890	11,700	6,520	6,320	4,170	2,720	3,610	1,700	2,890
8	910	1,300	5,120	2,550	9,960	6,940	6,120	3,250	2,380	3,250	1,620	3,070
9	760	1,460	5,120	2,380	9,710	8,020	7,800	3,250	2,720	3,250	1,460	2,210
10	880	1,780	4,360	2,550	9,210	9,210	7,360	3,070	2,550	2,550	1,300	2,040
11	775	1,780	3,980	2,720	8,720	8,250	7,150	3,070	2,210	1,870	1,460	2,210
12	835	1,780	3,610	2,720	7,800	7,580	9,460	3,790	1,870	1,700	1,380	1,960
13	910	10,500	3,250	2,890	7,360	6,940	10,500	3,250	2,040	1,620	1,060	1,540
14	746	12,300	2,720	2,720	8,250	6,520	14,700	3,070	2,040	1,300	985	1,540
15	1,380	13,800	2,380	2,380	12,300	6,320	15,000	3,430	1,700	1,780	985	1,380
16	1,700	8,250	2,380	2,380	28,100	5,720	14,400	3,610	1,460	1,780	2,720	1,460
17	1,620	5,720	2,380	2,380	23,200	5,520	12,600	3,610	1,780	1,960	3,070	1,460
18	1,380	4,550	2,550	6,730	15,600	5,320	10,800	3,250	1,380	1,540	2,380	1,380
19	1,300	3,980	2,380	36,300	12,300	5,520	9,710	3,610	1,540	1,220	2,890	1,300
20	1,220	3,250	2,040	44,800	12,000	5,320	8,720	3,790	1,540	1,140	2,890	1,220
21	1,300	3,070	2,380	31,600	10,800	5,120	8,250	3,790	1,700	1,060	4,170	1,220
22	1,140	2,890	2,380	20,000	9,460	5,720	8,020	3,430	1,540	1,140	5,520	1,220
23	1,060	2,720	3,610	16,200	8,720	6,520	7,360	3,250	1,380	985	4,550	1,060
24	1,060	2,720	4,930	17,600	8,250	6,320	7,580	3,070	1,380	1,060	3,790	1,060
25	1,220	2,550	4,170	14,700	9,460	6,120	7,360	3,070	2,210	1,140	3,430	1,060
26	2,210	2,550	3,790	9,960	20,000	6,120	6,730	2,890	1,870	1,060	6,520	985
27	2,890	1,780	3,430	7,800	17,600	6,120	5,920	3,430	1,620	1,060	4,360	985
28	2,550	1,780	3,070	6,730	16,200	5,720	5,320	3,430	1,460	1,060	3,980	910
29	2,040	2,040	2,890	5,920	-------	6,520	4,930	2,890	1,380	1,460	3,790	910
30	2,210	1,780	2,550	5,120	-------	8,480	4,550	2,720	1,300	1,380	3,980	1,220
31	1,960	-------	2,210	4,740	-------	8,720	-------	3,250	-------	1,620	3,610	------

Monthly discharge of James River at Cartersville, Va., for the year ending September 30, 1926

[Drainage area, 6,240 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	2,890	648	1,330	0.213	0.25
November	13,800	1,300	3,490	.559	.62
December	9,960	1,620	3,740	.599	.69
January	44,800	2,380	8,830	1.42	1.64
February	28,100	7,360	13,700	2.20	2.29
March	12,900	5,120	7,200	1.15	1.33
April	15,000	4,550	8,700	1.39	1.55
May	4,360	2,720	3,460	.554	.64
June	3,790	1,300	2,070	.332	.37
July	3,610	985	1,730	.277	.32
August	6,520	985	2,720	.436	.50
September	3,070	910	1,650	.264	.29
The year	44,800	648	4,830	.774	10.49

COWPASTURE RIVER NEAR CLIFTON FORGE, VA.

LOCATION.—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 (measured on topographic maps).

RECORDS AVAILABLE.—May 13, 1907, to August 8, 1908; March 26, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by Miss Flora Persinger.
DISCHARGE MEASUREMENTS.—Made from bridge or by wading.
CHANNEL AND CONTROL.—Bed composed of rock; permanent. Left bank high and not subject to overflow; right bank low and subject to overflow. Point of zero flow at gage height 0.37 foot ±0.1 foot on March 26, 1925.
EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.10 feet at 7.30 a. m. January 19 (discharge, 5,970 second-feet); minimum, 1.82 feet at 5.30 p. m. August 14 (discharge, 50 second-feet).
1907–1908, 1925–1926: Maximum stage recorded, 10.0 feet (old datum) June 14, 1907 (discharge not determined); minimum, that of August 14, 1926.
Flood of March, 1913, reached a stage of 20.8 feet (present datum) determined by leveling to high-water mark (discharge not determined).
ICE.—Stage-discharge relation affected by ice during severe winters.
ACCURACY.—Stage-discharge relation permanent; affected by ice December 27 to January 1. Rating curve well defined between 70 and 3,600 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except for stages affected by ice, for which it is estimated. Records good.

Discharge measurements of Cowpasture River near Clifton Forge, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Feb. 15	6.74	3,420	Apr. 14	4.35	1,280
Feb. 16	5.02	1,730	Aug. 12	2.03	80

Daily discharge, in second-feet, of Cowpasture River near Clifton Forge, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	121	121	180	1,830	760	1,100	238	252	77	128	159
2	85	118	112	234	1,420	698	1,030	213	238	84	186	140
3	89	114	143	227	1,340	610	890	234	220	76	159	146
4	89	107	206	206	890	502	857	189	203	84	133	162
5	89	95	275	196	760	451	698	125	203	125	109	146
6	84	85	314	186	668	378	528	114	196	180	95	138
7	77	84	294	193	638	638	451	138	183	177	85	168
8	74	87	275	162	638	960	426	174	165	146	79	210
9	77	107	294	171	638	638	760	156	151	107	74	177
10	79	143	249	177	582	528	760	168	143	97	70	156
11	73	156	231	168	476	528	792	135	133	99	64	133
12	73	242	206	196	426	502	1,100	135	128	95	59	123
13	81	2,380	177	162	451	451	960	151	123	89	55	114
14	89	1,420	156	4168	1,740	356	1,180	159	114	79	51	114
15	133	555	165	180	3,580	378	1,100	171	105	74	79	105
16	125	426	165	186	1,830	314	960	186	101	71	82	97
17	123	356	153	238	1,260	356	824	334	95	68	81	89
18	118	294	138	3,380	960	378	792	402	89	64	91	85
19	130	231	135	5,310	824	402	890	334	84	61	121	79
20	116	218	135	2,100	824	476	824	294	107	58	252	76
21	107	203	153	1,580	698	502	960	275	101	59	426	71
22	87	186	171	2,480	610	502	960	242	99	55	334	71
23	85	168	275	3,780	528	502	960	220	109	61	275	82
24	107	156	294	1,180	502	502	760	186	101	79	224	135
25	148	146	294	824	1,420	476	610	165	97	87	231	206
26	294	140	256	610	2,480	502	528	156	91	99	1,420	165
27	242	138		528	1,420	1,420	451	171	93	109	824	123
28	171	138		476	1,340	1,100	402	502	87	101	528	114
29	143	135	190	356	-------	857	451	528	84	93	294	114
30	130	125		294	-------	638	294	294	79	89	224	125
31	138	-------		451	-------	890	-------	275	-------	103	186	-------

Monthly discharge of Cowpasture River near Clifton Forge, Va., for the year ending September 30, 1926

[Drainage area, 456 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	294	73	114	0.250	0.29
November	2,380	84	296	.649	.72
December	314	112	204	.447	.52
January	5,310	162	857	1.88	2.17
February	3,580	426	1,100	2.41	2.51
March	1,420	314	587	1.29	1.49
April	1,180	294	777	1.70	1.90
May	528	114	228	.500	.58
June	252	79	132	.289	.32
July	180	55	91.8	.201	.23
August	1,420	51	226	.496	.57
September	210	71	127	.279	.31
The year	5,310	51	390	.855	11.61

CRAIG CREEK AT PARR, VA.

LOCATION.—At Chesapeake & Ohio Railway bridge 600 feet from Parr, Botetourt County, and 12 miles above mouth. Patterson Creek enters 11 miles below station.

DRAINAGE AREA.—331 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 5, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by Orville Drummond.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of gravel and boulders; not subject to shift. Banks wooded and not subject to overflow except at extremely high stages. Control, composed of large boulders and gravel, may shift a little at high stages. Point of zero flow at gage height 2.02 feet ±0.1 foot April 5, 1925.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.53 feet at 7 a. m. January 19 (discharge, 5,820 second-feet); minimum, 3.50 feet at 7 a. m. and 6.30 p. m. July 23 (discharge, 40 second-feet).

1925–1926: Maximum stage recorded, that of January 19, 1926; minimum, 3.45 feet at 7 a. m. September 11, 1925 (discharge, 36 second-feet).

ICE.—Stage-discharge relation affected by ice during winter.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 33 and 1,200 second-feet and fairly well defined between 1,200 and 5,000 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:
April 15, 1926: Gage height, 5.71 feet; discharge, 978 second-feet.
August 12, 1926: Gage height, 3.54 feet; discharge, 43.3 second-feet.

Daily discharge, in second-feet, of Craig Creek at Parr, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	85	82	99	1,650	586	900	181	90	48	116	64
2	51	82	78	99	1,200	586	677	171	85	47	88	62
3	56	83	92	98	900	586	586	164	82	47	72	63
4	60	86	88	107	803	500	500	157	78	55	62	62
5	59	85	92	120	771	472	446	149	80	58	58	58
6	52	85	98	135	708	419	394	140	86	116	67	60
7	48	85	118	151	616	472	344	135	88	103	103	62
8	47	88	116	164	586	1,040	344	132	92	78	67	67
9	48	94	111	291	586	803	368	129	72	67	72	63
10	46	125	107	177	557	646	419	132	69	59	54	59

Daily discharge, in second-feet, of Craig Creek at Parr, Va., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11	46	135	103	140	472	557	394	132	64	55	49	55
12	46	164	103	135	368	528	740	129	62	56	44	50
13	49	1,290	101	107	446	472	1,040	135	62	57	51	48
14	55	616	96	107	835	446	1,200	137	60	57	45	48
15	82	368	92	103	2,890	394	1,040	132	59	57	44	48
16	143	264	99	94	1,380	394	835	160	57	55	54	48
17	107	207	99	96	900	394	708	239	55	52	63	47
18	82	167	101	1,120	740	394	586	239	55	48	57	46
19	72	146	98	4,970	708	446	500	199	55	46	50	46
20	69	129	92	1,950	708	528	419	177	62	45	264	45
21	64	125	96	1,040	646	557	368	157	59	44	301	46
22	63	111	103	970	557	500	344	146	64	42	191	46
23	63	103	111	803	500	472	319	132	67	40	129	46
24	67	96	137	646	419	446	301	122	63	52	118	46
25	85	92	140	528	500	394	278	116	58	51	129	46
26	143	88	149	419	1,380	394	252	107	57	57	154	47
27	191	94	122	394	900	446	230	107	55	85	151	45
28	129	96	114	319	708	394	214	103	52	62	120	45
29	103	88	120	273	-------	368	207	103	50	62	96	46
30	90	83	114	230	-------	344	191	98	48	96	77	51
31	85	-------	103	305	-------	528	-------	92	-------	214	69	-------

Monthly discharge of Craig Creek at Parr, Va., for the year ending September 30, 1926

[Drainage area, 331 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	191	46	75.7	0.229	0.26
November	1,290	82	179	.541	.60
December	149	78	106	.320	.37
January	4,970	94	522	1.58	1.82
February	2,890	368	837	2.53	2.64
March	1,040	344	500	1.51	1.74
April	1,200	191	505	1.53	1.71
May	239	92	144	.435	.50
June	92	48	66.2	.200	.22
July	214	40	64.9	.196	.23
August	301	44	97.3	.294	.34
September	67	45	52.2	.158	.18
The year	4,970	40	258	.779	10.61

JOHNS CREEK AT NEWCASTLE, VA.

LOCATION.—At highway bridge just east of Newcastle, Craig County, one-fourth mile above mouth of Johns Creek.

DRAINAGE AREA.—106 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 27 to September 30, 1926.

GAGE.—Chain gage on bridge; read by Taft Abbott.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of ledge rock and boulders; rough and permanent. Left bank high and clean; not subject to overflow. Right bank low and subject to overflow at high stages. Control composed of ledge rock and boulders 75 feet downstream; permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.49 feet at 6.30 p. m. May 16 and 7.20 a. m. May 17 (discharge, 77 second-feet); minimum, 2.27 feet, August 14, 15, 16, and 19 (discharge, 8.1 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 6 and 3,000 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Record good.

The following discharge measurements were made:
April 27, 1926: Gage height, 3.40 feet; discharge, 70 second-feet.
August 11, 1926: Gage height, 2.30 feet; discharge, 8.6 second feet.

Daily discharge, in second-feet, of Johns Creek at Newcastle, Va., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	55	29	13	24	14	16	------	68	17	13	8.4	10
2	------	51	27	12	11	15	17	------	72	16	13	8.4	9.9
3	------	51	26	12	11	16	18	------	64	16	12	8.4	9.9
4	------	48	24	12	11	15	19	------	64	18	11	10	9.6
5	------	44	28	15	11	14	20	------	59	20	9.6	8.4	10
6	------	41	30	28	10	14	21	------	51	21	8.7	38	10
7	------	41	30	19	14	15	22	------	44	21	8.4	25	11
8	------	41	25	15	10	13	23	------	41	19	11	20	12
9	------	41	21	14	9.0	12	24	------	38	17	11	21	9.6
10	------	38	20	14	9.0	12	25	------	37	15	10	27	9.0
11	------	41	19	17	9.0	11	26	------	34	14	11	34	9.0
12	------	44	18	21	9.0	10	27	68	36	14	11	28	9.6
13	------	44	19	16	8.7	10	28	64	38	14	11	21	11
14	------	41	19	14	8.4	10	29	59	33	13	13	15	10
15	------	41	17	14	8.1	11	30	55	30	13	59	14	14
							31	------	30	------	55	14	------

Monthly discharge of Johns Creek at Newcastle, Va., for the year ending September 30, 1926

[Drainage area, 106 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
April 27–30	68	55	61.5	0.580	0.09
May	72	30	45.2	.426	.49
June	30	13	20.0	.189	.21
July	59	8.4	16.2	.153	.18
August	38	8.1	15.0	.142	.16
September	16	9.0	11.6	.109	.12

NORTH RIVER AT GOSHEN, VA.

LOCATION.—At highway bridge just outside of Goshen, Rockbridge County, on Goshen-Churchville road, and 500 feet below confluence of Mill Creek and Calfpasture River.

DRAINAGE AREA.—190 square miles (measured on topographic maps).

RECORDS AVAILABLE.—March 28, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by John Allen, jr.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of ledge rock, boulders, and large gravel; rough and probably permanent. Banks low, cultivated, and subject to overflow. Control for low water is ledge rock about 10 feet below gage which is probably drowned out at high stage, when a control about 100 feet feet below becomes effective. Point of zero flow at gage height 1.19 feet ± 0.1 foot August 30, 1925.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 6.05 feet at 5.15 p. m. January 18 (discharge, 2,780 second-feet); minimum, 1.79 feet at 9 a. m. July 22 (discharge, 8 second-feet).

1925–26: Maximum stage, that of January 18, 1926; minimum, that of July 22, 1926.

ICE.—Stage-discharge relation affected by ice during winter.
ACCURACY.—Stage-discharge relation changed during high water of January 20; affected by ice December 26 to January 2. Rating curves fairly well defined between 12 and 1,600 second-feet; extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:
March 19, 1926: Gage height, 2.55 feet; discharge, 141 second-feet.
April 12, 1926: Gage height, 3.13 feet; discharge, 348 second-feet.
August 13, 1926: Gage height, 1.87 feet; discharge, 13.1 second-feet.

Daily discharge, in second-feet, of North River at Goshen, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	30	38	45	832	316	537	100	147	14	20	45
2	23	31	37	45	659	295	430	95	122	15	12	40
3	23	31	44	45	510	255	337	88	95	17	13	36
4	20	28	68	59	406	208	275	84	82	17	13	37
5	18	29	96	55	295	198	233	75	82	25	12	33
6	18	31	187	55	255	159	184	75	71	40	20	32
7	17	28	175	59	244	795	159	75	67	25	22	33
8	16	29	126	54	275	382	172	71	63	22	14	29
9	16	34	114	48	251	295	172	69	57	15	12	27
10	16	31	94	48	255	222	233	71	50	13	12	29
11	16	30	81	42	222	215	295	67	43	14	11	25
12	16	29	73	47	165	201	337	65	40	14	11	23
13	19	795	64	48	168	172	360	63	48	13	10	19
14	21	295	59	41	1,070	142	430	59	32	13	13	26
15	27	162	57	45	1,290	136	430	59	33	14	12	23
16	27	121	54	44	950	128	406	112	30	14	20	23
17	28	96	52	42	482	122	337	172	30	12	15	22
18	23	77	48	1,560	382	122	316	194	29	9	26	20
19	20	73	45	2,150	337	125	482	162	29	9	25	19
20	18	70	42	950	295	136	456	131	26	9	63	17
21	19	66	47	832	255	162	537	112	25	9	84	18
22	21	59	54	1,290	233	162	596	102	24	9	77	19
23	21	54	73	870	184	172	430	91	22	9	63	17
24	24	50	72	510	172	178	337	82	22	11	52	17
25	60	45	70	382	870	156	251	73	20	10	187	22
26	52	45		275	1,110	337	198	67	17	10	456	22
27	39	45		198	566	725	162	198	17	11	225	22
28	34	42	50	187	406	482	145	337	18	12	128	22
29	29	39		108	-------	360	128	248	16	12	86	24
30	26	39		105	-------	275	108	178	14	12	73	27
31	34	-------		760	-------	382	-------	159	-------	43	55	-------

Monthly discharge of North River at Goshen, Va., for the year ending September 30, 1926

[Drainage area, 190 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	60	14	24.4	0.128	0.15
November	795	28	84.5	.445	.50
December	187	37	70.0	.368	.42
January	2,150	41	355	1.87	2.16
February	1,290	165	469	2.47	2.57
March	795	122	259	1.36	1.57
April	596	108	316	1.66	1.85
May	337	59	114	.600	.69
June	147	14	45.7	.241	.27
July	43	9	15.2	.080	.09
August	456	10	59.4	.313	.36
September	45	17	25.6	.135	.15
The year	2,150	9	151	.795	10.78

NORTH RIVER NEAR LEXINGTON, VA.

LOCATION.—About 300 yards above Lime Kiln highway bridge, 2½ miles above Lexington, Rockbridge County, a quarter of a mile below mouth of Kerrs Creek, and 5½ miles above mouth of South River.

DRAINAGE AREA.—487 square miles (measured on topographic maps).

RECORDS AVAILABLE.—August 27, 1925, to September 30, 1926.

GAGE.—Water-stage recorder on right bank; inspected by J. A. Anderson.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Bed composed of rock; rough, clean and permanent. Right bank low and wooded; subject to overflow. Left bank, high, wooded and not subject to overflow. Control composed of ledge rock and boulders 150 feet below gage; clean and permanent. Zero flow at gage height 1.05 feet, determined August 14, 1926.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 9.04 feet at midnight January 18 (discharge, 6,730 second-feet); minimum discharge (estimated), 45 second-feet September 25–30, 1925.

ICE.—Stage-discharge relation probably affected by ice during extremely cold winters.

ACCURACY.—Stage-discharge relation permanent; affected by ice December 27–30. Rating curve well defined between 50 and 9,000 second-feet and extended beyond these limits. Operation of water-stage recorder satisfactory. Daily discharge for low and medium stages ascertained by applying to rating table mean daily gage height determined from recorder graph by inspection; daily discharge for high or rapidly rising and falling stages ascertained by averaging results obtained by applying to rating table gage heights for hourly and bihourly intervals. Records excellent for periods given.

Discharge measurements of North River near Lexington, Va., for the period August 27, 1925, to September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1925	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*	1926—Con.	*Feet*	*Sec.-ft.*
Aug. 30	2.08	60	Jan. 23	5.17	1,320	May 19	3.12	347
Oct. 13	2.13	55	Feb. 23	3.67	612	Aug. 14	2.05	50
			Apr. 14	4.57	1,150			

Daily discharge, in second-feet, of North River near Lexington, Va., for the period August 27, 1925, to September 30, 1926

Day	Aug.	Sept.	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	June	July
1		57			118	1,530	850	1,090		76
2		76	60		122	1,450	910	970		69
3		72			122	1,090	730	850		72
4		69	60		134	970	620	702		136
5		63	64		141	790	538	565		370
6		62	60	348	146	702	485	510		219
7		56	58	296	129	675	760	438		122
8		56	57	244	126	702	1,230	460		93
9		54	59	212	112	760	970	620		116
10		52	59	173	128	790	760	620		91
11		51	59	151	120	620	675	675		93
12		55	60	136	131	510	620	1,030		76
13		64	60	124	102	510	538	970		72
14		67		112	114	1,690	438	1,160		72
15		64		110	112	3,550	438			72
16		90		108	102	1,950	415			69
17		67		106	114	1,300	392			66
18		60		95	3,330	1,030	392			63
19		54		91	4,760	970	415			
20		54		99	2,220	850	438			

Daily discnarge, in second-feet, of North River near Lexington, Va., for the period August 27, 1925, to September 30, 1926—Continued

Day	Aug.	Sept.	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	June	July
21		52		100	1,610	760	460			
22		50		114	2,410	675	460			
23		49		240	1,770	620	460			
24		46		212	1,160	510	460			
25				198	850	1,160	438		80	
26				170	620	2,510	485		80	
27	54	45			538	1,530	1,030		80	
28	54				460	1,030	970		76	
29	55			130	304		760		75	
30	52				348		648		72	
31	54			120	460		850			

NOTE.—No record Sept. 25 to Oct. 3, 1925; discharge estimated by comparison with that of North River at Goshen and study of weather records. Discharge Dec. 27–30 estimated because of ice. No record and discharge not estimated Oct. 14 to Dec. 5, 1925, Apr. 15 to June 24, 1926, and July 19 to Sept. 30, 1926.

Monthly discharge of North River near Lexington, Va., for the period August 27, 1925 to September 30, 1926

[Drainage area, 487 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1925					
August 27–31	55	52	53.8	0.110	0.02
September	90		57.0	.117	.13
1925–26					
October 1–13			59.7	.123	.06
December 6–31	348	91	157	.322	.31
January	4,760	102	739	1.52	1.75
February	3,550	510	1,120	2.30	2.40
March	1,230	392	633	1.30	1.50
April 1–14	1,160	438	761	1.56	.81
June 25–30	80	72	77.2	.159	.04
July 1–18	370	63	108	.222	.15

WRECK ISLAND CREEK NEAR CONCORD, VA.

LOCATION.—At gristmill, 9 miles from Concord, Appomattox County, and 6 miles above mouth.

DRAINAGE AREA.—40 square miles (measured on topographic maps).

RECORDS AVAILABLE.—February 6, 1926, to September 30, 1926.

GAGE.—Staff gage at highway bridge; read by F. L. Hollifield.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of fine gravel; clean and shifting. One channel at all stages. Right bank high, cultivated, and not subject to overflow; left bank wooded and subject to overflow. Control is a gravel bar 50 feet below gage; shifting. Zero flow at gage height 0.29 foot; determined May 9, 1926.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 6.00 feet at 4.30 p. m. July 5 (discharge not determined); minimum discharge, 13 second-feet during parts of June and July.

ICE.—Stage-discharge relation affected by ice during extremely cold winters.

REGULATION.—Low-water flow regulated to some extent by gristmill and dam 300 feet above gage.

ACCURACY.—Stage-discharge relation changed during high water of February 25 and July 5. Rating curve used February 6–25 fairly well defined between 24 and 200 second-feet, curve used February 26 to July 5 fairly well defined between 18 and 200 second-feet, and curve used July 6 to September 30 fairly well defined between 20 and 200 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair.

The following discharge measurements were made:
February 6, 1926: Gage height, 1.28 feet; discharge, 51 second-feet.
May 9, 1926: Gage height, 0.99 foot; discharge, 18 second-feet.

Daily discharge, in second-feet, of Wreck Island Creek near Concord, Va., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		32	36	23	19	13	29	15
2		57	36	23	19	13	29	15
3		36	27	23	19	32	29	15
4		29	27	19	19	57	29	21
5		27	27	19	19	400	29	21
6	47	27	27	19	19	70	29	94
7	44	46	27	19	19	43	25	38
8	38	34	36	19	19	38	21	29
9	36	27	29	19	19	38	21	21
10	38	27	27	19	19	25	18	21
11	33	29	32	19	19	29	15	21
12	29	27	55	19	18	29	15	21
13	33	34	74	19	16	29	15	21
14	71	36	80	19	16	29	15	21
15	44	27	52	19	16	29	124	21
16	38	27	36	19	16	29	38	20
17	35	27	34	19	16	21	43	18
18	38	27	32	19	16	21	38	15
19	42	29	32	19	13	21	29	15
20	42	27	27	19	13	21	38	15
21	40	27	27	19	13	21	34	15
22	38	27	27	19	13	21	29	15
23	33	27	27	19	13	70	29	15
24	33	27	27	19	13	34	29	15
25	191	27	27	19	13	29	29	15
26	66	32	27	19	13	29	21	15
27	46	27	27	19	13	29	21	15
28	36	27	23	19	13	29	21	15
29		27	23	19	13	29	15	15
30		27	23	19	13	29	15	21
31		52		19		29	15	

Monthly discharge of Wreck Island Creek near Concord, Va., for the year ending September 30, 1926

[Drainage area, 40 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
February 6–28	191	29	47.4	1.18	1.01
March	57	27	30.9	.772	.89
April	80	23	33.7	.842	.94
May	23	19	19.4	.485	.56
June	19	13	16.0	.400	.45
July	400	13	43.1	1.08	1.24
August	124	15	28.6	.715	.82
September	94	15	21.1	.528	.59

HARDWARE RIVER NEAR SCOTTSVILLE, VA.

LOCATION.—At highway bridge on Woodridge-Scottsville road 3 miles north of Scottsville, Albemarle County, and 9 miles above mouth.
DRAINAGE AREA.—104 square miles (measured on topographic maps).
RECORDS AVAILABLE.—May 28, 1925, to September 30, 1926.
GAGE.—Chain gage on bridge; read by C. B. Johnson.
DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of rock and sand; clean. Banks wooded and subject to overflow, but flow will be confined between abutments of bridge except for extremely high stages, at which time water will flow over bridge. Control is rock ledge 30 feet below gage; clean and probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 7.50 feet at 5.30 p. m. February 25 (discharge, 802 second-feet); minimum discharge probably less than 16 second-feet in July and August.

1925–26: Maximum stage recorded, that of February 25, 1926; minimum, 1.17 feet at 6.10 p. m. July 29, 1925 (discharge, 9 second-feet).

ICE.—Stage-discharge relation affected by ice during winter.

REGULATION.—Low-water flow regulated by dam at gristmill about 100 yards above gage.

ACCURACY.—Stage-discharge relation permanent; not affected by ice. Rating curve well defined between 16 and 800 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table, except as noted in footnote to table of daily discharge. Records good except those for estimated periods, which are fair.

Discharge measurements of Hardware River near Scottsville, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 12	1.64	20.0	Mar. 3	2.58	112	Aug. 19	2.71	122
Jan. 20	3.73	261	Aug. 10	1.52	20.8	Aug. 25	3.08	179

Daily discharge, in second-feet, of Hardware River near Scottsville, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				314	131	144	62	43	27	36	49
2		22		202	137	107	60	43	29	25	35
3		30		202	107	84	62	36	27	19	23
4		29		314	107	84	55	40	35	21	38
5		23		272	96	79	49	46	44	17	32
6		29		202	90	74	52	43	52	23	31
7				176	125	74	52	40	37	17	113
8				163	96	107	49	37	26	18	46
9		32		163	90	150	54	28	21		44
10		36		137	84	96	59	28	23		39
11		44		113	90	156	57	29	39	16	31
12	33	56		101	90	216	46	28	29		37
13	36	55		101	84	113	49	33	25		35
14	37	42		244	82	244	96	26	37		29
15	125			202	80	163	40	24	50	36	29
16	40			156	79	131	47	23	28	36	28
17	26			125	79	119	54	29		19	27
18				107	79	113	50	28		18	
19				119	79	107	54	27		125	
20			244	113	74	90	51	28	16	156	24
21			189	96	74	96	48	30		176	
22			163	96	68	79	39	27		64	21
23			119	90	68	79	39	27	24	44	
24			107	84	65	74	39	38	22	34	
25			90	454	64	68	40	74	24	113	18
26			90	314	79	56	35	40	25	113	
27			79	176	74	62	107	34	28	53	
28			66	137	68	66	53	29	27	35	28
29			52		68	67	46	27	25	23	24
30			66		64	66	45	27	24	35	33
31			468		230		44		18	125	

NOTE.—No record Oct. 1–11, 18–31, Nov. 1, 7, 8, 15–30 and Dec. 1 to Jan. 19. Gage not read Mar. 14, 15, Apr. 11, 18, May 9, 16, 30, June 6, 20, 27, July 4, 5, 25, and Sept. 15; discharge interpolated. Discharge estimated because of regulation May 20, June 1, 17, July 2, 12, 17–22, 31, Aug. 2, 3, 9–14, 18, Sept. 18–21, and 23–27

Monthly discharge of Hardware River near Scottsville, Va., for the year ending September 30, 1926

[Drainage area, 104 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
February	454	84	178	1.71	1.78
March	230	64	90.4	.869	1.00
April	244	56	105	1.01	1.13
May	107	35	52.7	.507	.58
June	74	23	33.7	.324	.36
July	52		27.2	.262	.30
August	176		47.6	.458	.53
September	113		31.9	.307	.34

SLATE RIVER NEAR ARVONIA, VA.

LOCATION.—At Bumpers highway bridge, about 2 miles from Arvonia, Buckingham County, and 2 miles above mouth.

DRAINAGE AREA.—235 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 7 to September 30, 1926.

GAGE.—Chain gage on bridge; read by W. W. Wheeler.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of ledge rock and some sand; very irregular, clean, and permanent. One channel. Banks low, wooded, and subject to overflow at high stages. Control composed of ledge rock; clean and permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period, 5.19 feet at 6 a. m. April 14 (discharge, 666 second-feet); minimum, 1.70 feet at 6 a. m. August 5 (discharge, 11 second-feet).

ICE.—Stage-discharge relation affected by ice for short periods during extremely cold winters.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 25 and 1,600 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Slate River near Arvonia, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Apr. 7	3.02	128	Aug. 13	2.09	29
May 12	2.74	87	Aug. 21	4.31	389

Daily discharge, in second-feet, of Slate River near Arvonia, Va., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	109	130	38	27	50	16	275	123	43	90	264	37
2	------	102	84	34	28	51	17	223	116	43	55	96	24
3	------	102	68	109	25	41	18	187	96	39	40	196	02
4	------	96	62	109	19	55	19	170	78	45	36	130	24
5	------	96	73	73	15	58	20	162	73	43	28	116	44
6	------	96	90	178	23	54	21	146	73	45	29	264	33
7	130	96	84	102	24	243	22	146	68	50	34	187	31
8	162	96	73	63	43	90	23	138	68	45	30	90	29
9	223	90	68	58	51	58	24	138	68	146	25	73	28
10	154	90	57	45	37	187	25	130	68	90	26	96	28
11	146	109	53	34	30	73	26	123	68	90	26	116	23
12	412	90	50	33	24	50	27	116	102	52	29	78	24
13	334	90	49	42	18	96	28	116	78	50	30	41	26
14	632	96	48	50	20	36	29	109	73	46	31	39	28
15	412	84	47	96	43	51	30	109	68	43	31	39	34
							31	------	68	------	34	49	------

Monthly discharge of Slate River near Arvonia, Va., for the year ending September 30, 1926

[Drainage area, 235 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
April 7-30	632	109	204	0.868	0.77
May	123	68	88.1	.375	.43
June	146	39	63.5	.270	.30
July	178	26	53.2	.226	.26
August	264	15	74.2	.316	.36
September	243	23	54.5	.232	.26

RIVANNA RIVER BELOW MOORES CREEK, NEAR CHARLOTTESVILLE, VA.

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

DRAINAGE AREA.—507 square miles (measured on topographic maps).

RECORDS AVAILABLE.—August 8, 1925, to September 30, 1926.

GAGE.—Water-stage recorder on right bank; inspected by engineers of Charlottesville office.

DISCHARGE MEASUREMENTS.—Made from cable 100 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed composed of sand underlain with rock. Two channels. Right bank high, clean, and not subject to overflow; left bank low, wooded, and subject to overflow. Control is a loose rock dam; shifting.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 9.68 feet at 11.55 a. m. August 25, 1926 (discharge, 6,390 second-feet); minimum stage, 1.10 feet at midnight September 4, 1925 (discharge, 21 second-feet).

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation changed September 1, 1925, January 18, July 14, and August 18, 1926. Rating curve used prior to August 31, 1925, based on one discharge measurement and shape of subsequent curves; curve used September 1 to January 18 and July 15 to August 18, 1926, fairly well defined between 60 and 6,400 second-feet; curve used January 19 to July 14 is well defined between 250 and 6,400 second-feet; curve used August 19 to end of year is well defined between 300 and 6,400 second-feet. All curves extended beyond these limits. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained from recorder graph by inspection and by averaging results obtained by applying to rating table gage heights for shorter intervals. Records good.

Discharge measurements of Rivanna River below Moores Creek, near Charlottesville, Va., during the years ending September 30, 1925 and 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1925	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*
Aug. 10	1.63	72	May 6	2.16	255	Aug. 23	2.68	425
Sept. 30	1.99	82	Aug. 4	1.85	62	Aug. 24	2.41	318
Nov. 13	5.70	2,330	Aug. 19	4.67	1,770	Aug. 25	9.57	6,250
			Do	3.85	1,160	Aug. 26	4.89	1.910
1926			Aug. 20	4.25	1,360			
Apr. 9	2.74	508	Aug. 21	3.84	1,090			
Apr. 12	2.95	677	Aug. 22	3.18	678			

Daily discharge, in second-feet, of Rivanna River below Moores Creek, near Charlottesville, Va., for the years ending September 30, 1925 and 1926

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1925			1925			1925		
1		213	11	56	44	21	52	46
2		44	12	141	61	22	57	46
3		36	13	172	104	23	48	53
4		36	14	85	109	24	51	96
5		28	15	59	53	25	41	61
6		34	16	57	106	26	50	58
7		35	17	51	169	27	40	58
8	100	35	18	48	74	28	40	54
9	117	33	19	53	39	29	36	57
10	82	39	20	47	51	30	42	52
						31	65	

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925–26												
1	51	127	96	476	2,260	766	766		210	218	150	366
2	65	140	290	476	1,400	712	660		250	202	84	772
3	154	161	2,380	476	1,060	610	585	280	206	230	52	308
4	106	136	1,240	562	1,190	536	536		187	306	43	254
5	197	124	1,530	562	1,330	464	488		198	480	42	254
6	96	114	1,930	562	1,000	441	464	267	206	284	57	350
7	60	106	1,060	467	880	488	441		210	418	51	
8	65	117	751	345	880	512	488	270	198	242	57	
9	72	127	623	217	766	441	512		175	172	43	
10	53	114	476	476	766	395	464		157	222	42	
11	58	109	396	450	610	395	488	255	172	179	46	
12	60	328	345	504	536	395	610		161	172	35	220
13	70	2,200	345	396	585	395	610	340	157	154	33	
14	104	718	320	422	823	350	712		161	161	100	
15	127	422	310	370	1,330	328	712		164	127	126	
16	120	320	320	345	1,060	328	660	395	150	106	355	
17	104	235	370	393	880	350	610	306	191	88	93	
18	109	184	345	2,240	766	350	585	259	222	78	68	115
19	98	165	315	3,980	766	350	635	263	242	82	976	135
20	82	161	370	2,020	766	328	660	234	242	55	992	148
21	68	140	422	1,400	660	328	610	218	255	57	1,090	132
22	70	136	449	1,400	610	328		202	238	53	760	128
23	72	133	718	1,060	610	328		179	271	51	462	112
24	67	133	623	880	610	306		194	284	61	329	132
25	157	109	623	766	1,590	306	460	194	350	68	3,490	105
26	209	104	562	610	1,980	328		191	222	54	2,080	145
27	140	111	370	585	1,120	350		372	183	52	952	128
28	120	104	396	536	880	306	372	372	179	57	615	122
29	109	96	422	372	-------	306	350	250	172	65	438	118
30	78	101	396	441	-------	306	328	218	172	86	372	152
31	109	-------	449	1,010	-------	560	-------	218	-------	114	438	------

NOTE.—Gage-height record missing Apr. 22–27, May 1–5, 7–10, 12–15, and Sept. 7–17, 1926; discharge estimated.

Monthly discharge of Rivanna River below Moores Creek, near Charlottesville, Va., for the years ending September 30, 1925 and 1926

[Drainage area, 507 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1925					
August 8-31	172	36	66.2	0.131	0.12
September	213	28	64.1	.126	.14
1925-26					
October	209	51	98.4	.194	.22
November	2,200	96	242	.477	.53
December	2,380	96	621	1.22	1.41
January	3,980	217	800	1.58	1.82
February	2,260	536	990	1.95	2.03
March	766	306	409	.807	.93
April	766	328	537	1.06	1.18
May	395	179	272	.536	.62
June	350	150	206	.406	.45
July	480	51	151	.298	.34
August	3,490	33	467	.921	1.06
September	772	105	213	.420	.47
The year	3,980	33	414	.817	11.06

WILLIS RIVER AT FLANAGAN MILLS, VA.

LOCATION.—At highway bridge at Flanagan Mills, Cumberland County, 5 miles west of Cartersville and 3 miles below Reynolds Creek.

DRAINAGE AREA.—247 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 8, 1926, to September 30, 1926.

GAGE.—Chain gage on highway bridge; read by Everett Trice.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of rock and sand; shifting. One channel. Right bank low and wooded, subject to overflow at stage of about 18 feet. Left bank high and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.15 feet at 6 p. m. April 14 and 7 a. m. April 15 (discharge, 614 second-feet); minimum, 2.74 feet at 7 p. m. July 23 (discharge, 30 second-feet).

ICE.—Stage-discharge relation will be affected by ice for short periods during severe winters.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 38 and 1,500 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Operation of gristmill at outlet of Trice Lake may slightly affect low-water flow. Records good.

Discharge measurements of Willis River at Flanagan Mills, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Apr. 8	4.48	113	Aug. 13	3.17	38.6	Aug. 21	6.38	340
May 12	3.86	64	Aug. 21	5.25	201			

Daily discharge, in second-feet, of Willis River at Flanagan Mills, Va., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	84	56	34	36	40	16	412	73	38	48	317	42
2	------	80	54	35	34	38	17	267	76	39	42	84	40
3	------	76	46	36	32	39	18	207	73	36	38	370	39
4	------	70	46	38	31	38	19	171	66	38	36	84	36
5	------	66	50	532	32	38	20	147	61	35	38	70	39
6	------	66	54	384	56	39	21	142	58	35	35	219	38
7	------	66	54	426	36	130	22	130	56	36	35	195	38
8	115	66	61	159	80	80	23	120	54	39	31	100	35
9	115	70	54	64	42	61	24	115	48	40	92	70	36
10	125	73	48	48	39	255	25	115	48	39	50	76	36
11	130	66	41	40	70	96	26	110	48	40	40	304	33
12	304	64	41	38	38	64	27	96	48	39	37	159	35
13	343	64	39	38	34	44	28	92	50	39	36	66	39
14	597	64	40	40	35	40	29	92	52	38	37	54	40
15	597	64	41	64	33	40	30	88	50	35	36	48	42
							31	------	48	------	35	50	------

Monthly discharge of Willis River at Flanagan Mills, Va., for the year ending September 30, 1926

[Drainage area, 247 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
April 8-30	597	88	201	0.814	0.70
May	84	48	62.8	.254	.29
June	61	35	43.0	.174	.19
July	532	31	85.2	.345	.40
August	370	31	93.4	.378	.44
September	255	33	53.7	.218	.24

APPOMATTOX RIVER AT FARMVILLE, VA.

LOCATION.—At bridge on Farmville-Cumberland road 1,000 feet north of Farmville, Prince Edward County, and 1½ miles below Buffalo Creek.

DRAINAGE AREA.—306 square miles (measured on topographic maps).

RECORDS AVAILABLE.—March 25 to September 30, 1926.

GAGE.—Chain gage on bridge; read by F. W. Putney.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of sand; clean and will shift during high stages. Banks low and subject to overflow. Control composed of rocks.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.90 feet at 5.30 p. m. July 6 (discharge, 898 second-feet); minimum, 2.53 feet at 2.05 p. m. August 13 (discharge, 9 second-feet).

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation changed during high water of April 14 and July 6. Rating curve used March 25 to April 14 and July 7 to September 30 fairly well defined between 9 and 1,700 second-feet; curve used April 15 to July 6 well defined between 120 and 1,700 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating tables. Records poor owing to almost complete regulation at low water.

Discharge measurements of Appomattox River at Farmville, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Mar. 25	4.41	163	May 13	3.92	124	Aug. 13	2.55	9.7
May 12	3.79	99	Aug. 13	2.88	13.6			

Daily discharge, in second-feet, of Appomattox River at Farmville, Va., for the year ending September 30, 1926

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	280	150	68	52	67	46	16	------	321	133	44	222	198	40
2	------	204	155	69	51	67	58	17	------	262	150	40	99	112	21
3	------	156	129	52	77	34	29	18	------	219	113	37	73	40	21
4	------	150	127	47	103	65	61	19	------	225	111	40	43	63	57
5	------	162	115	70	116	68	73	20	------	201	123	105	50	61	40
6	------	156	113	119	854	117	112	21	------	183	76	77	60	92	21
7	------	150	119	101	492	92	117	22	------	177	95	42	59	186	44
8	------	162	93	111	132	97	88	23	------	172	97	52	33	75	33
9	------	198	107	117	80	48	40	24	------	177	91	82	74	57	44
10	------	174	113	68	71	39	79	25	162	177	77	128	102	198	24
11	------	162	105	62	50	40	40	26	174	177	71	93	60	294	45
12	------	328	115	67	36	49	55	27	210	155	53	73	63	168	21
13	------	444	117	63	28	90	20	28	174	160	55	71	69	73	40
14	------	770	126	60	28	102	44	29	156	160	94	71	66	67	59
15	------	473	123	55	287	180	44	30	162	155	80	59	97	58	73
								31	228	------	60	------	70	63	------

Monthly discharge of Appomattox River at Farmville, Va., for the year ending September 30, 1926

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
April	770	150	230	0.752	0.84
May	155	53	106	.346	.40
June	128	37	71.4	.233	.26
July	854	28	119	.389	.45
August	294	34	95.5	.312	.36
September	117	20	49.6	.162	.18

APPOMATTOX RIVER AT MATTOAX, VA.

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

DRAINAGE AREA.—745 square miles.

RECORDS AVAILABLE.—August 26, 1900, to December 31, 1905; March 29 to September 30, 1926.

GAGE.—Chain gage on bridge; read by Charles Bily.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of rock and sand; clean; shifts at high stages. One channel at all stages. Banks low; overflowed at high stage.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.74 feet at 7.45 p. m. July 7 (discharge, 1,940 second-feet); minimum, 4.03 feet at 3.05 p. m. September 28 (discharge, 42 second-feet).

1900–1905, 1926: Maximum stage recorded, 24.6 feet (old datum) at 8 a. m. May 25, 1901 (discharge, 12,200 second-feet); minimum, that of September 28, 1926.

ICE.—Stage-discharge relation affected by ice during severe winters.
ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 90 and 3,500 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:
March 27, 1926: Gage height, 6.99 feet; discharge, 460 second-feet.
March 29, 1926: Gage height, 6.84 feet; discharge, 401 second-feet.
May 13, 1926: Gage height, 5.55 feet; discharge, 207 second-feet.

Daily discharge, in second-feet, of Appomattox River at Mattoax, Va., for the year ending September 30, 1926

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		612	292	140	83	140	115
2		612	276	154	78	115	98
3		472	276	134	244	93	83
4		414	260	127	472	83	74
5		396	244	134	1,220	78	88
6		378	244	140	1,220	109	121
7		360	244	168	1,910	228	276
8		360	228	175	905	196	324
9		492	228	161	360	140	161
10		432	228	140	244	134	182
11		396	204	127	154	115	168
12		744	212	109	127	78	127
13		980	204	109	115	88	103
14		1,520	228	98	140	74	88
15		1,580	244	98	744	66	74
16		1,030	244	98	810	74	78
17		744	244	78	432	88	88
18		612	260	74	276	212	66
19		532	228	74	161	154	70
20		472	196	78	127	140	62
21		432	168	78	115	212	66
22		414	161	134	109	360	66
23		396	154	115	88	342	58
24		378	154	98	168	196	62
25		360	140	93	1,190	324	58
26		342	134	204	472	955	45
27		324	147	168	276	656	62
28		308	161	121	175	342	42
29	414	292	147	103	204	189	62
30	378	292	147	88	196	147	62
31	452		154		161	109	

Monthly discharge of Appomattox River at Mattoax, Va., for the year ending September 30, 1926

[Drainage area, 745 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
April	1,580	292	556	0.746	0.83
May	292	134	208	.279	.32
June	204	74	121	.162	.18
July	1,910	78	419	.562	.65
August	955	66	201	.70	.31
September	324	42	101	.236	.15
				.1	

DISMAL SWAMP BASIN

LAKE DRUMMOND IN DISMAL SWAMP, VA.

LOCATION.—On east side of lake above outlet gates of feeder to Dismal Swamp Canal, Norfolk County.
DRAINAGE AREA.—Not determined.
RECORDS AVAILABLE.—May 16 to September 30, 1926.
GAGE.—Vertical staff near outlet; read by J. E. Barnes. Gage read twice daily and after every change in gate openings. Normal elevation of lake is about gage height 5.25 feet. Lake overflows at gage height of about 6.25 feet. Lake is used as storage basin for Dismal Swamp Canal.

Daily gage height, in feet, of Lake Drummond in Dismal Swamp, Va., for the year ending September 30, 1926

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	-------	4.40	3.90	2.98	2.11	16	4.38	4.20	3.52	2.46	1.81
2	-------	4.40	3.88	2.96	2.10	17	4.43	4.17	3.48	2.48	1.76
3	-------	4.38	3.86	2.87	2.10	18	4.44	4.10	3.46	2.39	1.75
4	-------	4.34	3.82	2.48	2.09	19	4.46	4.10	3.44	2.40	1.69
5	-------	4.44	3.86	2.80	2.04	20	4.47	4.08	3.36	2.31	1.67
6	-------	4.45	3.87	2.75	2.04	21	4.46	4.06	3.40	2.35	1.62
7	-------	4.50	3.88	2.75	2.08	22	4.46	4.00	3.32	2.32	1.62
8	-------	4.39	3.89	2.72	2.08	23	3.93	4.00	3.24	2.29	1.60
9	-------	4.43	3.79	2.66	2.08	24	4.45	4.04	3.22	2.27	1.58
10	-------	4.41	3.74	2.62	2.06	25	4.42	4.04	3.23	2.30	1.55
11	-------	4.39	3.74	2.63	2.02	26	4.44	4.40	3.21	2.31	1.54
12	-------	4.35	3.66	2.54	1.99	27	4.43	4.00	3.15	2.28	1.46
13	-------	4.33	3.62	2.51	1.94	28	4.44	3.94	3.10	2.26	1.47
14	-------	4.22	3.58	2.50	1.94	29	4.42	3.94	3.08	2.22	1.42
15	-------	4.24	3.61	2.60	1.84	30	4.40	3.94	3.07	2.20	1.38
						31	4.41	-------	3.05	2.16	------

ROANOKE RIVER BASIN

ROANOKE RIVER AT ROANOKE, VA.

LOCATION.—At Walnut Street bridge in Roanoke, Roanoke County.
DRAINAGE AREA.—388 square miles (measured on topographic maps).
RECORDS AVAILABLE.—July 10, 1896, to July 15, 1906; May 7, 1907, to September 30, 1926.
GAGE.—Chain gage on downstream side of bridge; read by employee of Appalachian Power Co.
DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.
CHANNEL AND CONTROL.—Bed composed of coarse gravel and small boulders. Banks may be overflowed at extreme flood stages. Control composed of loose boulders. Point of zero flow at gage height −0.66 foot ±0.1 foot, determined October 20, 1924.
EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.47 feet January 18 and February 19 (discharge, 1,690 second-feet); minimum stage, 0.45 foot July 21 (discharge, 38 second-feet).
1896–1926: Maximum stage recorded, 14.34 feet August 6, 1901 (discharge, 16,900 second-feet); minimum stage, 0.0 foot morning of December 23, 1909 (practically no flow).
ICE.—Stage-discharge relation affected by ice during severe winters only.
ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 80 and 3,700 second-feet and extended beyond these limits. Gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records good.

The following discharge measurement was made:
April 16, 1926: Gage height, 1.92 feet; discharge, 534 second-feet.

Daily discharge, in second-feet, of Roanoke River at Roanoke, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	88	88	76	533	300	406	129	104	58	129	52
2	88	88	99	78	533	300	341	129	99	69	94	59
3	78	78	88	97	384	300	261	116	92	74	72	56
4	78	69	111	97	533	300	231	116	92	74	64	62
5	69	69	104	86	533	300	231	116	92	88	58	59
6	69	69	99	86	384	300	231	116	92	109	55	82
7	61	78	88	76	384	261	242	116	88	80	53	69
8	61	88	88	67	300	231	231	116	76	66	52	62
9	61	84	88	59	480	213	231	116	70	58	47	59
10	61	78	88	67	384	196	231	116	64	58	46	76
11	53	78	88	67	300	261	261	116	61	55	43	69
12	61	406	88	67	384	261	533	116	76	56	42	56
13	69	300	88	67	533	231	587	116	76	46	46	52
14	78	235	88	67	533	213	642	116	72	56	43	55
15	78	199	99	67	384	261	506	116	69	56	53	48
16	88	111	88	67	1,080	261	454	157	58	61	61	52
17	88	111	84	823	480	261	406	142	59	62	82	51
18	88	111	78	1,690	759	300	384	129	64	56	82	51
19	88	104	78	1,000	1,690	261	320	104	67	53	109	48
20	78	99	78	891	1,240	241	320	104	72	42	116	47
21	78	99	99	587	480	300	280	104	90	38	104	46
22	69	88	104	480	430	341	224	104	72	41	80	43
23	78	88	99	341	341	300	206	104	72	42	72	42
24	111	88	88	300	300	300	206	104	70	43	70	41
25	151	88	88	261	384	261	206	104	69	46	70	43
26	99	88	88	231	341	300	172	104	72	261	69	42
27	88	88	88	163	300	300	172	104	70	94	67	43
28	88	88	88	109	341	261	157	104	69	97	62	51
29	78	88	88	109	-------	196	142	104	67	320	56	69
30	88	88	78	109	-------	213	142	104	64	203	52	76
31	88	-------	76	533	-------	533	-------	104	-------	145	48	-------

Monthly discharge of Roanoke River at Roanoke, Va., for the year ending September 30, 1926

[Drainage area, 388 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	151	53	80.0	0.206	0.24
November	406	69	114	.294	.33
December	111	76	89.7	.231	.27
January	1,690	59	284	.732	.84
February	1,690	300	527	1.36	1.42
March	533	196	279	.719	.83
April	642	142	299	.771	.86
May	157	104	114	.294	.34
June	104	58	75.3	.194	.22
July	320	38	84.1	.217	.25
August	129	42	67.6	.174	.20
September	82	41	55.4	.143	.16
The year	1,690	38	170	.438	5.96

ROANOKE RIVER NEAR TOSHES, VA.

LOCATION.—Three-fourths of a mile below Smith Mountain Gap, 3 miles above mouth of Pigg River, and 7 miles northwest of Toshes, Pittsylvania County.
DRAINAGE AREA.—1,020 square miles (measured on topographic maps).
RECORDS AVAILABLE.—September 3, 1925, to September 30, 1926.
GAGE.—Vertical staff on right bank; read by Mrs. Bertie Barber.

DISCHARGE MEASUREMENTS.—Made from cable three-fourths mile above gage or by wading.

CHANNEL AND CONTROL.—Bed composed of large gravel and small boulders. One channel. Banks subject to overflow at about stage of 13 feet. Control is riffle composed of gravel and small boulders; may shift at extremely high stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period, 8.6 feet at 8 a. m. January 19 (discharge, 7,840 second-feet); minimum stage, 1.0 foot September 9, 10, and 13, 1925 (discharge, 150 second-feet).

ICE.—Stage-discharge relation affected by ice during severe periods.

ACCURACY.—Stage-discharge relation permanent; affected by ice December 28 to January 4 and January 8–15. Rating curve well defined between 150 and 9,800 second-feet. Gage read to tenths daily prior to June 16, and to hundredths twice daily thereafter. Daily discharge ascertained by applying daily or mean daily gage height to rating table, except for periods affected by ice. Records fair prior to June 16 and good thereafter.

Discharge measurements of Roanoke River at Smith Mountain, Va., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
June 26	1.20	241	July 27	2.52	1,020	July 27	2.02	704
July 14	1.12	199	Do	2.19	794			

Daily discharge, in second-feet, of Roanoke River near Toshes, Va., for the period September 3, 1925, to September 30, 1926

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	190	290	290		3,920	680	1,560	470	290	215	390	205
2	-------	240	290	315	290	2,180	740	1,020	470	290	215	310	275
3	240	290	290	415		1,910	710	880	470	290	275	335	265
4	215	240	290	440		2,270	620	880	440	290	245	265	200
5	190	240	290	500	500	2,450	500	740	415	340	950	255	225
6	190	240	290	650	500	1,640	500	680	415	315	950	255	230
7	170	190	290	415	390	1,400	620	650	415	340	560	265	1,090
8	190	190	315	415		1,240	680	620	415	290	300	265	320
9	150	215	340	390		1,090	680	620	415	290	255	210	270
10	150	240	340	365		950	680	620	415	240	235	265	255
11	190	215	365	340	340	710	680	650	415	240	230	230	250
12	240	190	415	340		680	680	810	440	240	205	190	240
13	150	190	2,650	340		680	680	1,480	470	240	190	178	190
14	240	265	845	340		710	620	2,270	470	215	200	166	195
15	215	315	620	340		1,820	620	1,730	440	240	650	365	205
16	3,050	340	440	365	440	1,560	680	1,400	560	240	365	810	200
17	440	290	440	340	560	1,240	680	1,400	560	230	225	320	195
18	290	290	340	340	2,450	950	680	1,020	530	215	210	265	182
19	240	290	365	340	6,720	1,090	680	880	500	215	190	365	182
20	315	265	365	290	2,750	1,240	680	775	415	255	190	1,090	182
21	240	240	365	340	1,910	1,240	740	710	390	275	190	620	182
22	215	240	315	500	1,320	1,090	680	620	365	285	166	365	174
23	190	240	340	560	1,020	950	680	620	390	300	158	260	174
24	190	290	315	470	950	810	680	590	340	470	158	270	174
25	190	390	290	440	680	1,090	680	530	340	290	162	275	174
26	190	440	290	415	680	1,400	650	440	340	220	3,250	260	174
27	190	390	290	390	650	1,090	620	440	315	275	1,020	230	174
28	190	340	290		590	810	620	440	315	235	500	220	174
29	190	290	290	330	470	-------	620	470	290	225	340	205	178
30	190	290	290		440	-------	620	470	315	220	310	195	220
31	-------	290	-------		1,820	-------	1,090	-------	365	-------	310	190	------

NOTE.—Stage-discharge relation affected by ice Dec. 28 to Jan. 4 and Jan. 8–15; discharge estimated from study of weather records and comparison with Roanoke River at Roanoke and near Gretna.

Monthly discharge of Roanoke River near Toshes, Va., for the years ending September 30, 1925 and 1926

[Drainage area, 1,020 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1925					
September 3-30	3,050	150	316	0.310	0.32
1925-26					
October	440	190	270	.265	.31
November	2,650	290	432	.424	.47
December	650	290	387	.379	.44
January	6,720		926	.908	1.05
February	3,920	680	1,360	1.33	1.38
March	1,090	500	670	.657	.76
April	2,270	440	867	.850	.95
May	560	290	416	.408	.47
June	470	215	270	.265	.30
July	3,250	158	433	.425	.49
August	1,090	166	319	.313	.36
September	1,090	174	238	.233	.26
The year	6,720	158	544	.533	7.24

ROANOKE RIVER NEAR GRETNA, VA.

LOCATION.—At Tolers Ferry Bridge, 8 miles northwest of Gretna, Pittsylvania County, and seven-eighths mile below Pigg River.

DRAINAGE AREA.—1,430 square miles (measured on topographic maps).

RECORDS AVAILABLE.—March 17, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by William A. Johnson.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed largely of sand, gravel, and some large boulders. Banks low and subject to overflow. Control is a rock ledge 1,500 feet below gage; clean and probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.80 feet at 9 a. m. January 19 (discharge, 9,980 second-feet); minimum stage, 2.90 feet at 9 a. m. July 23 (discharge, 170 second-feet).

1925-26: Maximum and minimum stages, those of January 19 and July 23, 1926.

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation permanent; affected by ice December 28 to January 4 and January 10-16. Rating curve well defined between 300 and 14,000 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except for periods affected by ice. Records good.

The following discharge measurements were made:
April 4, 1926: Gage height, 5.49 feet; discharge, 1,580 second-feet.
May 8, 1926: Gage height, 4.00 feet; discharge, 619 second-feet.
July 27, 1926: Gage height, 6.28 feet; discharge, 2,050 second-feet.

Daily discharge, in second-feet, of Roanoke River near Gretna, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	470	470		5,860	1,100	2,240	645	470	300	645	280
2	420	470	470	420	3,260	1,170	1,680	670	420	300	420	840
3	595	520	840		2,320	1,100	1,380	670	400	380	470	400
4	420	470	720		3,760	960	1,240	620	380	380	360	320
5	380	445	1,030	900	3,460	840	960	645	445	1,030	300	300
6	380	470	1,380	840	2,320	840	900	595	445	1,240	340	300
7	360	470	720	720	2,000	1,030	960	570	520	720	420	1,240
8	300	545	670	620	1,520	1,240	960	595	445	470	470	570
9	340	670	620	570	1,520	1,170	960	595	380	380	380	420
10	320	520	570	530	1,380	1,030	960	720	380	340	300	400

Daily discharge, in second-feet, of Roanoke River near Gretna, Va., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11	340	520	545		1,100	1,030	960	620	360	340	470	340
12	340	545	570		960	1,100	1,680	620	320	280	320	380
13	340	5,140	520		1,100	1,030	2,410	900	340	260	245	260
14	400	1,450	520	530	1,170	960	2,860	670	340	300	230	280
15	1,240	1,100	445		2,160	960	2,410	620	320	1,680	595	280
16	720	670	595		2,080	960	1,760	720	260	720	1,030	280
17	495	720	570	570	1,680	1,030	1,520	840	300	445	495	260
18	570	570	545	5,030	1,380	960	960	670	280	320	340	260
19	495	570	520	9,140	1,450	960	1,170	620	300	260	340	245
20	380	620	495	4,260	1,760	1,100	1,100	570	360	300	1,240	245
21	380	595	545	2,320	1,680	1,030	1,030	570	380	260	780	260
22	380	520	670	2,080	1,380	1,030	960	570	420	245	620	245
23	400	570	1,170	1,520	1,310	1,030	900	545	470	200	420	245
24	445	470	840	1,240	1,030	1,030	900	445	780	230	380	245
25	595	495	720	1,100	1,920	840	900	470	840	245	470	230
26	780	520	595	900	2,320	960	780	420	420	5,140	470	260
27	620	470	470	960	1,520	1,030	720	420	960	2,080	360	230
28	520	495		720	1,240	960	670	445	380	670	300	230
29	445	470	440	720	-------	900	670	445	340	720	300	260
30	470	470		720	-------	840	670	420	300	570	280	280
31	520	-------		3,360	-------	1,600	-------	420	-------	960	260	-------

Monthly discharge of Roanoke River near Gretna, Va., for the year ending September 30, 1926

[Drainage area, 1,430 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	1,240	300	474	0.331	0.38
November	5,140	445	734	.513	.57
December	1,380	----------	632	.442	.51
January	9,140	----------	1,410	.986	1.14
February	5,860	960	1,950	1.36	1.42
March	1,600	840	1,030	.720	.83
April	2,860	670	1,240	.867	.97
May	900	420	592	.414	.48
June	960	260	425	.297	.33
July	5,140	200	702	.491	.57
August	1,240	230	453	.317	.37
September	1,240	230	346	.242	.27
The year	9,140	200	825	.577	7.84

ROANOKE RIVER AT BROOKNEAL, VA.

LOCATION.—At highway bridge at Virginian Railway station at Brookneal, Campbell County, 2¾ miles above Falling River.

DRAINAGE AREA.—2,420 square miles, revised (measured on topographic maps).

RECORDS AVAILABLE.—April 29, 1923, to September 30, 1926.

GAGE.—Chain gage on bridge; read by C. R. McDowell.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of sand, silt, and bedrock. Banks low and subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 19.6 feet at 9 a. m. January 19 (discharge, 16,400 second-feet); minimum stage, 2.78 feet at 5 p. m. September 28 (discharge, 370 second-feet).

1923–1926: Maximum stage, determined by levels from high-water marks, 31.46 feet October 1, 1924 (discharge, about 31,000 second-feet); minimum stage, that of September 28, 1926.

Flood of November, 1877, reached a stage of about 36 feet on the present gage and that of March 15, 1923, reached a stage of about 31 feet.

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation permanent; not affected by ice. Rating curve well defined between 500 and 28,000 second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except as noted in footnote to table of daily discharge. Records good.

The following discharge measurements were made:
November 24, 1925: Gage height, 3.84 feet; discharge, 930 second-feet.
April 18, 1926: Gage height, 6.22 feet; discharge, 2,500 second-feet.

Daily discharge, in second-feet, of Roanoke River at Brookneal, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	610	820	1,120	1,060	10,100			1,330	760	660	760	485
2	610	820	1,400	1,060	6,640		3,900	1,330	760	710	760	485
3	635	820	1,820	1,060	4,000			1,260	760	635	710	820
4	750	760	1,610	1,260	10,300	2,310	1,980	1,260	760		635	710
5	585	760	2,060	1,400	6,930		1,900	1,260	820		635	640
6	585	760	2,470	1,540	4,360		1,900	1,260	760		635	560
7	585	820	2,470	1,400	4,070	2,560	1,980	1,260	760		660	710
8	560	940	1,980	1,260	3,170	2,560	1,900	1,260	710		635	1,470
9	560	1,060	1,680	1,120	2,720	2,300	1,900	1,260	710		585	880
10	560	1,060	1,330	1,060	2,470	2,140	2,060	1,260	660	990	560	710
11	535	1,000	1,190	1,060	2,300	2,060	2,060	1,260	660		585	660
12	535	940	1,000	1,000	2,300	2,060	2,140	1,260	635		510	610
13	560	5,500	880	1,000	2,300	2,060	2,300	1,260	635		435	485
14	635	4,450	880	1,000	2,380	1,980	6,160	1,260	635		435	485
15	585	2,140	940	940	2,470	1,980	4,640	1,260	635		435	460
16	760	1,330	1,000	940	2,470	1,980	3,530	1,330	635	1,120	880	510
17	880	1,260	1,120	1,000	2,560	1,980	2,990	1,400	635	1,060	1,120	485
18	1,000	1,190	1,060	6,730	2,560	1,980	2,560	1,400	610	880	1,260	485
19	820	1,120	1,000	12,100	2,720	1,980	2,300	1,400	660	820	1,260	435
20	760	1,000	1,060	5,590	2,990	1,980	2,060	1,400	660	760	1,820	435
21	710	1,000	1,190	4,260	2,680	1,980	2,060	1,400	660	710	1,610	435
22	710	1,000	2,140	3,350	2,380	1,980	2,060	1,330	635	880	1,280	460
23	660	1,000	1,980	2,720	2,300	1,980	1,980	1,260	660	1,060	940	435
24	660	1,000	1,900	2,470	2,220	1,980	1,900	1,190	940	1,400	880	410
25	880	1,000	1,820	2,220	6,930	1,900	1,750	1,120	940	2,640	760	435
26	1,540	1,000	1,680	1,820	5,300	2,060	1,610	1,060	880	2,900	635	435
27	1,260	1,000	1,540	1,680	3,620	2,060	1,540	1,000	820	2,560	560	410
28	1,000	940	1,330	1,540	2,310	2,140	1,540	1,000	710	1,750	560	370
29	940	940	1,190	1,470	-------	2,060	1,400	880	660	1,190	535	435
30	880	1,000	1,060	1,400	-------	2,060	1,400	880	660	880	535	460
31	880	-------	1,000	2,300	-------	2,380	-------	820	-------	820	465	------

NOTE.—Gage not read Oct. 4, 18, Jan. 8, 17, 24, Feb. 3, 21, 28, Mar. 1–6, July 4–14, Aug. 22, and Sept. 5, and gage readings in error Apr. 1–3 and July 15; discharge estimated by comparison with Roanoke River near Gretna.

Monthly discharge of Roanoke River at Brookneal, Va., for the year ending September 30, 1926

[Drainage area, 2,420 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	1,540	535	749	0.310	0.36
November	5,500	760	1,280	.529	.59
December	2,470	880	1,450	.599	.69
January	12,100	940	2,220	.917	1.06
February	10,300	2,220	3,840	1.59	1.66
March	----------	1,980	2,130	.880	1.01
April	6,160	1,400	2,440	1.01	1.13
May	1,400	820	1,220	.504	.58
June	940	610	714	.295	.33
July	2,900	635	1,140	.471	.54
August	1,820	435	777	.321	.37
September	1,470	370	560	.231	.26
The year	12,100	370	1,530	.632	8.58

ROANOKE RIVER AT OLD GASTON, N. C.

LOCATION.—At bridge of Roanoke Railway Co. at Old Gaston, Northampton County, three-quarters of a mile below mouth of Indian Creek, 1¼ miles north of Thelma, and 2½ miles above mouth of Deep Creek.

DRAINAGE AREA.—8,350 square miles.

RECORDS AVAILABLE.—December 7, 1911, to September 30, 1926.

GAGE.—Au water-stage recorder at downstream end of second masonry pier from right end of bridge, since November 22, 1924; attended by R. A. Howell.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge. Measuring section broken by 11 piers.

CHANNEL AND CONTROL.—Channel straight and fairly permanent. Left bank subject to overflow in extreme floods but a fair determination can be made of the overflow discharge around bridge. Control of rocks about 1 mile below gage; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, 9.36 feet from 11 a. m. to 2 p. m. January 21 (discharge, 57,200 second-feet); minimum stage, 0.80 foot all day September 27 (discharge, 1,000 second-feet).

1911–1926: Maximum stage recorded, 16.6 feet at 7 a. m. March 18, 1912 (discharge, 210,000 second-feet); minimum discharge, 790 second-feet at 6 a. m. October 1, 1914 (gage height, 0.95 foot).

ICE.—Ice forms to considerable thickness at this station during severe winters.

REGULATION.—Small daily fluctuations caused by operation of power plants many miles upstream.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined below 33,000 second-feet and fairly well defined up to 200,000 second-feet. Water-stage recorder not operating October 1–9, December 28–30, February 18–19, February 21 to March 24, March 30 to April 24, and June 28 to July 2; gage-height graph estimated from daily chain gage readings. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting recorder graph, except for days of wide range in stage, for which discharge was obtained by averaging results for shorter intervals. Records good.

The following discharge measurements were made:

October 10, 1925: Gage height, 1.22 feet; discharge, 1,820 second-feet.
February 16, 1926: Gage height, 2.83 feet; discharge, 6,780 second-feet.
August 31, 1926: Gage height, 1.35 feet; discharge, 2,100 second-feet.

Daily discharge, in second-feet, of Roanoke River at Old Gaston, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,620	3,020	2,760	2,510	15,000	11,000	6,500	4,040	2,160	1,720	3,160	1,720
2	1,430	2,890	3,160	3,020	29,200	8,590	7,720	3,890	2,270	1,720	2,640	1,720
3	1,720	2,890	4,040	4,360	27,500	8,150	10,000	3,740	3,160	1,820	2,510	1,720
4	1,930	2,890	5,740	4,360	37,100	7,300	7,720	3,890	2,760	1,720	2,390	1,520
5	2,040	3,160	5,740	4,690	38,000	6,900	5,380	3,740	2,760	2,270	2,160	1,720
6	2,270	2,890	5,380	7,300	28,300	6,500	6,120	3,740	2,640	3,590	2,040	2,040
7	1,930	3,020	4,690	7,300	18,600	6,120	5,740	3,440	2,510	4,360	3,970	2,890
8	2,160	2,890	5,030	6,500	12,700	6,120	5,740	3,440	2,270	5,030	3,440	2,270
9	1,930	2,890	5,740	5,740	10,000	7,300	4,690	3,440	2,510	5,380	2,890	1,720
10	1,820	3,020	4,630	5,030	9,040	8,150	5,380	3,300	2,510	3,890	2,510	2,640
11	1,720	3,160	4,040	4,360	8,150	7,300	5,740	3,440	2,390	2,760	2,160	4,040
12	1,520	3,740	3,740	4,040	7,300	8,150	5,740	3,440	2,160	2,160	2,160	2,760
13	1,520	4,040	3,740	4,360	6,500	9,520	11,000	3,440	2,040	1,930	2,040	2,160
14	1,820	5,380	3,440	4,360	6,120	9,520	16,800	3,440	2,040	1,720	2,040	1,630
15	2,270	13,800	3,020	4,360	6,500	9,520	17,400	3,740	1,930	1,720	1,930	1,720
16	3,440	10,000	3,160	4,040	6,500	9,040	15,600	3,740	1,930	2,760	1,930	1,620
17	3,440	6,500	3,590	4,040	7,300	8,590	12,100	4,040	1,820	6,500	1,930	1,620
18	4,690	5,380	3,590	5,030	8,150	7,720	9,520	4,690	1,820	6,500	2,390	1,620
19	4,040	4,360	3,440	34,500	8,150	6,900	8,150	4,360	1,820	3,740	2,640	1,720
20	3,160	4,040	3,740	52,000	14,400	6,500	7,300	3,590	1,820	2,390	2,760	1,250
21	3,890	3,740	3,890	56,500	14,400	6,120	6,900	3,300	1,820	1,930	2,640	1,130
22	3,020	3,740	4,690	30,000	13,800	5,740	6,120	3,160	1,820	1,820	3,300	1,160
23	2,390	3,740	8,150	15,600	10,500	5,740	6,120	2,890	1,820	1,720	3,020	1,160
24	2,510	3,300	11,600	10,500	8,590	5,740	5,380	2,640	2,390	1,720	2,890	1,250
25	2,510	3,300	10,000	8,590	8,590	5,380	4,690	2,390	3,740	3,130	2,390	1,160
26	3,160	3,300	7,720	7,300	18,000	5,380	5,030	2,510	3,300	14,000	2,510	1,250
27	5,740	3,020	6,120	6,500	19,300	6,120	4,360	2,640	2,640	8,150	3,740	1,000
28	5,380	3,020	4,360	6,120	16,800	6,500	4,360	2,390	2,390	8,590	4,040	1,130
29	4,360	3,160	3,020	5,740	------	5,740	4,360	2,390	2,390	10,500	3,160	1,120
30	3,740	3,020	2,510	5,740	------	5,030	4,360	2,390	2,040	6,500	2,390	1,030
31	3,300	------	2,390	7,300	------	5,740	------	2,270	------	4,040	2,040	------

Monthly discharge of Roanoke River at Old Gaston, N. C., for the year ending September 30, 1926

[Drainage area, 8,350 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	5,740	1,430	2,790	0.334	0.39
November	13,800	2,890	4,110	.492	.55
December	11,600	2,390	4,740	.568	.65
January	56,500	2,510	10,700	1.280	1.48
February	38,000	6,120	14,800	1.770	1.84
March	11,000	5,030	7,170	.859	.99
April	17,400	4,360	7,530	.902	1.01
May	4,690	2,270	3,340	.400	.46
June	3,740	1,820	2,320	.278	.31
July	14,000	1,720	4,060	.486	.56
August	4,040	1,930	2,640	.316	.36
September	4,040	1,000	1,730	.207	.23
The year	56,500	1,000	5,430	.650	8.83

BLACKWATER RIVER NEAR UNION HALL, VA.

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

DRAINAGE AREA.—208 square miles (measured on topographic maps).

RECORDS AVAILABLE.—March 18, 1925, to September 30, 1926.

GAGE.—Chain gage attached to bridge; read by S. S. Plybon and J. L. Brown.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of rock and sand; clean and permanent. Right bank high and not subject to overflow; left bank low and subject to overflow at high stages. Control is rock ledge 50 feet below gage; probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.70 feet at 4 p. m. January 18 (discharge, 1,010 second-feet); minimum stage, 1.32 feet at 7 a. m. September 23 (discharge, 16 second-feet).

1925–26: Maximum stage recorded, 3.85 feet at 7 a. m. April 29, 1925 (discharge, 1,070 second-feet); minimum stage, that of September 23, 1926.

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation permanent; affected by ice December 27 to January 14. Rating curve well defined between 60 and 1,180 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying daily or mean daily gage height to rating table except for period affected by ice. Records good.

The following discharge measurement was made:
April 16, 1926: Gage height, 2.12 feet; discharge, 226 second-feet.

Daily discharge, in second-feet, of Blackwater River near Union Hall, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	83	70		734	158	343	103	158	63	207	35
2	76	83	89		215	148	192	80	76	63	155	38
3	83	78	94	85	256	158	169	135	86	63	111	83
4	78	73	91		504	155	129	105	86	343	94	94
5	76	73	141		434	141	114	105	88	173	58	38
6	56	76	176		215	141	111	123	108	135	83	176
7	56	73	162		172	162	135	91	94	108	83	141
8	56	89	111	70	169	155	148	120	86	94	83	111
9	60	89	89		148	148	141	129	78	83	83	94
10	56	83	94		138	129	129	141	78	56	58	58
11	58	73	89		135	141	176	120	78	38	83	68
12	63	83	83	60	155	148	248	114	86	35	94	38
13	63	528	83		129	135	299	129	70	46	68	30
14	83	184	73		169	129	299	138	76	50	56	58
15	100	169	78	78	176	148	290	114	68	162	100	24

Daily discharge, in second-feet, of Blackwater River near Union Hall, Va., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16	89	169	94	141	162	141	223	155	63	176	299	30
17	83	111	83	148	158	129	176	126	68	135	141	46
18	83	111	78	1,010	169	117	162	108	80	58	83	58
19	78	108	78	787	215	111	141	103	46	46	111	34
20	83	89	89	366	176	141	138	91	83	38	94	27
21	76	94	83	176	169	135	138	78	65	37	83	50
22	73	83	111	176	129	117	132	73	94	35	141	22
23	78	78	123	169	123	117	135	66	126	32	138	16
24	86	76	117	123	114	111	144	56	169	32	94	18
25	111	78	111	141	388	105	144	86	126	35	68	27
26	141	83	100	123	278	135	132	78	120	734	83	35
27	83	89		117	176	135	129	91	103	299	80	27
28	83	83		111	158	111	117	94	83	89	50	32
29	73	68	85	94	-------	100	114	111	78	83	38	42
30	68	73		105	-------	111	123	114	73	111	58	54
31	83	-------		895	-------	388	-------	126	-------	105	46	-------

NOTE.—Stage-discharge relation affected by ice Dec. 27 to Jan. 14: discharge estimated from study of observer's notes, weather records, and comparison with flow of Roanoke River at Roanoke.

Monthly discharge of Blackwater River near Union Hall, Va., for the year ending September 30, 1926

[Drainage area, 208 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	141	56	77.1	0.371	0.43
November	528	68	108	.519	.58
December	176	70	97.3	.468	.54
January	1,010	-------	186	.894	1.03
February	734	114	220	1.06	1.10
March	388	100	142	.683	.79
April	343	111	169	.812	.91
May	155	56	107	.514	.59
June	169	46	89.8	.432	.48
July	734	32	115	.553	.64
August	299	38	97.5	.469	.54
September	176	16	53.5	.257	.29
The year	1,010	16	121	.582	7.92

GOOSE CREEK NEAR HUDDLESTON, VA.

LOCATION.—At bridge on Stone Mountain-Huddleston highway 3 miles from Huddleston, Bedford County, and 1,000 feet above Rockcastle Creek.

DRAINAGE AREA.—188 square miles (measured on topographic maps).

RECORDS AVAILABLE.—March 15, 1925, to September 30, 1926.

GAGE.—Chain gage on bridge; read by T. C. Drew.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed of sand and gravel; shifting. Right bank high, wooded, and not subject to overflow; left bank low, cultivated, and subject to overflow. Control composed of sand and gravel just below gage; shifting.

EXTREMES OF STAGE.—Maximum stage recorded during year, 7.50 feet at 5 p. m. January 18; minimum stage, 0.45 foot August 14.

1925–26: Maximum stage recorded, that of January 18, 1926; minimum stage, that of August 14, 1926.

Flood of September, 1924, reached a stage of 21.4 feet.

ICE.—Stage-discharge relation affected by ice during severe winters.

ACCURACY.—Stage-discharge relation not permanent. Rating curve not fully developed. Gage read to hundredths twice daily. Gage-height record good.

The following discharge measurement was made:

April 17, 1926: Gage height, 1.88 feet; discharge, 193 second-feet.

Daily gage height, in feet, of Goose Creek near Huddleston, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.70	1.04	0.98	1.41	4.68	1.72	2.12	1.19	0.93	0.74	0.73	0.63
2	.88	1.03	1.02	1.43	2.89	1.76	1.81	1.17	.89	.75	.70	.61
3	1.20	1.02	1.37	1.40	2.84	1.56	1.76	1.19	.85	1.26	.68	.62
3	.95	1.00	1.20	1.74	3.66	1.51	1.56	1.20	.85	.88	.65	.63
5	.89	.96	1.42	1.69	3.24	1.47	1.50	1.17	.95	.84	.70	.67
6	.78	.99	1.54	1.52	2.64	1.34	1.43	1.16	1.01	2.39	.95	.71
7	.81	1.01	1.28	1.20	2.37	1.55	1.38	1.15	.93	1.73	.82	1.51
8	.81	1.12	1.21	1.15	2.16	1.72	1.55	1.13	.87	.87	.76	.76
9	.80	1.17	1.15	1.10	2.02	1.53	1.64	1.10	.82	.85	.64	.70
10	.81	1.04	1.11	1.55	1.89	1.49	1.54	1.13	.80	.80	.62	.71
11	.82	1.01	1.10	1.38	1.66	1.53	1.54	1.11	.81	.81	.57	.65
12	.87	1.37	1.10	1.44	1.56	1.54	2.14	1.11	.79	.73	.57	.63
13	.90	2.90	1.07	1.32	1.63	1.48	2.59	1.18	.96	.72	.52	.66
14	1.00	1.70	1.05	1.24	2.23	1.38	3.03	1.14	.95	1.03	.45	.65
15	1.23	1.41	1.04	1.21	2.55	1.55	2.44	1.12	.80	1.32	1.63	.65
16	1.07	1.34	1.12	1.34	2.12	1.52	2.11	1.28	.75	.85	.80	.67
17	1.13	1.16	1.07	1.46	1.85	1.52	1.90	1.20	.80	.74	1.08	.64
18	.98	1.16	1.08	6.42	1.82	1.52	1.73	1.09	.76	.70	.96	.62
19	.96	1.15	1.10	4.58	2.05	1.51	1.68	1.03	.78	.72	.93	.62
20	.92	1.16	1.08	2.75	2.08	1.49	1.56	.99	.83	.70	.99	.64
21	.90	1.10	1.07	2.21	1.96	1.50	1.49	.99	.96	.68	.86	.61
22	.92	1.07	1.17	2.06	1.83	1.44	1.43	1.00	.82	.64	.78	.60
23	.92	1.04	1.81	1.63	1.74	1.43	1.40	.97	.86	.61	.72	.60
24	.99	1.02	1.33	1.57	1.62	1.41	1.36	.94	1.17	.71	.71	.58
25	1.56	1.02	1.27	1.51	2.45	1.37	1.33	.92	.82	.70	.69	.59
26	1.36	1.04	1.20	1.41	2.23	1.57	1.28	.90	.87	1.68	.74	.62
27	1.09	1.03	.91	1.43	1.98	1.50	1.26	.89	1.05	1.01	.69	.57
28	1.01	1.02	1.44	1.40	1.78	1.38	1.24	.94	.81	.79	.65	.60
29	.99	1.01	1.44	1.18	-------	1.34	1.22	.90	.77	.83	.63	.68
30	.99	1.00	1.41	1.36	-------	1.34	1.21	.86	.72	.89	.64	.70
31	1.06	-------	1.42	4.64	-------	2.94	-------	.87	-------	.80	.65	-------

DAN RIVER NEAR ASBURY, N. C.

LOCATION.—At county highway bridge at Joyce's mill, 2.4 miles above mouth of Little Dan River and 3 miles from Asbury, Stokes County.

DRAINAGE AREA.—66.4 square miles, revised (measured on base maps).

RECORDS AVAILABLE.—August 17, 1924, to September 30, 1926, when station was discontinued.

GAGE.—Vertical staff attached to locust tree on right bank 300 feet downstream from bridge; read by Willie Slate.

DISCHARGE MEASUREMENTS.—Made by wading or from highway or footbridge above gage.

CHANNEL AND CONTROL.—Channel straight for 500 feet above and below gage; bed rocky. Banks sloping, covered with brush and timber, and are overflowed for short distance above 5-foot stage. Control at low water is loose rock riffle 100 feet below gage; subject to frequent shifting. Zero flow at gage height −0.4 foot ±0.2 foot, determined July 8, 1925.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year ending September 30, 1926, 3.0 feet at 9 a. m. January 19 (discharge, 1,000 second-feet); minimum stage, 0.50 foot at 5 p. m. July 23 and 9 a. m. July 24 (discharge, 23 second-feet).

1924–1926: Maximum stage recorded, 5.00 feet at 5.30 p. m. December 8, 1924 (discharge, 3,370 second-feet); minimum stage, 0.35 foot during discharge measurement August 20, 1925 (discharge, 12.7 second-feet).

ICE.—Stage-discharge relation may be slightly affected by ice for short periods.

REGULATION.—Joyce's mill may have slight regulatory effect.

ACCURACY.—Stage-discharge relation changed several times during period. Rating curves fairly well defined between 10 and 200 second-feet; extended above. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table; shifting-control method used August 20 to September 29, December 16–31, 1924; January 1–10, January 19 to April 24, 1925; and April 1 to May 25, 1926. Records fair.

The following discharge measurements were made:

February 19, 1926: Gage height, 1.21 feet; discharge, 151 second-feet.

May 26, 1926: Gage height, 0.68 foot; discharge, 43 second-feet.

Daily discharge, in second-feet, of Dan River near Asbury, N. C., for the years ending September 30, 1924–1926

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1924			1924—Con.			1924—Con.		
1	-------	87	11	-------	69	21	99	297
2	-------	87	12	-------	70	22	93	120
3	-------	87	13	-------	74	23	95	101
4	-------	83	14	-------	91	24	205	83
5	-------	85	15	-------	76	25	167	76
6	-------	79	16	-------	73	26	129	79
7	-------	74	17	108	82	27	106	104
8	-------	73	18	101	76	28	97	369
9	-------	74	19	101	76	29	97	1,000
10	-------	76	20	112	77	30	88	850
						31	87	-------

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1924–25												
1	258	95	86	275	155	116	99	113	73	49	32	35
2	194	91	65	194	153	118	97	105	70	47	29	30
3	158	89	73	180	167	108	95	107	70	44	29	24
4	141	89	93	175	155	118	97	99	65	44	33	23
5	132	87	113	168	144	137	101	91	63	44	37	23
6	122	86	117	160	144	135	93	87	60	44	37	23
7	117	87	115	146	137	122	93	82	65	42	36	22
8	119	87	1,080	150	137	110	90	78	63	42	35	21
9	113	91	505	146	148	108	85	82	62	42	33	20
10	109	97	224	178	179	108	135	84	60	42	31	42
11	107	87	194	297	179	110	135	91	60	42	27	68
12	103	86	162	219	179	108	99	332	56	50	33	37
13	105	86	146	205	155	106	91	194	48	49	40	80
14	105	87	137	179	153	106	97	170	49	54	35	62
15	99	99	134	155	179	102	88	172	49	47	36	40
16	97	87	134	179	167	102	90	141	49	42	36	44
17	97	87	130	248	155	155	85	132	49	44	35	43
18	93	87	124	219	148	118	91	134	67	40	33	38
19	91	86	119	192	142	179	90	113	52	34	29	32
20	89	82	119	233	137	135	90	105	49	33	31	31
21	89	78	119	233	133	118	83	99	49	33	34	29
22	91	332	105	219	131	116	87	93	47	34	32	27
23	89	124	150	192	142	110	90	89	47	37	27	27
24	91	111	144	167	153	108	87	87	57	37	28	28
25	95	105	139	167	137	108	84	82	70	38	24	25
26	87	97	141	167	127	110	87	84	57	57	22	27
27	180	95	134	167	122	135	91	78	53	48	22	27
28	170	95	146	179	118	125	180	77	52	40	22	27
29	115	91	170	167	-------	110	172	77	60	34	25	25
30	101	91	141	155	-------	104	126	73	56	32	27	25
31	99	-------	175	151	-------	101	-------	73	-------	31	23	-------
1925–26												
1	26	44	50	43	205	118	132	67	128	54	62	27
2	30	50	50	48	148	122	107	67	65	86	111	36
3	31	49	50	57	155	101	99	67	62	275	60	111
4	31	49	53	57	114	102	99	67	59	63	63	111
5	30	45	56	80	137	93	103	63	49	47	65	75
6	29	44	67	119	118	88	87	62	48	54	70	101
7	29	50	65	115	116	142	86	59	48	45	50	84
8	27	111	65	80	125	125	95	59	41	36	45	48
9	27	97	52	65	125	88	111	59	38	35	43	45
10	27	54	52	57	125	91	93	65	32	34	38	82
11	27	45	50	53	79	102	113	63	34	44	37	59
12	27	70	48	50	97	114	178	73	34	37	59	45
13	28	208	44	65	104	118	178	73	50	36	45	41
14	41	89	47	65	116	108	158	87	50	40	38	38
15	97	73	47	82	131	102	134	87	43	49	38	45

Daily, discharge in second-feet, of Dan River near Asbury, N. C., for the years ending September 30, 1924–1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925–26												
16	77	117	48	75	116	102	117	82	41	41	65	45
17	294	78	44	77	97	99	111	75	42	35	49	40
18	275	63	44	312	116	99	103	62	41	38	41	34
19	86	59	44	558	155	114	101	57	41	34	43	34
20	67	59	47	205	144	106	105	56	41	32	68	32
21	47	57	50	148	122	102	99	52	53	32	50	32
22	41	54	73	129	114	102	86	52	63	26	45	30
23	38	53	73	122	106	99	84	52	53	24	45	30
24	53	52	57	110	106	95	84	49	91	24	48	28
25	87	50	54	106	205	95	80	49	65	32	78	27
26	89	52	52	85	179	88	78	43	65	351	56	28
27	52	52	52	99	140	88	78	42	45	82	50	26
28	42	53	49	95	127	106	73	43	44	77	48	29
29	42	52	43	79	-------	102	71	45	40	70	41	32
30	40	49	42	83	-------	99	71	43	36	71	34	34
31	44	-------	40	179	-------	192	-------	53	-------	62	30	-------

Monthly discharge of Dan River near Asbury, N. C., for the years ending September 30, 1924–1926

[Drainage area, 66.4 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1924					
August 17–31	205	87	112	1.69	0.94
September	1,000	69	155	2.33	2.60
1924–25					
October	258	87	118	1.78	2.05
November	332	78	99.7	1.50	1.67
December	1,080	65	175	2.64	3.04
January	297	146	189	2.85	3.29
February	179	118	149	2.24	2.33
March	179	101	118	1.78	2.05
April	180	83	109	1.64	1.83
May	332	73	110	1.66	1.91
June	73	47	57.6	.867	.97
July	57	31	41.8	.630	.73
August	40	22	30.7	.462	.53
September	80	20	33.5	.505	.56
The year	1,080	20	102	1.54	20.96
1925–26					
October	294	26	60.7	.914	1.05
November	208	44	65.9	.992	1.11
December	73	40	51.9	.782	.90
January	558	43	113	1.70	1.96
February	205	79	129	1.94	2.02
March	192	88	107	1.61	1.86
April	178	71	104	1.57	1.75
May	87	42	60.4	.910	1.05
June	128	32	51.4	.774	.86
July	351	24	63.4	.955	1.10
August	111	30	52.1	.785	.90
September	111	26	47.6	.717	.80
The year	558	24	75.1	1.13	15.36

DAN RIVER NEAR FRANCISCO, N. C.

LOCATION.—At county highway bridge just below George's mill, 2 miles from Francisco, Stokes County, and 7.9 miles downstream from mouth of Little Dan River.

DRAINAGE AREA.—119 square miles revised (measured on base maps).

RECORDS AVAILABLE.—August 16, 1924, to September 30, 1926, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by C. R. Cardwell. Zero of gage, 919.94 feet above sea level.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel straight for several hundred feet above and below gage; bed rocky. Banks steep and covered with brush. Control of boulders 100 feet below gage; fairly permanent. Gage height of zero flow —0.5 foot, determined July 8, 1925.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.2 feet at 6 p. m. January 18 (discharge, 1,900 second-feet); minimum stage, 0.78 foot at 7 a. m. July 25 (discharge, 27 second-feet).

1924–1926: Maximum stage recorded, 10.0 feet at 10 p. m. December 8, 1924 (discharge not determined); minimum stage, that of July 25, 1926.

ICE.—Stage-discharge relation may be slightly affected by ice for short periods.

REGULATION.—Several gristmills above with scant pondage may have slight regulatory effect.

ACCURACY.—Stage-discharge relation permanent during year. Rating curve well defined between 40 and 1,200 second-feet. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:
February 1, 1926: Gage height, 2.04 feet; discharge, 323 second-feet.
February 19, 1926: Gage height 1.75 feet; discharge, 241 second-feet.
May 26, 1926: Gage height, 1.13 feet; discharge, 73.5 second-feet.

Daily discharge, in second-feet, of Dan River near Francisco, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	81	80	134	342	163	217	118	208	116	83	42
2	74	98	76	131	239	166	155	109	114	62	109	45
3	76	87	87	89	255	163	158	116	98	136	98	239
4	67	96	89	121	288	163	131	118	87	111	76	186
5	60	98	102	152	211	139	131	114	93	87	85	139
6	47	102	150	147	183	134	134	111	93	80	85	223
7	55	102	85	111	175	214	124	107	87	62	62	141
8	58	128	89	102	166	178	139	107	81	58	58	91
9	60	172	89	114	178	160	169	109	80	60	58	109
10	42	139	100	134	155	141	147	118	74	53	52	102
11	52	102	98	152	118	169	166	124	72	68	49	70
12	53	102	89	114	114	155	306	134	67	55	63	65
13	47	470	87	124	160	139	323	155	56	47	50	53
14	107	186	91	118	155	144	288	160	72	67	43	62
15	186	166	104	98	175	160	217	150	78	81	42	62
16	136	166	102	109	150	158	204	152	72	81	85	58
17	323	121	96	136	134	152	169	136	67	58	65	60
18	118	100	87	1,800	144	147	166	118	63	46	56	55
19	85	116	72	470	223	147	147	109	80	46	58	47
20	72	124	89	274	201	139	144	100	78	47	102	56
21	72	102	100	255	169	139	144	96	93	40	89	56
22	65	93	136	192	150	139	136	89	89	42	70	53
23	58	91	139	144	144	131	139	81	104	37	68	53
24	96	96	121	111	139	124	131	83	118	42	68	47
25	144	96	114	150	272	124	128	87	93	31	155	43
26	198	114	100	111	255	128	126	83	78	160	89	53
27	109	98	91	131	211	124	134	83	93	116	74	55
28	87	98	139	124	166	116	126	89	78	124	56	47
29	81	93	139	91	-------	111	118	85	72	91	50	52
30	70	80	118	109	-------	121	126	83	63	136	47	52
31	81	-------	118	288	-------	255	-------	91	-------	126	36	-------

Monthly discharge of Dan River near Francisco, N. C., for the year ending September 30, 1926

[Drainage area, 119 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	323	42	91.4	0.768	0.89
November	470	80	124	1.04	1.16
December	150	72	102	.857	.99
January	1,800	89	204	1.71	1.97
February	342	114	188	1.58	1.64
March	255	111	150	1.26	1.45
April	323	118	165	1.39	1.55
May	160	81	110	.924	1.07
June	208	56	86.7	.729	.81
July	160	31	76.3	.641	.74
August	155	36	70.4	.592	.68
September	239	42	80.5	.676	.75
The year	1,800	31	120	1.01	13.70

DAN RIVER AT PINE HALL, N. C.

LOCATION.—At highway bridge at Pine Hall, Stokes County, 2 miles upstream from mouth of Belew Creek.

DRAINAGE AREA.—481 square miles.

RECORDS AVAILABLE.—November 10, 1923, to September 30, 1926, when station was discontinued.

GAGE.—Chain gage attached to bridge; read by G. O. Carter.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel slightly curved; bed of shifting sand and boulders. Banks about 12 feet high with rows of trees along them. Control is gravel bar diagonally across stream 400 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.62 feet at 5.15 p. m. January 18 (discharge, about 6,900 second-feet); minimum stage, 0.70 foot at 6 p. m. October 10 and 5.30 p. m. October 11 (discharge, 85 second-feet).

1924–1926: Maximum stage recorded, 22.08 feet at 10 a. m. September 30, 1924 (discharge not determined); minimum stage, 0.58 foot at 9 a. m. August 21 and 6.30 p. m. September 9, 1925 (discharge, 64 second-feet).

ICE.—No ice effect.

REGULATION.—Fairly large regulation by Walnut Cove Dam.

ACCURACY.—Stage-discharge relation shifting. Rating curve well defined between 100 and 2,000 second-feet and extended above and below these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except as stated in footnote to daily-discharge table. Records poor.

The following discharge measurements were made:
February 2, 1926: Gage height, 3.36 feet; discharge, 942 second-feet.
February 19, 1926: Gage height, 3.50 feet; discharge, 1,100 second-feet.
May 26, 1926: Gage height, 1.27 feet; discharge, 184 second-feet.

Daily discharge, in second-feet, of Dan River at Pine Hall, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.
1	139	195	220	245	1,500	490	-------	165	255	245	155
2	168	232	220	220	870	630	-------	168	250	245	152
3	137	245	232	220	950	595	-------	152	245	258	150
4	127	220	232	245	1,300	525	-------	170	245	245	150
5	135	245	245	345	910	375	-------	170	258	258	148
6	160	220	285	330	750	285	-------	160	270	258	141
7	158	208	285	285	670	630	-------	155	258	245	137
8	152	170	270	258	560	670	-------	152	258	258	139
9	113	375	258	245	490	630	-------	162	258	258	139
10	89	300	245	220	438	630	-------	150	245	245	137

Daily discharge, in second-feet, of Dan River at Pine Hall, N. C., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.
11	89	270	245	208	420	670	-------	160	245	245	131
12	170	560	232	285	360	630	-------	162	245	258	152
13	137	1,400	232	245	345	630	-------	160	245	245	150
14	117	560	232	245	375	670	-------	160	245	245	143
15	170	360	245	245	438	670	-------	160	315	150	137
16	300	232	208	245	390	670	-------	155	285	155	140
17	232	220	195	490	345	630	270	150	270	152	145
18	220	270	220	4,010	345	560	285	160	270	158	150
19	195	270	220	2,440	790	438	630	155	258	160	152
20	145	270	232	1,200	1,030	455	405	165	245	155	143
21	162	270	232	710	710	455	405	195	245	155	148
22	165	245	420	630	490	438	375	220	208	152	152
23	135	232	560	560	315	390	220	208	220	152	150
24	141	232	390	525	390	330	195	220	232	155	145
25	148	232	300	455	630	330	143	210	270	152	145
26	232	195	270	390	830	315	150	210	258	158	148
27	270	220	220	375	710	315	145	208	270	152	150
28	300	208	170	360	525	258	145	208	270	158	150
29	208	220	170	330	-------	232	145	208	270	148	152
30	162	220	182	360	-------	300	152	220	270	152	152
31	141	-------	195	2,100	-------	330	152	-------	258	148	-------

NOTE.—Discharge Jan. 18 determined by averaging results for intervals of the day. No gage-height record Apr. 1 to May 16; discharge not determined. No gage-height record June 25, 26, 30, July 1–3, 28, and Sept. 16–18; discharge estimated.

Monthly discharge of Dan River at Pine Hall, N. C., for the year ending September 30, 1926

[Drainage area, 481 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	300	89	168	0.349	0.40
November	1,400	170	303	.630	.70
December	560	170	254	.528	.61
January	4,010	208	614	1.28	1.48
February	1,500	315	638	1.33	1.38
March	670	232	490	1.02	1.18
May 17–31	630	143	254	.528	.29
June	220	150	177	.368	.41
July	315	208	256	.532	.61
August	258	148	197	.410	.47
September	155	131	146	.304	.34

DAN RIVER AT SOUTH BOSTON, VA.

LOCATION.—At Norfolk & Western Railway bridge at South Boston, Halifax County, 6 miles upstream from mouth of Banister River.

DRAINAGE AREA.—2,820 square miles (measured on base maps).

RECORDS AVAILABLE.—August 27, 1900, to May 5, 1907, and April 28, 1923, to September 30, 1926.

GAGE.—Chain gage on bridge; read by E. B. Willard.

DISCHARGE MEASUREMENTS.—Made from bridge.

CHANNEL AND CONTROL.—Bed composed of fine sand. Banks subject to overflow at stages above 20 feet.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 21.5 feet at 12.45 p. m. January 20 (discharge, 22,300 second-feet); minimum stage, 3.36 feet at 8 a. m. October 1 (discharge, 375 second-feet).

1900–1907, 1923–1926: Maximum discharge recorded, 52,600 second-feet at 4 p. m. December 31, 1901; minimum discharge, 300 second-feet at 12.45 p. m. September 11, 1925.

ICE.—Stage-discharge relation not affected by ice except during severe winters.

REGULATION.—Dams at Danville regulate low-water flow to some extent.

DIVERSIONS.—Water supply of South Boston is diverted just above measuring section.

ACCURACY.—Stage-discharge relation changed during high water of January 20; not affected by ice. Rating curve used prior to January 22 well defined between 500 and 30,000 second-feet, and curve used after that date is well defined between 1,100 and 30,000 second-feet; extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating tables. Record good.

The following discharge measurements were made:
November 25, 1925: Gage height, 4.59 feet; discharge, 803 second-feet.
November 26, 1925: Gage height, 5.21 feet; discharge, 1,130 second-feet.
April 18, 1926: Gage height, 6.85 feet; discharge, 2,440 second-feet.

Daily discharge, in second-feet, of Dan River at South Boston, Va., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	420	1,010	1,070	2,880	14,400	2,940	2,240	1,420	1,000	777	1,000	810
2	510	690	960	2,960	11,200	2,700	3,900	1,540	1,300	770	1,000	540
3	650	860	1,580	3,040	5,500	2,620	2,540	1,180	1,060	690	1,000	950
4	650	960	1,650	2,880	9,180	2,460	2,100	1,420	1,180	1,180	900	850
5	610	1,010	1,250	1,790	10,300	2,170	1,890	1,240	1,060	690	850	900
6	690	1,010	1,310	2,080	5,200	1,750	1,750	1,240	900	1,960	1,820	850
7	650	1,010	1,190	2,000	3,580	1,820	1,820	1,180	650	2,540	2,240	690
8	570	1,130	1,860	1,720	3,340	2,240	1,750	1,240	950	2,310	1,610	610
9	610	810	1,190	1,510	2,540	2,860	1,360	1,000	950	1,180	1,060	2,620
10	650	1,370	1,130	1,250	2,620	2,310	1,890	1,420	900	1,180	1,060	1,960
11	650	1,650	1,130	810	2,460	2,310	1,540	1,120	900	900	900	1,180
12	540	1,580	1,070	1,310	2,240	2,860	1,820	1,180	900	570	810	950
13	540	1,720	1,130	1,310	1,750	3,340	3,420	1,180	810	770	850	770
14	540	6,530	730	1,190	1,680	3,580	5,500	1,240	900	540	810	900
15	770	3,120	1,070	1,130	1,890	3,420	4,730	1,300	810	1,750	770	810
16	860	1,930	1,130	1,070	2,030	2,940	3,180	1,180	540	3,900	1,120	770
17	1,310	1,790	960	1,190	2,170	2,860	2,860	1,540	510	2,380	810	510
18	1,440	1,580	1,130	3,630	2,030	2,540	2,460	2,240	770	950	1,420	510
19	1,790	1,130	960	17,700	2,460	2,310	2,100	1,480	810	730	810	650
20	1,580	1,130	1,130	21,900	4,820	2,240	2,240	1,180	730	810	1,750	510
21	860	1,190	910	8,920	5,940	2,030	1,960	1,120	690	770	1,120	730
22	960	1,310	1,860	4,380	3,980	1,750	1,890	1,120	730	730	1,000	430
23	810	1,010	3,040	3,100	2,780	2,030	1,820	950	900	770	770	570
24	810	1,190	3,040	3,020	2,100	1,820	1,820	690	1,680	650	900	540
25	1,190	960	2,480	1,890	2,620	1,820	1,420	1,000	950	10,600	900	510
26	1,650	1,070	1,790	2,170	6,650	1,680	1,540	1,000	850	1,360	2,170	450
27	2,240	1,010	1,440	2,100	8,140	1,960	1,540	950	850	1,820	2,310	540
28	1,650	1,010	1,130	1,960	3,900	1,680	1,420	1,000	900	4,820	1,300	610
29	1,250	1,190	1,370	1,960	------	1,540	1,360	1,000	730	2,460	1,000	430
30	1,010	690	2,880	1,820	------	1,820	1,360	900	480	2,030	690	450
31	960	------	2,480	2,380	------	1,750	------	610	------	1,120	850	------

Monthly discharge of Dan River at South Boston, Va., for the year ending September 30, 1926

[Drainage area, 2,820 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	2,240	420	949	0.337	0.39
November	6,530	690	1,420	.504	.56
December	3,010	730	1,490	.528	.61
January	21,900	810	3,450	1.22	1.41
February	14,400	1,680	4,550	1.61	1.68
March	3,580	1,540	2,330	.826	.95
April	5,500	1,360	2,240	.794	.89
May	2,240	610	1,190	.422	.49
June	1,680	480	880	.312	.35
July	10,600	540	1,730	.613	.71
August	2,310	690	1,150	.408	.47
September	2,620	430	787	.279	.31
The year	21,900	420	1,830	.649	8.82

LEATHERWOOD CREEK NEAR OLD LIBERTY, VA.

LOCATION.—At bridge on road between Old Liberty and Loneoak post office, 3 miles from Old Liberty, Henry County, and 1½ miles above mouth.
DRAINAGE AREA.—68 square miles (measured on topographic maps).
RECORDS AVAILABLE.—September 10, 1925, to September 30, 1926.
GAGE.—Chain gage on bridge; read by G. L. Stone.
DISCHARGE MEASUREMENTS.—Made from bridge or by wading.
CHANNEL AND CONTROL.—Bed composed of sand and gravel; clean; shifting. One channel. Banks high and wooded; not subject to overflow. Control is riffle 200 feet below bridge composed of sand and gravel, clean and probably shifting.
EXTREMES OF DISCHARGE.—Maximum stage recorded during period, 8.10 feet at 10.45 a. m. November 13 (discharge, 1,040 second-feet); minimum stage, 1.52 feet at 10.20 a. m. September 25, 1926 (discharge, 7 second-feet).
ICE.—Stage-discharge relation affected by ice during severe winters.
ACCURACY.—Stage-discharge relation permanent; not affected materially by ice. Rating curve fairly well defined between 7 and 400 second-feet; extended beyond these limits. Gage read to hundredths once daily except Sundays. Daily discharge ascertained by applying daily gage height to rating table except as noted in footnote to table of daily discharge. Records good.

The following discharge measurements were made:
September 10, 1925: Gage height, 1.54 feet; discharge, 7.6 second-feet.
September 11, 1925: Gage height, 1.88 feet; discharge, 33 second-feet.

Daily discharge, in second-feet, of Leatherwood Creek near Old Liberty, Va., for the period September 10, 1925, to September 30, 1926

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	17	a 45	29	53	238	38	67	28	41	12	a 18	10
2	-------	29	51	31	65	71	45	44	a 27	22	12	16	14
3	-------	33	44	44	a 60	156	30	40	26	19	11	13	10
4	-------	a 30	40	46	85	178	28	a 38	23	18	a 15	13	14
5	-------	26	37	93	57	66	27	37	22	25	42	12	a 14
6	-------	20	40	72	60	50	20	35	25	a 30	44	86	13
7	-------	20	42	60	44	a 43	a 50	35	23	22	24	15	13
8	-------	18	a 120	46	93	36	45	37	22	19	15	a 14	41
9	-------	21	100	42	163	32	32	33	a 40	16	15	12	16
10	8	18	57	40	a 120	34	28	31	38	16	18	10	20
11	34	a 18	18	37	100	22	43	a 32	34	15	a 14	10	12
12	17	18	51	37	107	16	56	178	27	15	11	12	a 11
13	a 17	21	1,040	a 34	75	22	50	254	28	a 15	12	8	10
14	17	23	193	31	83	a 25	a 46	142	30	15	12	8	10
15	16	107	a 80	31	62	28	41	88	28	13	481	a 60	12
16	135	40	55	40	42	23	38	60	a 65	12	62	23	12
17	35	254	42	33	a 70	23	38	51	32	13	40	19	10
18	23	a 60	40	31	481	28	35	a 55	23	13	a 30	13	10
19	20	40	37	29	549	45	31	46	25	14	23	10	a 10
20	a 22	29	51	a 31	114	41	31	37	22	a 50	21	84	9
21	24	31	35	33	67	a 36	a 30	37	22	28	18	156	9
22	20	29	a 34	62	55	32	29	37	22	15	17	a 35	9
23	21	29	33	93	29	30	29	31	a 20	16	16	23	9
24	21	37	31	51	a 30	28	29	33	19	26	13	15	8
25	23	a 250	29	46	40	156	29	a 32	19	16	a 15	27	7
26	20	67	31	44	28	156	29	31	16	15	149	52	a 8
27	a 18	42	35	a 30	26	63	29	29	19	a 16	48	22	9
28	16	37	31	24	23	a 50	a 28	29	19	16	29	18	10
29	17	33	a 30	29	21	-------	28	29	18	13	26	a 16	11
30	17	35	29	40	19	-------	28	29	a 22	12	21	13	15
31	-------	48	-------	51	a 300	-------	178	-------	25	-------	20	10	-------

a Estimated or interpolated.

Monthly discharge of Leatherwood Creek near Old Liberty, Va., for the years ending September 30, 1925 and 1926

[Drainage area, 68 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1925					
September 10-30	135	8	25.8	0.379	0.30
1925-26					
October	254	17	47.7	.701	.81
November	1,040	29	84.4	1.24	1.38
December	93	24	43.2	.635	.73
January	549	19	101	1.49	1.72
February	238	16	61.7	.907	.94
March	178	20	39.3	.578	.67
April	254	29	55.2	.812	.91
May	65	18	26.1	.384	.44
June	50	12	19.2	.282	.31
July	481	11	41.5	.610	.70
August	156	8	27.2	.400	.46
September	41	7	12.2	.179	.20
The year	1,040	7	46.5	.684	9.27

TAR RIVER BASIN

FISHING CREEK NEAR ENFIELD, N. C.

LOCATION.—At highway bridge 2,000 feet below Atlantic Coast Line Railroad bridge, 2 miles southwest of Enfield, Halifax County, and 4¾ miles below mouth of Rocky Creek.

DRAINAGE AREA.—462 square miles (furnished by United States Weather Bureau).

RECORDS AVAILABLE.—October 1, 1923, to September 30, 1926.

GAGE.—Staff gage attached to downstream end of right pier; read by employee of United States Weather Bureau.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel straight for 300 feet below and curved to left above station. Bed consists of mud. Banks subject to overflow during extreme floods, with one overflow channel in highway fill. Low-water control is gravel bar 300 feet downstream; probably shifting.

EXTREMES OF DISCHARGE.—Maximum stage during year, 13.4 feet February 6 (discharge, 3,140 second-feet); minimum stage, 0.90 foot September 2, 26, and 27 (discharge, 40 second-feet).

1924–1926: Maximum stage, 17.3 feet October 1 and 2, 1924 (discharge, 12,300 second-feet); minimum stage, that of September 2, 26, and 27, 1926.

ICE.—Stage-discharge relation not affected by ice.

ACCURACY.—Stage-discharge relation shifts slightly. Rating curve fairly well defined between 50 and 2,000 second-feet and extended above. Gage read once daily to tenths. Daily discharge ascertained by applying daily gage height to rating table. Records fair.

Discharge measurements of Fishing Creek near Enfield, N. C., during the years ending September 30, 1924–1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1924	*Feet*	*Sec.-ft.*	1925	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*
Aug. 21	1.98	182	Feb. 26	5.25	667	Feb. 15	5.80	874
Oct. 10	4.04	480	Apr. 28	2.50	253			
Nov. 23	6.22	860	July 21	1.40	75.2			
			Oct. 10	1.21	64.0			

Daily discharge, in second-feet, of Fishing Creek near Enfield, N. C., for the year ending September 30, 1924–1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1923–24												
1	150	108	225	122	494	2,020	255	478	414	1,840	225	122
2	122	81	195	350	478	1,310	318	165	414	5,100	195	165
3	108	81	195	240	478	1,040	382	195	414	9,220	210	165
4	165	136	150	240	414	1,080	510	108	857	5,100	414	165
5	136	165	318	210	334	998	649	81	798	2,880	478	165
6	136	240	398	165	318	957	760	136	613	1,040	478	165
7	108	334	350	165	414	817	462	165	430	760	165	122
8	136	318	195	150	350	722	350	478	225	1,260	286	94
9	122	286	165	122	318	578	195	2,020	318	1,620	225	94
10	81	240	136	94	318	478	180	2,350	414	1,040	195	108
11	69	255	108	240	318	703	649	2,430	837	1,380	195	108
12	81	255	108	225	286	837	798	3,630	837	1,740	578	94
13	69	240	94	195	255	837	685	2,880	446	2,020	703	94
14	60	225	318	195	240	685	649	2,670	382	2,310	350	108
15	52	210	255	165	240	667	578	3,630	350	2,020	382	195
16	60	165	255	210	210	837	510	3,070	318	1,260	255	414
17	52	108	210	1,040	195	857	318	1,740	595	703	255	1,040
18	69	108	165	1,690	703	703	240	1,490	2,270	649	318	1,490
19	136	81	165	1,690	685	613	561	1,260	2,200	398	240	779
20	60	94	150	1,360	1,150	613	462	877	1,260	414	195	478
21	45	94	122	1,110	2,350	561	462	837	649	544	165	255
22	45	81	108	1,040	2,310	578	398	2,230	561	527	136	779
23	108	94	334	1,040	2,310	649	446	2,670	494	398	136	937
24	108	136	165	998	2,230	1,040	398	3,950	957	366	136	649
25	94	94	180	1,150	2,020	837	255	2,670	857	334	136	741
26	150	94	94	722	1,260	779	225	1,740	1,400	318	255	462
27	150	81	81	722	1,310	685	225	1,690	1,840	318	255	977
28	108	94	210	649	1,380	649	180	779	1,520	382	165	1,400
29	108	150	165	578	2,120	398	136	760	510	350	165	1,130
30	94	240	150	578	-------	334	108	1,190	382	270	195	5,100
31	94	-------	136	527	-------	286	-------	649	-------	240	165	-------
1924–25												
1	12,300	478	366	1,790	1,490	578	494	446	318	478	255	240
2	12,300	578	350	2,350	1,310	1,080	478	302	240	544	165	240
3	8,890	382	334	2,620	1,190	957	446	165	318	398	165	240
4	3,840	366	318	2,670	1,130	722	446	165	318	165	165	240
5	1,900	366	318	2,120	1,040	685	414	240	165	165	318	240
6	857	350	334	1,360	957	685	398	240	165	165	318	240
7	649	334	350	837	837	578	240	225	165	165	837	240
8	578	366	366	703	649	544	382	210	165	165	837	240
9	527	398	446	649	613	527	414	180	760	165	318	45
10	494	414	462	685	817	649	462	165	937	165	318	45
11	462	334	478	2,090	937	649	462	210	837	165	318	45
12	446	334	414	2,670	1,960	667	478	195	318	165	318	45
13	430	334	446	3,140	1,930	613	462	286	240	165	318	45
14	398	334	446	3,000	1,540	350	382	837	165	561	578	45
15	382	334	462	2,830	1,110	382	366	1,220	165	165	318	45
16	382	350	414	1,740	917	382	350	578	165	398	760	302
17	398	334	382	1,260	837	446	318	478	240	165	578	165
18	382	318	350	1,620	649	1,240	318	366	398	165	318	649
19	366	334	350	2,160	649	1,330	366	527	798	240	318	478
20	366	318	334	1,790	544	877	350	414	1,130	240	240	318
21	350	334	334	2,880	494	527	318	302	527	240	165	302
22	334	350	318	2,940	631	527	382	286	240	240	165	302
23	318	798	334	2,520	510	478	302	270	165	240	165	165
24	318	1,020	350	1,640	649	430	286	255	165	240	165	165
25	318	703	631	1,310	649	414	225	240	165	240	240	165
26	318	527	1,150	1,310	649	414	195	240	398	165	210	165
27	334	414	1,040	1,170	722	366	210	2,570	578	414	225	108
28	561	398	817	877	760	527	270	1,040	318	760	225	108
29	977	414	631	1,060	-------	595	270	722	318	318	225	108
30	998	382	446	1,490	-------	527	302	318	318	318	225	108
31	667	-------	494	1,620	-------	527	-------	318	-------	318	225	-------
1925–26												
1	108	165	286	165	1,740	1,490	649	318	150	94	150	45
2	108	165	286	165	1,740	1,490	649	318	150	81	136	40
3	94	180	318	165	1,740	649	649	318	150	81	136	45
4	94	180	877	165	2,390	544	649	318	150	81	108	45
5	94	165	649	318	2,880	478	478	318	165	81	108	45
6	94	165	478	318	3,140	478	382	165	136	81	81	45
7	94	165	478	318	2,880	649	382	165	165	94	81	45
8	94	165	478	318	1,260	837	318	165	195	318	81	270
9	94	165	478	318	937	649	350	165	210	165	69	414
10	150	165	318	318	937	478	318	210	165	122	60	165

Daily discharge, in second-feet, of Fishing Creek near Enfield, N. C., for the year ending September 30, 1924–1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925–26												
11	150	165	318	318	318	527	165	210	136	108	45	165
12	81	165	286	318	478	1,260	195	210	81	108	45	108
13	81	165	286	318	478	1,490	478	210	81	108	45	69
14	94	165	286	318	478	1.450	1,930	210	81	108	45	45
15	94	165	286	318	478	1,260	1,590	210	60	108	45	45
16	94	318	165	318	649	1,080	1,470	225	60	108	45	45
17	94	318	165	318	1,040	837	760	225	60	108	45	45
18	165	318	225	414	1,040	649	649	225	60	108	45	45
19	180	318	225	414	649	649	478	225	60	94	45	45
20	165	318	318	2,020	1,900	649	478	225	60	81	45	45
21	165	318	318	2,020	2.390	1,040	478	165	60	81	45	45
22	165	318	561	1,040	2,230	649	478	165	60	81	45	45
23	165	302	561	1,040	2,020	937	382	165	60	81	45	45
24	165	286	478	478	578	544	398	165	108	69	45	45
25	165	286	478	478	649	478	318	165	108	69	60	45
26	165	286	478	318	2,020	478	318	165	108	366	81	40
27	165	286	318	318	2,390	649	318	165	108	1,150	302	40
28	165	286	318	478	1,620	478	318	165	108	837	165	45
29	165	286	318	478	------	478	318	165	108	382	108	45
30	165	286	165	478	------	478	318	165	94	430	45	45
31	165	------	165	1,260	------	478	------	150	------	286	45	------

Monthly discharge of Fishing Creek near Enfield, N. C., for the years ending September 30, 1924–1926

[Drainage area, 462 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1923–24					
October	165	45	99.2	0.215	0.25
November	334	81	163	.353	.39
December	398	81	190	.411	.47
January	1,690	94	580	1.26	1.45
February	2,350	195	879	1.90	2.05
March	2,020	286	779	1.69	1.95
April	798	108	411	.890	.99
May	3.950	81	1,580	.342	.39
June	2.270	225	785	1.70	1.90
July	9,220	240	1,510	3.27	3.77
August	703	136	266	.576	.66
September	5,100	94	620	1.34	1.50
The year	9,220	45	656	1.42	15.77
1924–25					
October	12,300	318	1,670	3.61	4.16
November	1.020	318	423	.916	1.02
December	1,150	318	460	.996	1.15
January	3,140	649	1,840	3.98	4.59
February	1,960	494	935	2.02	2.10
March	1,330	350	622	1.35	1.56
April	494	195	360	.779	.87
May	2,570	165	452	.978	1.13
June	1,130	165	373	.807	.90
July	760	165	274	.593	.68
August	837	165	322	.697	.80
September	649	45	195	.422	.47
The year	12,300	45	662	1.43	19.43
1925–26					
October	180	81	130	.281	.32
November	318	165	234	.506	.56
December	877	165	367	.794	.92
January	2,020	165	517	1.12	1.29
February	3,140	318	1,470	3.18	3.31
March	1,490	478	783	1.69	1.95
April	1,930	165	555	1.20	1.34
May	318	150	208	.450	.52
June	210	60	110	.238	.27
July	1,150	69	196	.424	.49
August	302	45	78.9	.171	.20
September	414	40	75.2	.163	.18
The year	3,140	40	386	.835	11.35

NEUSE RIVER BASIN

FLAT RIVER AT BAHAMA, N. C.

LOCATION.—At head of Durham water-supply pond, 1½ miles above mouth of Dial Creek and county highway bridge at Bahama, Durham County.

DRAINAGE AREA.—150 square miles.

RECORDS AVAILABLE.—July 16, 1925, to September 30, 1926.

GAGE.—Au continuous water-stage recorder on right bank, installed October 12, 1925; inspected by Melvin Clark.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Channel bends slightly above and below gage. Sloping wooded banks subject to overflow. Prior to October 22, 1925, control was a rock ledge with boulders at head of pond. Subsequent to October 22, 1925, control is rock and masonry weir 10 feet long with a 1-foot weir at right end for low water. Point of zero flow at 0.00 gage height.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, from water-stage recorder, 6.69 feet at 9.45 a. m. February 3 (discharge, 3,610 second-feet); minimum stage, from water-stage recorder, 0.50 foot at 6.30 a. m. October 1 (discharge, 0.5 second-foot).

1925–26: Maximum stage recorded, that of February 3, 1926; minimum stage, 0.50 foot September 27, 30, and October 1, 1925 (discharge, 0.5 second-foot).

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Slight diurnal regulation caused by operation of gristmills above.

ACCURACY.—Stage-discharge relation changed October 22, 1925, owing to construction of rock masonry control. Rating curve used October 1–15 is well defined between 1 and 130 second-feet; curve used October 22 to September 30 is well defined between 2 and 8,000 second-feet. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph, except for days of wide range in stage, when discharge was obtained by averaging results for intervals of a day. Records good.

The following discharge measurements were made:
October 8, 1925: Gage height, 0.72 foot; discharge, 2.00 second-feet.
February 17, 1926: Gage height, 2.83 feet; discharge, 100 second-feet.
August 28, 1926: Gage height, 1.44 feet; discharge, 18.6 second-feet.

Daily discharge, in second-feet, of Flat River at Bahama, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	7.7	8.6	11	450	114	168	43	14	8.7	28	633
2	6.8	5.7	6.2	15	218	107	90	40	18	8.4	21	234
3	6.5	5.0	11	11	1,260	96	72	36	18	8.0	15	48
4	2.8	4.7	29	17	1,340	77	65	64	14	8.4	13	24
5	2.6	4.6	39	18	289	68	57	44	15	9.4	13	15
6	2.6	4.6	21	37	188	61	54	39	13	66	12	13
7	2.2	5.5	22	44	149	119	52	32	15	54	10	164
8	2.2	7.4	15	37	119	254	55	34	15	27	11	44
9	2.2	4.7	13	33	102	132	61	28	16	17	9.2	26
10	1.9	4.4	12	32	90	89	52	29	15	16	8.2	16
11	1.6	7.4	12	29	77	119	48	26	11	12	8.0	13
12	1.7	11	11	28	61	504	89	29	11	8.9	8.0	9.4
13	2.2	21	8.6	24	56	336	1,180	30	10	8.7	8.2	7.7
14	2.6	50	5.5	26	250	254	370	25	8.4	9.4	8.2	6.0
15	2.9	26	10	22	675	278	210	30	9.4	179	8.0	5.1
16	2.5	18	11	23	176	254	156	46	8.0	100	7.5	6.5
17	2.1	14	9.8	21	104	183	121	34	6.6	38	6.6	6.2
18	3.2	14	9.5	1,840	96	140	96	22	6.4	19	6.6	7.2
19	2.1	13	8.6	682	1,260	119	107	17	8.0	16	30	5.1
20	1.7	13	7.4	202	504	105	121	14	8.0	11	280	4.6
21	1.8	12	17	132	230	105	86	13	8.4	8.2	44	6.2
22	2.0	9.5	88	134	163	96	77	12	8.9	9.2	17	30
23	1.8	6.2	145	105	125	87	66	13	11	10	13	13
24	2.2	9.5	70	75	98	81	63	18	5.6	11	205	8.8
25	3.4	10	42	65	1,190	71	61	13	47	500	285	6.9

Daily aischarge, in second-feet, of Flat River at Bahama, N. C., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
26	8.9	9.2	30	56	450	73	53	16	23	63	48	6.2
27	33	8.6	24	56	210	102	49	14	14	36	24	5.0
28	14	12	18	65	142	75	47	14	13	22	18	4.5
29	11	8.3	14	59	-------	63	44	14	11	18	12	4.0
30	9.5	5.7	12	102	-------	59	42	11	9.7	20	9.4	3.8
31	8.6	-------	11	923	-------	152	-------	11	-------	37	9.1	------

NOTE.—Stage-discharge relation affected by construction of rock masonry control Oct. 16–21; discharge estimated. No record May 17–22; discharge estimated by comparison with Dial, Dry, and Rocky Creeks.

Monthly discharge of Flat River at Bahama, N. C., for the year ending September 30, 1926

[Drainage area, 150 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	33	1.6	4.87	0.032	0.04
November	50	4.4	11.1	.074	.08
December	145	5.5	23.9	.159	.18
January	1,840	11	159	1.06	1.22
February	1,340	56	360	2.40	2.50
March	504	61	141	.940	1.08
April	1,180	42	127	.847	.94
May	64	11	26.2	.175	.20
June	47	5.6	13.0	.087	.10
July	500	8.0	43.8	.292	.34
August	285	6.6	38.6	.257	.30
September	633	3.8	45.9	.306	.34
The year	1,840	1.6	80.9	.539	7.32

DIAL CREEK AT BAHAMA, N. C.

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

DRAINAGE AREA.—4.9 square miles.

RECORDS AVAILABLE.—October 29, 1925, to September 30, 1926.

GAGE.—Gurley 7-day recorder on right bank; inspected by Melvin Clark.

CHANNEL AND CONTROL.—Channel curves above and below gage; consists of stones and boulders. Banks fairly steep and wooded. Control is masonry dam with 2-foot 90° V-notch weir of 4 by 4 inch angles set in masonry.

EXTREMES OF DISCHARGE.—Maximum stage estimated, 4.5 feet February 25 (discharge, 330 second-feet; no flow September 16–30.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve based on 90° V-notch sharp-crested weir formula for low stages and broad-crested weir formula for high stages. Operation of water-stage recorder satisfactory except as indicated in footnote to table of daily discharge. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph, except as stated in footnote to table of daily discharge. Records fair.

No discharge measurements made during year.

Daily discharge, in second-feet, of Dial Creek at Bahama, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	0.45	0.35	0.75	8.0	3.95	3.25	1.0	0.65	0.1	0.1	1.85
2	------	.5	.8	.75	3.2	3.55	2.7	1.0	.35	.1	.05	.2
3	------	.85	1.8	.65	87.	2.9	2.65	.9	.25	.1	.05	.1
4	------	.55	.8	.65	12.2	2.6	2.5	.8	.2	.1	.05	.05
5	------	.4	.7	1.1	4.8	2.5	2.3	.7	.2	.5	.05	.05
6	------	.35	.65	1.25	4.55	2.2	2.15	.7	.2	.15	.05	.05
7	------	.35	.6	.95	3.95	6.3	2.1	.7	.15	.1	.05	.05
8	------	.35	.55	.85	3.25	4.3	2.1	.7	.15	.05	.05	.05
9	------	.4	.5	.95	3.0	3.0	2.05	.7	.1	.05		.05
10	------	.35	.5	.85	2.6	2.65	2.05	.65	.1	.05		.05
11	------	.35	.45	.85	2.3	6.5	2.1	.6	.1	.05		.05
12	------	1.0	.45	.85	2.05	12.9	3.2	.6	.1	.05		
13	------	3.2	.45	.8	2.05	11.4	20.0	.55	.1	.05	.02	.02
14	------	.85	.45	.75	5.0	11.0	10.0	.55	.1	.05		
15	------	.6	.5	.75	5.4	9.4	6.1	.5	.1	1.8		
16	------	.5	.6	.75	3.05	6.9	4.55	1.4	.05	.2		
17	------	.45	.6	9.4	2.5	4.9	3.8	.95	.05	.1		
18	------	.4	.5	54.	4.	4.1	2.8	.7	.05	.1		
19	------	.4	2.5	6.3	34.1	3.7	3.2	.50	.05	.1	2.1	
20	------	.5	8.7	2.6	10.5	3.4	2.7	.4	.45	.05	1.0	
21	------	.7	2.0	2.4	6.9	3.8	2.1	.4	.6	.05		
22	------	.45	5.3	3.3	5.0	3.05	1.8	.4	.25	.05		
23	------	.45	4.4	2.2	3.9	3.2	1.6	.45	.35	.05		0
24	------	.35	1.6	1.8	3.3	2.8	1.5	.4	2.6	.05	.05	
25	------	.35	1.2	1.5	156	2.6	1.4	.35	.45	1.4		
26	------	.35	1.0	1.4	12.2	3.5	1.4	.3	.25	3.9		
27	------	.4	.75	1.6	6.2	2.8	1.3	.25	.2	.3		
28	------	.5	.7	2.0	4.35	2.6	1.2	.35	.3	.15		
29	0.15	.4	.7	1.8	------	2.4	1.1	.35	.2	.15	.02	
30	.15	.35	.7	20.0	------	2.4	1.0	.25	.15	.15		
31	.35	------	.7	19.5	------	6.1	------	.3	------	.15		------

NOTE.—Recorder not operating satisfactorily Dec. 2-4, 19-26, Jan. 17-31, Feb. 1-5, 20-27, Mar. 14-16, Apr. 3-9, 18-30, May 1-9, June 5-13, Aug. 9-31, Sept. 12-30; mean daily gage heights estimated from fragmentary records, comparison with flow of Rocky Creek near Bahama, and observer's notes.

Monthly discharge of Dial Creek at Bahama, N. C., for the year ending September 30, 1926

[Drainage area, 4.9 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October 29-31	0.35	0.15	0.216	0.044	0.01
November	3.20	.35	.570	.116	.13
December	8.70	.35	1.34	.273	.31
January	54	.65	4.61	.941	1.08
February	156	2.05	14.3	2.92	3.04
March	12.9	2.20	4.62	.943	1.09
April	20	1.00	3.22	.657	.73
May	1.40	.25	.594	.121	.14
June	2.60	.05	.295	.060	.07
July	3.90	.05	.331	.068	.08
August	2.10	----------	.132	.027	.03
September	1.85	0	.088	.018	.02

ROCKY CREEK NEAR BAHAMA, N. C.

LOCATION.—1¼ miles upstream from confluence with Flat River, 2 miles upstream from dam of Durham water supply and 3 miles east of Bahama, Durham County.

DRAINAGE AREA.—2.7 square miles.

RECORDS AVAILABLE.—October 1, 1925, to September 30, 1926.

GAGE.—Staff gage on right bank; read by V. B. Mangam.

CHANNEL AND CONTROL.—Channel curved above and straight below gage. Bed consists of rock and shifting sand. Banks are wooded and sloping. Control is masonry dam with 2-foot 90° V-notch weir with 4 by 4 inch angles set in masonry.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.4 feet at 10 a. m. February 25 (discharge, 88 second-feet); minimum stage, 0.06 foot several times in August and September (no flow).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve based upon formula for 90° V-notch weir for low stages and for broad-crested weir for high stages. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair.

Daily discharge, in second-feet, of Rocky Creek near Bahama, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.05	0.1	0.15	5.6	1.2	1.4	0.3	0.1	0	0.05	0.05
2	0	.1	.1	.15	2.05	1.1	.8	.3	.1	0	.05	.05
3	0	.05	.85	.15	16	1.0	.75	.3	.1	0	.05	0
4	0	.05	.25	.2	6.6	.9	.65	.3	.1	0	0	0
5	0	.05	.15	.3	2.7	.75	.6	.25	.1	0	0	0
6	0	.05	.1	.35	1.75	.7	.55	.25	.1	0	.05	0
7	0	.05	.1	.35	1.45	5.1	.6	.25	.1	0	.05	2.2
8	.05	.05	.1	.35	1.2	1.95	.7	.2	.05	0	.05	.05
9	0	.05	.1	.3	1.05	1.1	.6	.2	.05	0	0	.05
10	0	.05	.1	.25	.95	.95	.5	.2	.05	0	0	.05
11	0	.05	.1	.25	.8	5.6	.5	.2	.05	0	0	0
12	0	.1	.05	.25	.7	12	3.35	.2	.05	0	0	0
13	0	.4	.05	.25	.65	9.5	10.6	.2	.05	0	0	0
14	.3	.1	.05	.3	1.2	9.6	6.9	.2	.05	0	0	0
15	.15	.1	.05	.3	1.65	7.4	2.45	.2	.05	.30	0	0
16	.05	.1	.05	.35	1.1	4.1	1.35	.3	.05	.05	0	0
17	.15	.05	.1	.45	.75	2.05	1.25	.2	.05	0	0	0
18	.25	.05	.05	31	1.3	1.6	.8	.15	.05	0	0	0
19	.05	.05	.05	3.95	36	1.3	1.15	.15	.05	0	6.3	0
20	.05	.1	5.3	1.8	4.05	1.3	.95	.15	.1	0	.25	0
21	.05	.05	.6	1.3	2.1	1.45	.7	.15	.05	0	.05	0
22	.05	.05	2.4	2.45	1.6	1.2	.65	.15	.05	0	0	0
23	.05	.05	1.65	1.1	1.2	1.1	.6	.1	.05	0	0	0
24	.05	.05	.6	.85	.95	1.0	.6	.1	.25	.85	0	0
25	.1	.05	.4	.75	41	.85	.5	.1	.05	.65	.05	0
26	.1	.05	.35	.7	4.05	1.6	.45	.1	.05	.05	.05	0
27	.05	.05	.3	.85	2.15	1.35	.4	.1	.05	.05	0	0
28	.05	.05	.2	1.2	1.7	.95	.4	.1	.05	.05	0	0
29	.05	.1	.15	.7	-------	.8	.35	.1	.05	.05	0	0
30	.05	.1	.15	5.7	-------	.8	.3	.1	.05	.05	0	0
31	.05	-------	.15	14	-------	6.3	-------	.1	-------	.05	0	-------

NOTE.—No record Oct. 1-3; discharge estimated.

Monthly discharge of Rocky Creek near Bahama, N. C., for the year ending September 30, 1926

[Drainage area, 2.7 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	0.30	0	0.063	0.023	0.02
November	.40	.05	.075	.028	.03
December	5.3	.05	.476	.176	.20
January	31	.15	2.29	.849	.98
February	41	.65	5.08	1.88	1.96
March	12	.70	2.79	1.03	1.19
April	10.6	.30	1.38	.511	.57
May	.30	.10	.184	.068	.08
June	.25	.05	.070	.026	.03
July	.85	0	.069	.026	.03
August	6.3	0	.226	.084	.10
September	2.20	0	.082	.030	.03
The year	41	0	1.05	.389	5.22

MOCCASIN CREEK NEAR MIDDLESEX, N. C.

LOCATION.—At highway bridge just below dam at Taylor's mill and 3 miles west of Middlesex, Nash County.

DRAINAGE AREA.—42 square miles.

RECORDS AVAILABLE.—October 1, 1924, to September 30, 1926, when station was discontinued.

GAGE.—Staff gage attached to downstream side of pier since November 25, 1924; read by J. S. Lewis. Prior to this date a vertical staff gage in mill pond at boat landing about 30 feet from mill.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Two channels for intermediate stages. Both banks subject to overflow above gage height 5.0 feet. Bed consists of gravel. Control is gravel bar about 50 feet downstream; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, 5.5 feet at 8 a. m. February 4 (discharge, 1,200 second-feet); minimum stage, 0.45 foot at 5 p. m. September 30 (discharge, 0.2 second-foot).

1924–1926: Maximum stage recorded, 5.9 feet at 5 p. m. January 20, 1925 (discharge estimated, 1,600 second-feet); minimum stage, that of September 30, 1926.

ICE.—Stage-discharge relation not affected by ice.

REGULATION.—Operation of gristmill directly upstream causes considerable diurnal fluctuation.

ACCURACY.—Stage-discharge relation changed November 25, 1924. Rating curve used October 1 to November 24, 1924, poorly defined between 6 and 200 second-feet; curve used thereafter fairly well defined between 1 and 250 second-feet and extended above. Gage read to hundredths in the forenoon prior to operation of wheel and in the afternoon after closing down. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair subsequent to November 25, 1924, except for high stages.

Discharge measurements of Moccasin Creek near Middlesex, N. C., during the years ending September 30, 1925 and 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1924	*Feet*	*Sec.-ft.*	1925	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*
Nov. 24	2.46	70	Apr. 28	1.02	12.1	Feb. 15	2.97	116
Dec. 7	1.34	19.0	Apr. 28	1.42	34.2	May 24	.76	4.80
			July 21	1.12	20.6			
1925			July 21	.65	1.73			
Feb. 26	2.24	55.4	Oct. 11	.65	2.14			
Feb. 26	2.44	69.1						

Daily discharge, in second-feet, of Moccasin Creek near Middlesex, N. C., for the years ending September 30, 1925 and 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1924-25												
1	500	27	24	40	138	53	28	13	13	9.5	4.0	2.2
2	300	28	24	44	132	159	26	13	9.8	11	2.7	66
3	190	26	16	40	132	138	32	16	11	12	2.2	20
4	114	24	15	36	138	59	30	13	12	12	2.2	7.1
5	106	24	15	40	109	42	26	12	11	11	2.5	4.7
6	81	24	18	36	99	44	25	14	13	12	3.3	2.7
7	69	24	20	32	94	40	25	16	9.0	19	4.0	1.5
8	55	21	22	36	104	36	25	16	8.3	13	3.0	1.5
9	49	23	104	28	126	36	24	16	11	9.5	2.8	1.5
10	47	23	90	109	138	40	25	12	24	7.6	2.5	1.5
11	40	18	34	392	340	32	25	13	19	7.4	2.7	1.4
12	40	19	30	1,010	358	34	26	24	18	9.3	3.0	1.3
13	33	22	25	490	272	32	26	18	15	7.8	392	1.3
14	33	19	25	212	212	34	28	14	12	9.5	212	1.5
15	31	16	22	138	175	32	25	18	10	9.8	94	1.5
16	29	20	24	159	175	30	19	16	8.8	11	18	126
17	27	17	25	126	152	248	24	15	12	10	13	540
18	27	17	28	285	132	212	248	59	32	9.5	9.5	46
19	32	15	34	375	114	114	90	145	25	7.4	8.1	13
20	25	16	34	1,500	94	62	53	120	13	6.6	7.1	8.1
21	23	17	32	710	81	44	38	66	11	6.4	6.4	7.4
22	21	93	32	235	59	32	25	56	8.6	7.1	5.2	6.4
23	22	145	34	167	62	28	22	34	7.8	3.3	4.2	5.4
24	22	72	40	114	66	30	20	19	12	5.2	3.3	4.7
25	20	44	81	94	73	28	19	16	9.8	6.4	2.8	5.2
26	27	36	86	77	59	32	18	14	8.6	8.1	2.8	5.4
27	44	30	81	86	40	30	16	12	12	9.5	2.0	5.2
28	99	30	44	77	36	81	13	12	159	8.8	2.2	4.2
29	55	26	38	104	------	40	10	12	50	8.6	1.8	3.0
30	37	25	40	175	------	36	16	12	28	5.9	1.5	2.7
31	31	------	42	145	------	30	------	18	------	4.2	1.8	------
1925-26												
1	2.3	1.5	10	16	212	53	120	19	2.0	7.4	1.6	4.2
2	2.2	2.0	16	25	175	46	73	20	1.5	6.2	2.0	3.5
3	2.2	7.6	120	19	260	42	53	18	1.9	4.7	1.6	3.0
4	2.2	6.4	94	40	930	40	44	15	2.3	5.7	1.1	2.5
5	2.5	4.0	34	56	410	38	38	15	2.7	6.2	1.3	2.3
6	2.0	2.8	19	46	235	36	32	15	2.3	5.0	2.0	2.3
7	1.8	2.3	16	40	104	53	30	12	4.2	3.3	1.6	2.0
8	1.6	2.0	16	40	81	59	28	9.8	3.8	6.2	1.4	2.3
9	1.0	1.5	16	56	66	50	32	9.5	3.8	5.2	1.0	2.5
10	.9	2.2	16	53	62	81	30	10	2.7	4.2	.9	3.0
11	.6	2.5	15	66	42	410	28	8.6	2.3	5.0	.5	2.7
12	1.0	2.8	16	48	44	375	28	7.6	2.7	6.2	.7	2.3
13	.7	4.0	14	56	40	340	212	7.8	2.7	4.7	.9	1.9
14	.9	4.7	14	48	40	298	86	8.6	2.0	3.3	.8	1.5
15	3.3	5.2	13	40	48	235	40	8.3	1.5	2.3	.5	1.8
16	8.1	4.7	13	36	59	175	36	9.8	1.4	1.8	.9	1.3
17	7.8	2.8	22	34	66	90	34	9.5	2.0	1.9	1.3	1.2
18	5.2	2.7	20	120	62	99	32	8.6	2.7	1.5	1.5	1.1
19	4.2	2.2	19	202	81	81	30	7.4	2.3	2.2	1.6	.9
20	3.3	2.8	18	159	99	73	28	5.7	2.3	2.0	1.6	.9
21	2.2	4.0	40	81	94	99	26	4.2	3.0	1.4	2.0	.7
22	1.8	4.2	73	62	73	81	25	2.7	3.8	1.3	2.0	.7
23	1.5	11	59	40	50	73	24	2.4	28	1.0	1.5	.6
24	1.5	4.2	38	48	48	99	22	3.0	132	.7	1.8	.6
25	1.5	6.2	32	46	73	62	24	2.7	86	1.4	6.6	.8
26	4.0	6.4	28	40	310	53	25	2.2	48	2.3	14	.5
27	3.3	8.1	26	36	175	59	25	1.6	32	2.0	14	.5
28	2.2	8.8	25	28	81	50	22	1.6	19	1.6	9.5	.9
29	1.8	9.8	19	40	------	50	19	1.4	12	1.3	7.4	.4
30	1.5	10	16	53	------	50	20	1.6	8.6	1.0	6.2	.3
31	1.5	------	16	340	------	60	------	2.3	------	1.3	5.2	------

NOTE.—Stage beyond limits of rating curve Oct. 1 and 2, 1925, and no record Mar. 28–31, 1926; discharge estimated.

Monthly discharge of Moccasin Creek near Middlesex, N. C., for the years ending September 30, 1925 and 1926

[Drainage area, 42 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1924–25					
October		20	71.9	1.71	1.97
November	145	15	31.4	.748	.83
December	104	15	38.0	.905	1.04
January	1,500	28	229	5.45	6.28
February	358	36	132	3.14	3.27
March	248	28	60.9	1.45	1.67
April	248	10	34.2	.814	.91
May	145	12	27.5	.655	.76
June	159	7.8	19.8	.471	.53
July	19	3.3	8.98	.214	.25
August	392	1.5	26.5	.631	.73
September	540	1.3	30.0	.714	.80
The year	1,500	1.3	59.0	1.40	19.04
1925–26					
October	8.1	.6	2.47	.059	.07
November	11	1.5	4.65	.111	.12
December	120	10	28.8	.686	.79
January	340	16	65.0	1.55	1.79
February	930	40	144	3.43	3.57
March	410	36	110	2.62	3.02
April	212	19	42.2	1.00	1.12
May	20	1.4	8.09	.193	.22
June	132	1.4	14.0	.333	.37
July	7.4	.7	3.24	.077	.09
August	14	.5	3.06	.073	.08
September	4.2	.3	1.64	.039	.04
The year	930	.3	34.9	.831	11.28

LITTLE CREEK NEAR ZEBULON, N. C.

LOCATION.—At county line, three-quarters of a mile above confluence with Moccasin Creek and 2¾ miles southeast of Zebulon, Wake County.

DRAINAGE AREA.—5.2 square miles (measured on soil survey map of United States Department of Agriculture).

RECORDS AVAILABLE.—December 8, 1924, to September 30, 1926, when station was discontinued.

GAGE.—Vertical enameled staff on downstream face of large pine tree on left bank; read by S. A. Todd and Thomas Pace.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Channel straight. Bed composed of rock and gravel. Right bank steep; left bank slopes 300 feet to railroad embankment. Control built of 2-inch planks forming V-notch weir. Gage height of zero flow is 0.10 foot.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.5 feet at 4 p. m. June 23 (discharge, about 200 second-feet); no flow during several periods in July, August, and September.

1925–26: Maximum stage recorded, 4.35 feet at 9.10 a. m. March 1, 1925 (discharge not determined); no flow during several periods in July, August, and September 1926.

ICE.—Stage-discharge relation probably not affected by ice.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 40 second-feet and extended above. Gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records fair.

Discharge measurements of Little Creek near Zebulon, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 11	0.30	0.319	Feb. 15	1.30	13.5
Jan. 31	1.81	32.5	May 24	.36	.562

Daily discharge, in second-feet, of Little Creek near Zebulon, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.5	7.4	4.4	-------	7.9	11.	2.0	0.4	1.1	0.7	0.3
2	.5	9.4	20	3.5	-------	7.4	9.0	1.9	.4	.9	.6	.3
3	.3	3.5	11	3.5	-------	7.2	6.9	1.9	.4	.7	.3	.3
4	.3	2.2	5.7	3.0	-------	5.7	6.3	1.0	.4	.6	.3	.3
5	.3	1.4	5.8	27	-------	5.7	5.7	1.0	1.6	.5	.2	.3
6	.3	1.4	3.1	5.8	-------	4.3	5.4	1.3	.9	.5	.3	.3
7	.3	1.4	2.1	-------	9.0	32	4.9	1.3	.8	1.1	.3	.3
8	.3	1.4	2.3	4.9	9.0	14	4.9	1.3	.5	.9	.2	.5
9	.3	1.5	2.0	5.8	9.0	9.0	5.7	1.1	1.1	.7	.2	.3
10	.3	1.4	2.1	-------	9.0	7.2	4.9	1.1	.8	.7	.1	.3
11	.3	1.3	2.2	-------	7.2	57	4.3	1.1	.3	.3	.1	.3
12	.3	1.4	2.1	-------	7.2	27	9.0	1.1	.3	.6	.1	.3
13	.3	9.4	2.2	-------	7.2	57	37	1.1	.3	.6	.1	.2
14	1.0	12	2.1	-------	7.2	20	15	1.1	.3	.5	0	.1
15	5.7	2.4	2.0	-------	17	17	11	1.1	.2	.5	0	.1
16	1.3	4.4	4.3	-------	7.2	14	9.0	1.7	.2	.3	0	.1
17	.9	2.3	4.4	-------	6.3	12	7.2	1.3	.2	.3	0	.1
18	1.4	4.4	3.1	-------	5.7	9.8	6.3	.9	.2	.3	0	.1
19	.9	2.1	2.2	-------	11	9.0	5.7	.7	.2	.2	0	.1
20	.8	2.1	2.2	-------	12	7.2	5.4	.6	.9	.1	2.0	1
21	.8	2.0	4.6	-------	8.3	20	4.9	.6	1.3	.1	.3	.1
22	.5	1.6	3.1	-------	7.2	9.0	4.3	.6	.9	.1	.3	.1
23	.3	1.4	2.1	-------	7.2	9.8	3.8	.5	57	0	.3	0
24	.4	1.4	2.2	-------	5.7	9.0	3.8	.5	94	0	.2	0
25	.9	1.4	2.2	-------	32	7.2	3.0	.5	5.4	3.0	4.6	0
26	.9	1.4	3.3	-------	18	7.2	3.0	.4	3.8	.3	9.0	0
27	.9	2.1	3.5	-------	11	9.0	2.8	.4	6.6	.3	2.0	0
28	.8	2.1	2.4	-------	7.2	7.2	2.8	.5	6.3	.3	.7	0
29	.8	1.4	2.1	-------	-------	5.7	2.4	.5	2.4	.7	.3	0
30	.8	1.4	2.4	-------	-------	5.7	2.4	.4	1.6	7.9	.3	0
31	.8	-------	3.0	-------	-------	43	-------	.4	-------	1.3	.3	-------

NOTE.—No record on days for which no discharge is shown.

Monthly discharge of Little Creek near Zebulon, N. C., for the year ending September 30, 1926

[Drainage area, 5.2 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	5.7	0.3	0.78	0.150	0.17
November	12	1.3	2.74	.527	.59
December	20	2.0	3.85	.740	.85
February 7–28	32	5.7	10.0	1.92	1.57
March	57	4.3	14.9	2.87	3.31
April	37	2.4	6.93	1.33	1.48
May	2.0	.4	.96	.185	.21
June	94	.2	6.32	1.22	1.36
July	7.9	.0	.82	.158	.18
August	9.0	.0	.77	.148	.17
September	.5	.0	.16	.031	.03

CAPE FEAR RIVER BASIN

CAPE FEAR RIVER AT LILLINGTON, N. C.

LOCATION.—At State highway bridge, just below Norfolk Southern Railroad bridge at Lillington, Harnett County, and 1 mile below Neilly Creek.

DRAINAGE AREA.—3,530 square miles (measured on base map of North Carolina).

RECORDS AVAILABLE.—December 6, 1923, to September 30, 1926.

GAGE.—Chain gage on downstream side of bridge; read by Leo Kelly.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel composed mostly of heavy gravel; curved above and straight below gage. Control is remains of old dam 1¼ miles below gage, having seven channels at low water; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 13.1 feet at 4.30 p. m. January 19 (discharge, 26,600 second-feet); minimum stage, 0.46 foot at 4 p. m. October 9 and 7 a. m. October 13 (discharge, 68 second-feet).

1923–1926: Maximum stage recorded, 18.7 feet at 4.15 p. m. September 30, 1924 (discharge, 51,800 second-feet); minimum stage, 0.32 foot at 6.30 a. m. September 5, 1924 (discharge, 47 second-feet).

ICE.—Stage-discharge relation probably not affected by ice.

REGULATION.—Marked daily regulation from dam upstream.

ACCURACY.—Stage-discharge relation permanent during year. Rating curve well defined between 100 and 50,000 second-feet and extended above and below these limits. Gage read to two-hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except as stated in footnote to table of daily discharge. Records good.

The following discharge measurements were made:
May 24, 1926: Gage height, 1.28 feet; discharge, 296 second-feet.
August 21, 1926: Gage height, 1.23 feet; discharge, 245 second-feet.

Daily discharge, in second-feet, of Cape Fear River at Lillington, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	260	240	590	16,300	4,300	13,500	740	181	325	1,570	350
2	134	700	214	700	10,900	3,450	7,230	780	248	400	1,280	350
3	158	280	280	590	15,200	2,750	4,300	1,160	205	256	430	590
4	96	214	400	400	25,800	2,340	3,590	865	190	260	430	740
5	112	228	460	590	18,700	2,470	2,610	700	256	138	490	350
6	122	214	460	375	8,300	2,610	2,210	625	175	300	1,390	325
7	92	520	205	520	5,830	4,010	1,820	555	150	910	3,870	740
8	92	190	375	780	4,010	10,400	1,950	430	300	1,010	3,030	490
9	71	590	248	1,060	3,310	6,430	2,610	490	280	555	1,160	248
10	87	625	214	910	2,610	4,010	2,340	300	211	1,220	820	325
11	81	300	260	1,060	2,080	4,010	1,950	590	211	244	820	252
12	83	700	217	960	1,820	14,600	2,210	430	124	160	700	141
13	88	660	248	865	1,690	13,200	13,200	460	124	260	490	187
14	96	555	181	865	865	13,500	17,800	820	117	300	430	217
15	85	490	490	820	1,060	10,400	9,920	325	199	590	256	220
16	112	700	228	1,220	1,950	7,650	6,030	325	252	3,170	211	153
17	110	960	122	910	2,610	6,830	4,600	820	187	1,010	248	117
18	102	325	300	3,070	1,570	4,450	3,450	865	163	1,010	196	205
19	108	280	248	22,300	3,950	3,590	2,890	520	175	740	300	160
20	104	960	400	15,200	21,700	3,310	2,080	325	300	300	520	117
21	119	1,220	490	6,830	11,900	4,150	2,080	280	555	172	244	155
22	88	590	1,690	4,300	6,430	2,750	2,080	430	590	244	196	143
23	106	240	2,610	3,590	4,920	2,340	2,080	375	1,570	205	160	155
24	172	590	3,450	3,030	3,450	2,750	1,950	325	3,450	232	163	202
25	187	400	2,210	1,950	6,430	2,470	1,820	280	3,730	14,900	590	193
26	146	520	1,690	1,510	22,400	2,210	2,080	300	3,030	10,200	1,330	87
27	280	400	960	1,690	14,000	2,210	1,950	202	2,210	4,150	2,890	98
28	350	205	865	1,690	5,830	2,470	1,820	375	1,010	2,750	1,820	129
29	350	400	820	1,570	-------	2,610	1,820	375	660	1,950	865	160
30	350	141	700	1,160	-------	2,080	1,570	300	325	1,690	205	126
31	187	-------	740	6,030	-------	3,450	-------	141	-------	2,340	260	-------

NOTE.—Discharge Jan. 18, 19, Feb. 19, 20, 26, and April 13 determined by approximate integration of graph estimated from two daily gage readings.

Monthly discharge of Cape Fear River at Lillington, N. C., for the year ending September 30, 1926

[Drainage area, 3,530 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	350	71	142	0.040	0.05
November	1,220	141	482	.137	.16
December	3,450	122	710	.201	.23
January	22,300	375	2,810	.796	.92
February	25,800	865	8,060	2.28	2.37
March	14,600	2,080	4,960	1.41	1.63
April	17,800	1,570	4,180	1.18	1.32
May	1,160	141	500	.142	.16
June	3,730	117	706	.200	.22
July	14,900	138	1,680	.476	.55
August	3,870	160	883	.250	.29
September	740	87	258	.073	.08
The year	25,800	71	2,070	.586	7.98

REEDY FORK NEAR SUMMERFIELD, N. C.

LOCATION.—50 feet below highway bridge on Greensboro-Summerfield road, half a mile above mouth of Brush Creek, and 2 miles southeast of Summerfield, Guilford County.

DRAINAGE AREA.—34.1 square miles.

RECORDS AVAILABLE.—November 9, 1925, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on left bank 50 feet below bridge; inspected by C. W. Smedberg.

DISCHARGE MEASUREMENTS.—Made from downstream side of highway bridge or by wading.

CHANNEL AND CONTROL.—Channel straight below and curved above bridge. Bed consists of clay and sand; shifting. Both banks low and subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.16 feet at 4 a. m. January 19 (discharge, 690 second-feet); minimum stage, 0.20 foot at 1 a. m. August 30 (discharge, 4.4 second-feet).

ICE.—Stage-discharge relation not affected by ice.

REGULATION.—Diurnal fluctuation caused by operation of mill at Summerfield.

ACCURACY.—Stage-discharge relation changed on January 20 and September 30. Rating curve used November 9 to January 19 and September 30 fairly well defined between 2 and 50 second-feet and extended above; curve used January 20 to September 23 poorly defined between 5 and 60 second-feet and extended above. Operation of water-stage recorder satisfactory except as indicated in footnote to table of daily discharge. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph or, for days of considerable fluctuation, by averaging discharge for parts of day, except as indicated in footnote to table of daily discharge. Records poor.

Discharge measurements of Reedy Fork near Summerfield, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Nov. 9	0.89	24.0	Feb. 18	1.16	43.3	May 26	0.44	10.7
Nov. 10	.74	18.1	May 21	.54	12.6	Aug. 19	.56	12.9

Daily discharge, in second-feet, of Reedy Fork near Summerfield, N. C., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					41	50	22	14	9.1	11	5.6
2					41	38	20	12	8.3	11	26
3			21		35	35	21	10	7.8	10	14
4			28		36	32	20	13	10	10	19
5			34		33	30	17	16	27	11	11
6			35	46	29	30	20	13	50	32	12
7			26	42	42	28	17	13	12	17	10
8		18	24	40	50	33	20	11	14	13	8.6
9	22	17		38	41	29	15	12	15	11	8.3
10		15		38	38	27	19	10	12	8.8	9.4
11		17		32	38	32	18	10	7.1	13	8.1
12		18		30	45	41	19	10	6.9	9.8	6.6
13		13		32	53	120	20	9.4	9.8	9.1	7.8
14	23	16			50	88	27	10	10	8.6	8.6
15	19	17			46	50	21	9.4	45	5.8	8.3
16	19	18			43	39	27	10	26	7.4	8.8
17		16	17		39	35	22	7.8	11	6.4	7.8
18		15	193		36	33	15	8.8	9.8	6.6	7.1
19		16	456		36	37	14	11	10	7.6	6.4
20		24	83		35	34	13	14	8.6	8.6	6.2
21			57	57	35	30	15	16	8.8	7.8	6.6
22			46	42	33	30	14	15	8.3	6.4	7.1
23			43	39	33	28	14	13	8.8	7.6	6.6
24			38	38	30	30	13	24	17	8.1	
25			37	56	30	25	13	14	53	11	
26			34	101	33	24	12	10	24	9.8	7.7
27			35	53	33	23	12	9.1	36	8.1	
28			35	42	29	24	13	11	38	7.1	
29			28		28	24	13	12	25	5.2	
30			32		30	22	11	11	19	6.0	7.8
31					50		12		14	6.0	

NOTE.—No record on days for which no discharge is shown. Discharge estimated Sept. 24–29. Braced figure shows mean discharge for period indicated.

Monthly discharge of Reedy Fork near Summerfield, N. C., for the year ending September 30, 1926

[Drainage area, 34.1 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
March	53	28	37.8	1.11	1.28
April	120	22	36.7	1.08	1.20
May	27	11	17.1	.501	.58
June	24	7.8	12.0	.352	.39
July	53	6.9	18.1	.531	.61
August	32	5.2	9.70	.284	.33
September	26	5.6	9.13	.268	.30

HORSEPEN CREEK AT BATTLE GROUND, N. C.

LOCATION.—1,000 feet above highway bridge 1 mile northwest of Battle Ground, Guilford County, and 2½ miles above confluence with Reedy Fork.

DRAINAGE AREA.—15.9 square miles (measured on soil survey maps).

RECORDS AVAILABLE.—November 9, 1925, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on right bank; inspected by C. W. Smedberg.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Channel practically straight above and below gage. Bed consists of sand and gravel. Both banks steep; subject to overflow above gage height 6.5 feet. Original control of plank sheeting with rectangular steel-faced weir in center 8 feet long and 1 foot deep. On June 1, 1926, this was cut down 1.15 feet into a rough broad-crested weir of parabolic outline 19 feet in length with some leakage through weir.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.15 feet at 7.30 p. m. January 18 (discharge estimated, 766 second-feet); minimum stage, 0.72 foot at 5 a. m. July 24 (discharge, 0.7 second-foot).

ICE.—Stage-discharge relation slightly affected by ice during severe winter.

REGULATION.—Diurnal regulation during extremely dry weather caused by operation of swimming pools.

ACCURACY.—Stage-discharge relation changed June 1. Rating curve used prior to this date fairly well defined between 0 and 200 second-feet; curve used thereafter well defined between 3 and 50 second-feet, fairly well defined to 250 second-feet and extended above. Operation of water-stage recorder satisfactory except as indicated in footnote to table of daily discharge. Daily discharge ascertained by applying to rating table mean daily gage height determined by inspection of gage-height graph or, for days of considerable fluctuation, by averaging discharge for intervals of day. Records fair.

Discharge measurements of Horsepen Creek at Battle Ground, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Aug. 22		3.61	Nov. 10	2.33	5.56	May 26		5.19
Nov. 9	2.37	6.48	Feb. 18	3.66	62.5	Aug. 19	0.97	2.78

Daily discharge, in second-feet, of Horsepen Creek at Battle Ground, N. C., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	June	July	Aug.	Sept.
1		5.0		84	13	16	4.3	1.7	3.1	2.7
2		5.5		29	13	12	4.3	1.3	3.2	2.5
3		5.7		106	11	11	4.0	1.1	3.1	4.4
4		5.2		95	11	10	4.3	1.2	2.8	3.3
5		6.0		27	10	9.7	4.7	3.1	11	
6		5.5		19	9.7	9.2	4.5	2.8	5.8	
7		5.2		16	33	9	4.3	2.7	4.1	
8		5		13	19	19	4.3	2.2	3.8	
9	6.7	5		13	13	11	4.7	2.1	4.7	
10	5.7	5		12	12	10	3.8	1.9	4.7	
11	5.5	5		10	17	11	3.3	1.7	4.5	
12	13	5		9.7	41	62	3.1	1.7	4.0	
13	12	5		9.7	39	103	3.7	2.2	3.2	
14	7.2	5		17	29	32	3.6	2.7	2.7	
15	6.4	5		13	24	21	3.6	8.7	2.5	
16	6.4	5	4.2	10	19	18	3.5	2.9	2.4	
17	5.7	5	4.2	9.5	15	14	3.3	2.6	2.2	
18	5.5	5	256	33	13	12	6.0	2.3	2.3	
19	5.5	4.8	109	130	13	22	4.9	1.9	2.5	
20	7.4	11	27	37	12	13	5.0	1.8	2.4	
21	6.2	25	23	21	11	11	4.0	1.7	2.5	
22	6.0	41	42	17	9.7	10	3.1	1.3	2.3	
23	5.7	27	19	14	10	12	3.2	1.0	2.1	
24	5.2	11	15	12	9.5	13	3.1	50	2.7	
25	5.2	9.7	13	108	9	10	2.4	19	2.9	2.3
26	5.2	8.2	10	35	11	9	2.6	4.9	3.2	2.3
27	5.7	6	12	19	9.7	9	3.8	3.7	2.8	3.2
28	5.2	5	11	15	9.0	9	3.3	3.4	2.6	5.2
29	5.0	4	9.2		8.7	9	2.7	3.3	2.4	6.0
30	5.0	3	17		9	8	2.3	3.3	2.2	4.3
31		2	176		48			3.2	2.2	

NOTE.—No record Jan. 1-15, May 1-31, Sept. 5-24; discharge not determined. Gage-height record faulty or missing Dec. 28-31, Apr. 21-30, June 13-18, July 27-30, Aug. 22-27; discharge estimated.

Monthly discharge of Horsepen Creek at Battle Ground, N. C., for the year ending September 30, 1926

[Drainage area, 15.9 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
December	41		8.09	0.509	0.59
February	130	9.5	33.4	2.10	2.19
March	48	8.7	16.5	1.04	1.20
April	103		17.5	1.10	1.23
June		2.3	3.79	.238	.27
July	50	1.0	4.62	.291	.34
August	11		3.32	.209	.24

MORGAN CREEK NEAR CHAPEL HILL, N. C.

LOCATION.—At ford 500 feet below mouth of Neville Creek, 2½ miles southwest of Chapel Hill, Orange County, and 7 miles above mouth of creek.

DRAINAGE AREA.—29 square miles (measured on topographic maps).

RECORDS AVAILABLE.—January 20, 1923, to September 30, 1926.

GAGE.—Since December 9, 1924, Au continuous water-stage recorder on left bank; attended by students or faculty of University of North Carolina at Chapel Hill.

DISCHARGE MEASUREMENTS.—Made from cable 75 feet upstream from gage or by wading.

CHANNEL AND CONTROL.—Creek is straight for 150 feet upstream and about 700 feet downstream from gage. Bed of shifting sand; current sluggish at low water. Banks are high and wooded but subject to overflow at extremely high water. Original control consisted of large boulders and gravel about 40 feet downstream from gage; permanent. On October 29, 1925, a broad-crested masonry weir 50 feet long, having a sharp-crested right-angle V-notch weir, 1.66 feet depth in center, was completed.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 11.75 feet at 11 p. m. July 24 (discharge, 3,570 second-feet); minimum stage, 0.65 foot all day October 11 (discharge, 1.0 second-foot).

1923–1926: Maximum stage, about 25.0 feet at 10 a. m. August 4, 1924 (discharge, about 30,000 second-feet); minimum stage, 0.54 foot all day September 11, 1925 (discharge, 0.47 second-foot).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—Since July 9, 1925, water is diverted from creek a short distance above gage for water supply of Chapel Hill. Tables of discharge include diversion.

ACCURACY.—The stage-discharge relation was changed on October 29 by construction of an artificial control. Rating curve used to October 28 well defined up to 300 second-feet. Curve used thereafter well defined between 0.5 and 5,000 second-feet. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage height graph or, for days of considerable fluctuation in stage, by averaging discharge for intervals of day, except as indicated in footnote to table of daily discharge. Records good except for periods during which flashboards were on weir, which are fair.

Discharge measurements of Morgan Creek near Chapel Hill, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 8	0.58	0.56	Jan. 19	3.26	39.7	Feb. 19	4.50	285
Oct. 30	1.72	1.70	Feb. 3	4.94	419	May 22	1.95	5.1
Jan. 18	4.80	371	Feb. 4	3.65	84	May 25	1.83	3.97
Do	4.41	257	Do	3.62	72	Aug. 30	1.74	2.05
Do	4.32	240	Feb. 5	3.34	39.7			
Jan. 19	3.41	47.4	Feb. 17	2.67	11.1			

Daily discharge, in second-feet, of Morgan Creek near Chapel Hill, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	2.8	4.0	4.4	57	28	43	11.2	4.0	3.1	8.1	125
2	1.5	4.6	4.8	4.7	33	24	32	10.5	3.9	2.5	6.9	11.3
3	2.8	5.0	5.8	4.9	231	20	28	10.5	3.2	2.2	6.0	6.2
4	1.8	4.0	5.3	5.4	109	17.8	25	11.7	3.6	2.7	5.6	4.9
5	1.3	3.4	4.9	7.4	43	15.0	24	10.3	4.9	2.7	7.1	4.3
6	1.2	3.2	4.8	7.8	33	14.0	23	9.4	5.2	4.0	10.2	4.6
7	1.2	3.2	4.1	7.1	28	50	19.0	9.2	4.8	3.3	5.9	20
8	1.3	3.8	4.0	6.9	24	35	22	8.2	3.7	3.2	6.6	6.9
9	1.2	4.6	3.9	6.9	21	26	19.4	8.7	3.1	2.7	4.6	4.0
10	1.2	3.9	3.8	6.2	18.6	22	16.6	8.6	2.7	2.5	4.0	4.9
11	1.0	3.4	3.7	5.8	15.0	51	16.6	8.5	2.3	2.3	3.8	3.8
12	1.2	4.8	3.8	5.7	13.7	164	28	8.6	2.3	2.3	3.3	3.0
13	1.3	9.2	3.5	5.7	13.4	188	184	8.4	2.5	2.3	3.2	2.6
14	2.0	4.9	3.4	5.8	19.4	109	50	8.0	2.1	4.4	2.8	2.5
15	3.0	4.0	3.6	5.7	34	72	36	9.2	2.6	6.6	2.6	2.3
16	2.1	4.2	4.0	5.9	17.0	50	31	17.0	2.6	5.0	2.4	2.0
17	2.8	3.8	4.2	6.0	13.0	40	28	9.8	2.0	4.0	1.9	1.9
18	7.1	3.2	4.0	192	17.4	34	24	9.8	2.0	3.2	1.8	1.9
19	2.7	3.2	4.0	44	249	32	22	8.2	3.0	2.7	1.9	1.9
20	1.9	3.8	9.9	27	72	29	19.4	7.2	6.2	2.2	2.2	1.8
21	1.7	3.8	9.8	20	40	32	17.4	7.8	4.4	2.2	2.4	1.7
22	1.7	3.5	24	21	32	26	16.6	7.4	6.0	2.1	2.2	1.8
23	1.6	3.3	11.0	15.0	26	30	15.8	6.3	7.2	2.0	3.4	1.9
24	2.1	3.2	8.7	12.7	22	27	23	5.7	13.4	537	4.4	1.7
25	4.6	3.2	7.2	11.3	220	24	17.4	5.7	6.8	235	4.1	1.4
26	3.6	3.3	6.5	12.0	67	27	14.7	5.8	5.1	21	4.9	1.2
27	2.1	4.0	5.3	11.6	39	24	13.7	5.4	4.7	15.0	3.3	1.1
28	1.5	3.8	4.1	12.4	31	21	13.0	5.8	5.3	11.3	2.7	1.4
29	1.7	3.8	4.0	11.6	-------	19.0	11.7	6.2	4.1	15.0	2.5	1.6
30	2.5	4.0	4.0	56	-------	18.6	11.6	4.0	3.6	13.0	2.3	1.6
31	2.6	-------	4.0	175	-------	126	-------	4.0	-------	9.3	2.1	------

NOTE.—Drain pipe in control open May 18–29 and Aug. 23 and 24; discharge obtained by applying a correction of +0.2 foot to mean daily gage height. Flashboards in weir June 15–21, July 1–15, 20–23; discharge obtained by applying a correction of −0.95 foot to mean daily gage height.

Monthly discharge of Morgan Creek near Chapel Hill, N. C., for the year ending September 30, 1926

[Drainage area, 29 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	7.1	1.0	2.12	0.073	0.08
November	9.2	2.8	3.96	.137	.15
December	24	3.4	5.75	.198	.23
January	192	4.4	23.4	.807	.93
February	249	13.0	54.9	1.890	1.97
March	188	14.0	45.0	1.550	1.79
April	184	11.6	28.2	.972	1.08
May	17.0	4.0	8.29	.286	.33
June	13.4	2.0	4.24	.146	.16
July	537	2.0	29.9	1.030	1.19
August	10.2	1.8	4.04	.139	.16
September	125	1.1	7.71	.266	.30
The year	537	1.0	17.9	.617	8.37

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

LOCATION.—At highway bridge 1½ miles northwest of Jamestown and 3½ miles northeast of High Point, Guilford County.

DRAINAGE AREA.—33 square miles (measured on soil survey maps).

RECORDS AVAILABLE.—June 14, 1923, to September 30, 1926, when station was discontinued.

GAGE.—Enameled vertical staff in two sections on right bank about 20 feet upstream from highway bridge; read by W. S. Davis.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed composed mostly of sand. Right bank is high but left bank is subject to overflow at about 8-foot gage height. Control formed by loose rocks under lower side of bridge; sand between rocks washes away and is replaced frequently.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.8 feet morning of January 18 (discharge, about 1,060 second-feet); minimum stage, 0.70 foot evening of September 29 and morning of September 30 (discharge, 2 second-feet).

1923–1926: Maximum stage recorded, 10.1 feet evening of September 29, 1924 (discharge, about 1,100 second-feet); minimum stage, 0.70 foot July 28 to August 3, 1925, and September 29 and 30, 1926 (discharge, 2 second-feet).

ICE.—Not sufficient to affect stage-discharge relation.

REGULATION.—Slight diurnal regulation caused by gristmill above.

DIVERSIONS.—None.

ACCURACY.—Stage-discharge relation seems to have held constant throughout year. Rating curve poorly defined. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records poor.

Discharge measurements of West Fork of Deep River near High Point, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 6	0.83	3.97	Feb. 18	1.59	32.3	May 21	1.10	9.00
Oct. 30	1.12	9.03						

Daily discharge, in second-feet, of West Fork of Deep River near High Point, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	14	11	14	262	25	32	14	10	4	9	4
2	5	15	11	13	88	24	25	14	7	4	8	5
3	4	14	12	14	298	23	23	16	7	4	7	5
4	4	11	11	15	84	20	21	17	7	4	6	6
5	4	12	11	32	49	17	19	14	7	5	53	6
6	4	12	11	20	36	16	17	12	8	6	35	6
7	4	12	11	14	32	117	17	12	7	5	66	6
8	4	16	11	27	26	70	30	14	8	5	37	6
9	5	14	10	33	25	30	20	10	8	5	10	6
10	5	12	10	16	24	21	18	12	8	4	8	6
11	5	12	10	14	24	35	18	12	7	4	7	6
12	5	16	10	16	22	152	122	12	6	4	7	4
13	5	13	10	20	20	117	142	12	5	4	6	4
14	21	13	10	16	27	75	36	14	5	6	6	4
15	22	25	10	14	20	43	31	12	4	7	5	4
16	8	15	11	23	17	37	35	11	4	7	5	4
17	7	12	11	24	16	32	28	11	4	6	5	4
18	8	13	11	885	62	25	21	9	5	5	5	4
19	8	14	11	239	298	24	42	9	19	4	5	4
20	8	12	10	52	62	22	25	9	32	4	4	4
21	7	12	50	36	38	22	20	7	8	4	4	4
22	8	12	132	57	28	20	20	13	9	4	5	4
23	10	11	52	31	22	19	19	11	13	4	5	4
24	10	11	23	25	19	17	36	8	12	361	5	3
25	173	11	18	21	374	17	20	9	7	22	6	3
26	33	10	17	21	66	20	17	9	6	57	7	3
27	16	11	20	24	39	20	15	9	12	84	5	3
28	13	12	20	24	31	17	16	8	11	43	5	4
29	13	11	20	20	-------	16	14	7	8	23	5	3
30	11	11	16	19	-------	16	14	7	6	22	4	4
31	11	-------	16	556	-------	84	------	10	-------	10	4	------

Monthly discharge of West Fork of Deep River near High Point, N. C., for the year ending September 30, 1926

[Drainage area, 33 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	173	4	14.4	0.436	0.50
November	25	10	13.0	.394	.44
December	132	10	19.3	.585	.67
January	885	13	75.3	2.28	2.63
February	374	16	75.3	2.28	2.37
March	152	16	38.5	1.17	1.35
April	142	14	30.4	.921	1.03
May	17	7	11.1	.336	.39
June	32	4	8.67	.263	.29
July	361	4	23.6	.715	.82
August	66	4	11.3	.342	.39
September	6	3	4.43	.134	.15
The year	885	3	26.8	.812	11.03

DEEP RIVER AT RAMSEUR, N. C.

LOCATION.—At upper end of long pool, 2,000 feet downstream from railroad station at Ramseur, Randolph County, and 1½ miles downstream from mouth of Sandy Creek.

DRAINAGE AREA.—343 square miles (measured on soil survey map).

RECORDS AVAILABLE.—November 24, 1922, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on right bank; attended by J. M. Woodell.

DISCHARGE MEASUREMENTS.—Made from cable 200 feet below gage.

CHANNEL AND CONTROL.—Channel straight for 700 feet above and below gage. Bed composed of boulders and sand; fairly smooth. Banks are about 20 feet high and subject to overflow. Control for low and medium stages is a solid rock jagged shoal about 600 feet downstream from gage. High water is channel controlled. There are three small islands between the cable and control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 13.3 feet from 6 to 12 p. m. January 18 (discharge 8,970 second-feet); minimum stage, 0.37 foot several times in October (discharge, 10 second-feet).

1923–1926: Maximum stage recorded, 19.22 feet at 1 p. m. March 13, 1923 (discharge, 14,700 second-feet, revised figure); minimum stage, 0.37 foot at 2 a. m. August 4, 1925, and several times in October, 1925 (discharge, 10 second-feet).

ICE.—Negligible.

DIVERSIONS.—None.

REGULATION.—The record from recorder shows continual regulation by power plants above station, but as no plant has more than 10 hours' storage, the weekly and monthly mean discharge is representative of the natural flow.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 10 and 7,000 second-feet; extended above. Operation of water-stage recorder satisfactory. Daily discharge ascertained by averaging discharge for parts of day. Records good except for estimated period, which is fair.

The following discharge measurements were made:

October 7, 1925: Gage height, 0.40 foot; discharge, 10.4 second-feet.

May 22, 1926: Gage height, 1.33 feet; discharge, 175 second-feet.

Daily discharge, in second-feet, of Deep River at Ramseur, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	11	50	30	1,800	342	608	120	52	41	113	36
2	12	66	50	64	701	280	406	99	58	42	138	45
3	12	50	48	64	2,300	288	297	148	55	46	81	99
4	10	43	48	121	2,330	217	217	130	76	45	94	88
5	10	38	40	64	701	184	234	133	53	45	564	82
6	10	38	31	66	431	157	232	123	40	52	733	58
7	10	24	71	103	342	1,010	183	114	66	34	230	45
8	11	33	54	131	297	749	202	116	43	43	325	40
9	11	60	49	78	271	424	316	82	30	47	162	40
10	28	49	54	56	210	294	184	117	50	32	156	110
11	14	86	49	108	201	508	154	92	55	59	66	27
12	37	73	38	107	158	1,100	322	99	55	49	99	28
13	32	78	27	103	129	1,760	4,310	98	54	50	82	49
14	31	131	76	93	130	1,050	1,050	101	54	61	77	35
15	29	70	54	80	214	847	608	97	39	368	48	36
16	29	111	48	73	207	599	499	66	42	258	66	36
17	18	97	48	55	146	468	428	93	40	107	56	33
18	10	78	50	5,300	164	362	300	96	35	73	36	26
19	30	56	35	3,580	2,890	286	280	96	68	101	39	17
20	29	73	55	654	693	263	270	96	150	61	39	33
21	29	41	94	402	580	260	236	99	220	42	27	31
22	28	32	441	441	419	271	217	77	319	41	30	30
23	28	84	413	370	351	289	201	65	309	51		28
24	19	49	214	230	260	267	295	97	235	1,960		28
25	24	46	139	238	2,530	241	313	82	133	1,810		18
26	56	35	109	197	1,340	198	242	75	61	337	98	11
27	144	78	89	176	551	232	186	77	71	280		26
28	124	44	136	183	381	170	168	43	61	431		24
29	54	24	83	154	-------	200	159	43	42	204		21
30	58	78	117	174	-------	202	156	45	47	162		35
31	31	-------	89	2,480	-------	1,390	-------	52	-------	137		------

NOTE.—Recorder not operating Aug. 23-31; discharge estimated by comparison with Cape Fear River at Lillington and West Fork of Deep River near High Point.

Monthly discharge of Deep River at Ramseur, N. C., for the year ending September 30, 1926

[Drainage area, 343 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	144	10	32.2	0.094	0.11
November	131	11	59.2	.173	.19
December	441	27	93.5	.273	.31
January	5,300	30	515	1.50	1.73
February	2,890	129	740	2.16	2.25
March	1,760	157	481	1.40	1.61
April	4,310	154	442	1.29	1.44
May	148	43	92.6	.270	.31
June	319	30	87.1	.254	.28
July	1,960	32	228	.665	.77
August	733	----------	134	.391	.45
September	110	11	40.5	.118	.13
The year	5,300	10	242	.706	9.58

PEE DEE RIVER BASIN

YADKIN RIVER AT NORTH WILKESBORO, N. C.

LOCATION.—At bridge 3,870 feet below Southern Railway station at North Wilkesboro, Wilkes County.

DRAINAGE AREA.—500 square miles.

RECORDS AVAILABLE.—April 10, 1903, to June 30, 1909; October 1, 1920, to September 30, 1926.

GAGE.—Chain gage on downstream handrail since October 1, 1920; read by S. U. Reynolds.

DISCHARGE MEASUREMENTS.—Made from bridge at gage.

CHANNEL AND CONTROL.—Channel is straight above station; slightly curved at bridge and straight for 600 feet below; one channel at all stages. Right bank is low and subject to overflow, but all water must pass under bridge and approaches. Left bank high and rocky. Bed rocky, with sand in places. Control not known.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.6 feet at 5.30 p. m. January 18 (discharge, 10,200 second-feet); minimum stage, 0.34 foot at 8 a. m. July 25 (discharge, 161 second-feet).

1903–1909, 1920–1926: Maximum stage recorded, 18.8 feet (old datum) at 10.20 a. m. November 19, 1906 (discharge, 22,300 second-feet); minimum stage, 0.34 foot at 8 a. m. July 25, 1926 (discharge, 161 second-feet).

ICE.—Stage-discharge relation rarely affected by ice.

REGULATION.—Very slight regulation from mill dams upstream.

ACCURACY.—Stage-discharge relation changed January 18 and probably April 13, 1926. Rating curve used prior to January 18 is well defined between 150 and 10,000 second-feet and those used thereafter are fairly well defined. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except as stated in footnote to table of daily discharge. Records fair.

The following discharge measurements were made:
February 20, 1926: Gage height, 1.86 feet; discharge, 706 second-feet.
May 27, 1926: Gage height, 0.77 foot; discharge, 250 second-feet.

Daily discharge, in second-feet, of Yadkin River at North Wilkesboro, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	237	275	262	492	1,500	550	1,060	445	650	272	410	480
2	275	379	288	414	1,160	550	770	462	392	248	410	462
3	275	331	288	414	1,860	510	635	445	360	248	375	410
4	262	302	275	452	1,860	510	550	428	330	235	360	462
5	250	275	250	414	1,260	510	510	410	315	285	650	480
6	226	275	237	379	1,100	510	725	410	300	248	605	940
7	214	414	237	379	905	590	680	392	285	235	1,240	840
8	214	331	250	379	815	550	770	375	330	222	1,800	480
9	250	302	250	379	725	550	725	360	375	210	1,490	428
10	262	288	250	362	635	550	550	345	330	200	1,190	410
11	250	275	237	362	550	550	510	345	300	200	790	375
12	237	618	262	362	490	550	490	330	285	190	560	375
13	226	912	262	331	490	550	1,160	428	272	190	650	360
14	262	712	275	331	510	550	1,190	462	272	180	840	345
15	379	574	302	331	550	550	940	428	260	170	650	330
16	414	492	316	331	510	550	840	410	248	180	480	315
17	362	414	302	346	450	550	790	392	248	170	520	300
18	302	396	288	7,810	510	550	695	392	248	170	560	285
19	275	362	275	3,410	725	550	650	375	235	170	480	285
20	250	331	262	1,400	680	550	582	360	345	170	582	272
21	226	316	288	1,000	590	510	560	345	300	162	605	272
22	214	288	414	860	590	510	540	345	272	170	520	260
23	214	302	452	725	590	550	520	330	375	170	428	248
24	237	302	414	550	550	590	500	330	445	162	520	235
25	250	302	379	510	1,000	550	500	315	375	210	582	222
26	331	288	331	510	1,160	550	480	300	360	650	500	272
27	331	288	288	510	770	550	480	285	330	840	520	285
28	288	275	275	490	590	550	462	285	315	790	560	248
29	288	262	330	490	------	510	462	285	285	560	480	272
30	275	262	385	490	------	510	482	272	272	520	445	260
31	262	------	440	1,300	------	1,360	------	272	------	445	410	------

NOTE.—Stage-discharge relation affected by ice Dec. 29-31; discharge estimated. Discharge Jan. 18 determined by approximate integration of graph estimated from two daily gage readings.

Monthly discharge of Yadkin River at North Wilkesboro, N. C., for the year ending September 30, 1926

[Drainage area, 500 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	414	214	269	0.538	0.62
November	912	262	371	.742	.83
December	452	237	302	.604	.70
January	7,810	331	855	1.71	1.97
February	1,860	450	826	1.65	1.72
March	1,360	510	568	1.14	1.31
April	1,190	462	660	1.32	1.47
May	462	272	366	.732	.84
June	650	235	324	.648	.72
July	840	162	286	.572	.66
August	1,800	360	652	1.30	1.50
September	940	222	374	.748	.83
The year	7,810	162	486	.972	13.17

YADKIN RIVER NEAR SALISBURY, N. C.

LOCATION.—At Piedmont toll bridge, 1,000 feet above Southern Railway bridge and 6 miles northeast of Salisbury, Rowan County.

DRAINAGE AREA.—3,400 square miles.

RECORDS AVAILABLE.—September 24, 1895, to December 31, 1909; September 1, 1911, to September 30, 1926.

GAGE.—Enameled vertical staff gage in three sections on right bank 50 feet below bridge; read by J. T. Yarbrough.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge.

CHANNEL AND CONTROL.—Channel wide; bed rather rough. Control is rock ledge about 500 feet below bridge extending entirely across river; permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.75 feet at 6 p. m. January 19 (discharge, 37,200 second-feet); minimum stage, 1.40 feet at 7 a. m. July 24 (discharge, 700 second-feet).

1895–1926: Maximum stage recorded, 23.8 feet at 1 a. m. July 18, 1916 (discharge, 121,000 second-feet); minimum stage, 1.4 feet several times in August and September, 1925, and July 24, 1926 (discharge, 700 second-feet).

ICE.—Never enough to affect stage-discharge relation.

DIVERSIONS.—None.

REGULATION.—Flow during low stages may be somewhat affected by power plants on river and tributaries.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined below 20,000 second-feet and fairly well defined up to 121,000 second-feet. Gage read twice daily to half-tenths. Daily discharge ascertained by applying mean daily gage height to rating table except as stated in footnote to table of daily discharge. Records good.

The following discharge measurement was made:

October 6, 1925: Gage height, 1.61 feet; discharge, 971 second-feet.

Daily discharge, in second-feet, of Yadkin River near Salisbury, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	922	1,350	1,540	1,740	13,200	3,780	5,760	2,180	1,540	1,170	3,200	1,350
2	922	1,740	1,640	1,960	11,200	3,340	5,080	2,070	1,960	1,170	2,420	1,640
3	1,080	1,740	1,640	1,740	8,310	3,200	3,630	2,180	1,960	1,350	2,550	2,420
4	1,000	1,740	1,540	1,960	17,200	2,940	3,070	2,180	1 740	1,440	2,180	2,180
5	1,170	1,640	1,740	2,180	15,800	2,680	2,940	1 960	1,540	1,960	1,960	2,180
6	1,000	1,640	1,540	2,940	7,140	2,680	2,680	2,180	1,350	2,300	2,800	2,940
7	1,000	1,640	1,740	2,550	5,080	3,930	2,680	1,960	1,740	2,940	3,780	3,200
8	845	1,540	1,740	2,180	4,080	5,760	2,680	1,960	1,440	2,300	3,780	3,200
9	1,000	2,070	1,640	1,960	3,780	5,080	2,680	1,850	1,540	1,640	3,480	2,800
10	922	2,550	1,440	1,850	3,340	3,780	2,940	1,960	1,350	1,350	2,180	1,960
11	1,000	2,180	1,540	1,850	3,070	3,780	2,940	2,180	1,440	1,080	1,740	2,070
12	1,000	1,960	1,540	1,740	2,680	4,740	3,200	2,180	1,350	1,540	1,540	1,440
13	1,000	3,200	1,350	2,180	2,940	6,780	7,140	2,180	1,350	1,170	1,540	1,540
14	1,170	7,140	1,540	1,740	2,680	6,100	7,500	2,180	1,350	1,170	1,350	1,170
15	2,070	3,480	1,540	1,850	2,940	5,080	5,760	2,300	1,170	4,080	1,170	1,170
16	2,800	2,680	1,540	1,740	2,680	4,400	4,740	2,180	1,080	2,680	1,350	1,170
17	2,550	2,180	1,540	1,740	2,420	3,780	3,780	2,300	1,170	1,540	1,170	1,170
18	3,200	2,070	1,540	9,090	2,420	3,480	3,480	2,180	1,170	1,080	1,170	1,170
19	2,550	1,960	1,540	33,600	4,740	3,200	3,200	1,850	1,260	1,000	1,350	1,080
20	1,640	1,960	1,440	21,800	7,860	3,070	3,070	1,850	1,350	1,000	2,680	1,000
21	1,440	1,960	1,850	8,620	5,420	2,940	2,940	1,540	1,740	922	2,180	1,000
22	1,350	1,740	2,800	5,760	3,930	2,940	2,680	1,640	1,540	845	2,180	1,000
23	1,350	1,960	3,930	4,740	3,200	2,680	2,680	1,640	1,640	816	2,420	1,000
24	1,350	1,540	3,480	3,630	2,940	2,680	2,680	1,740	1,850	1,000	1,850	1,000
25	2,680	1,640	2,680	3,200	4,740	2,550	2,680	1,540	2,420	1,170	2,180	1,000
26	4,400	1,540	2,180	2,940	10,600	2,420	2,680	1,540	1,640	6,440	2,420	845
27	3,340	1,740	1,960	2,800	7,140	2,680	2,180	1,540	1,440	7,500	3,480	845
28	2,070	1,740	1,350	2,680	4,400	2,420	2,180	1,540	1,440	6,440	2,420	1,000
29	1,540	1,440	1,000	2,420	-------	2,420	2,180	1,540	1,170	7,140	1,740	1,000
30	1,440	1,740	1,260	2,420	-------	2,420	2,180	1,350	1,350	6,100	1,640	1,170
31	1,540	-------	1,740	4,630	-------	4,400	-------	1,640	-------	4,740	1,260	------

NOTE.—Discharge Jan. 18, 19, 31, and Feb. 1-4 determined by approximate integration of graph estimated from two daily gage readings.

Monthly discharge of Yadkin River near Salisbury, N. C., for the year ending September 30, 1930

[Drainage area, 3,400 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	4,400	845	1,660	0.488	0.56
November	7,140	1,350	2,120	.624	.70
December	3,930	1,000	1,790	.526	.61
January	33,600	1,740	4,590	1.34	1.54
February	17,200	2,420	5,930	1.74	1.81
March	6,780	2,420	3,620	1.06	1.22
April	7,500	2,180	3,470	1.02	1.14
May	2,300	1,350	1,910	.562	.65
June	2,420	1,080	1,500	.441	.49
July	7,500	816	2,490	.732	.84
August	3,780	1,170	2,170	.638	.74
September	3,200	845	1,560	.459	.51
The year	33,600	816	2,710	.797	10.81

YADKIN RIVER AT HIGH ROCK, N. C.

LOCATION.—At Brinkles Ferry at High Rock, Davidson County, 2 miles above mouth of Lick Creek and 15 miles upstream from dam of Tallassee Power Co. at Badin.

DRAINAGE AREA.—3,930 square miles.

RECORDS AVAILABLE.—January 8, 1919, to September 30, 1926.

GAGE.—Au continuous recorder since April 1, 1925, on right bank, attended by employees of Tallassee Power Co. Zero flow at gage about elevation 592.8 feet above sea level.

CHANNEL AND CONTROL.—Bed composed of rock and gravel. Banks about 20 feet high; probably not subject to overflow. Control is a rock shoal about half a mile downstream; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year occurred during period of no record in January; minimum stage, elevation 593.33 feet from 2 to 5 a. m. July 24 (discharge, 924 second-feet).

1919–1926: Maximum stage, elevation 605.9 feet morning of July 21, 1919 (discharge, 104,000 second-feet); minimum stage, elevation 593.27 feet at 9 a. m. August 31, 1925 (discharge, 879 second-feet).

The flood of July, 1916, reached elevation 612.1 feet (discharge, 184,000 second-feet).

ICE.—Stage-discharge relation not affected by ice.

REGULATION.—Slight diurnal fluctuation in low-water periods from power developments on tributaries.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 1,000 and 28,000 second-feet and extended above. Operation of water-stage recorder fairly satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph; except for days of wide range in stage when discharge was approximately integrated. Records good.

COOPERATION.—Water-stage recorder graph furnished by Tallassee Power Co.

The following discharge measurement was made:
October 5, 1925: Gage height, 593.64 feet; discharge, 1,290 second-feet.

Daily discharge, in second-feet, of Yadkin River at High Rock, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,150	1,780	1,900	------	13,500	4,800	7,390	2,690	1,580	1,360	4,170	1,510
2	1,170	1,900	1,900	------	13,000	4,480	6,210	2,420	2,030	1,280	3,120	1,780
3	1,220	2,160	1,900	------	10,300	4,170	4,800	2,560	2,420	1,240	2,970	2,560
4	1,200	2,290	1,900	------	18,200	3,860	4,020	2,560	2,030	1,620	2,970	2,970
5	1,270	2,160	2,030	------	18,200	3,560	3,560	2,420	1,780	1,550	2,770	2,420
6	1,180	2,030	------	------	9,470	3,410	3,410	2,420	1,660	2,690	4,800	2,830
7	1,090	1,900	------	------	6,590	5,470	3,260	2,160	1,660	3,560	4,800	3,860
8	1,110	1,900	------	------	5,470	7,790	3,260	2,290	1,660	2,690	4,170	3,710
9	1,090	2,420	------	------	4,800	6,590	3,410	2,030	1,660	2,030	4,480	3,410
10	1,100	3,260	------	------	4,480	5,130	3,410	2,030	1,620	1,440	3,120	2,420
11	1,110	3,120	------	------	4,170	4,800	3,560	2,160	1,660	1,230	2,030	2,290
12	1,120	2,420	------	------	3,860	6,210	3,860	2,290	1,580	1,360	1,780	1,780
13	1,140	3,120	------	------	3,560	9,050	11,700	2,420	1,440	1,310	1,660	1,470
14	1,090	7,790	------	------	3,410	9,050	9,890	2,420	1,340	1,310	1,560	1,340
15	1,660	5,130	------	------	3,710	6,990	7,390	2,420	1,410	4,600	1,370	1,330
16	3,120	3,560	------	------	3,710	5,830	5,830	2,290	1,310	1,300	1,260	1,310
17	3,120	2,970	------	------	3,410	5,130	5,130	2,420	1,210	1,900	1,310	1,310
18	3,560	2,690	------	------	3,260	4,480	4,480	2,290	1,260	1,330	1,340	1,260
19	3,860	2,560	------	------	6,990	4,170	4,020	2,160	1,300	1,160	1,260	1,260
20	2,420	2,420	------	------	10,300	3,860	4,020	2,030	1,660	1,190	2,560	1,140
21	1,780	2,420	------	------	7,790	3,860	3,710	1,900	2,290	1,080	3,560	1,160
22	1,470	2,420	------	------	5,470	3,860	3,410	1,900	2,030	1,050	2,560	1,210
23	1,370	2,420	------	------	4,480	3,710	3,260	1,900	1,900	972	2,830	1,180
24	1,410	2,160	------	------	3,860	3,560	3,410	1,900	2,160	989	2,160	1,160
25	2,160	2,160	------	------	6,990	3,560	3,410	1,780	2,830	2,030	3,120	1,140
26	5,470	2,030	------	------	12,600	3,410	3,260	1,780	2,160	7,230	4,170	1,090
27	4,800	2,030	------	------	9,890	3,410	2,830	1,660	1,660	10,800	4,480	998
28	2,970	2,160	------	------	6,210	3,260	2,690	1,660	1,580	7,790	3,120	1,070
29	2,160	2,160	------	------	------	3,120	2,690	1,620	1,440	8,630	2,290	1,090
30	1,900	2,030	------	3,120	------	2,970	2,690	1,550	1,440	9,470	1,780	1,180
31	1,780	------	------	5,470	------	5,830	------	1,620	------	6,210	1,470	------

Monthly discharge of Yadkin River at High Rock, N. C., for the year ending September 30, 1926

[Drainage area, 3,930 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	5,470	1,090	1,970	0.501	0.58
November	7,790	1,780	2,650	.674	.75
February	18,200	3,260	7,420	1.89	1.97
March	9,050	2,970	4,820	1.23	1.42
April	11,700	2,690	4,470	1.14	1.27
May	2,690	1,550	2,120	.539	.62
June	2,830	1,210	1,730	.440	.49
July	10,800	972	2,980	.758	.87
August	4,800	1,260	2,740	.697	.80
September	3,860	998	1,770	.450	.50

FISHER RIVER NEAR DOBSON, N. C.

LOCATION.—At Turkey Ford steel highway bridge on Dobson-Ararat highway, 2 miles east of Dobson, Surry County.

DRAINAGE AREA.—109 square miles (measured on topographic maps).

RECORDS AVAILABLE.—September 1, 1920, to September 30, 1926.

GAGE.—Chain gage installed August 30, 1921, on upstream side of bridge; read by Miss Ada Kidd.

DISCHARGE MEASUREMENTS.—Made from lower side of bridge.

CHANNEL AND CONTROL.—Channel straight above and below gage; bed rough. Banks subject to overflow above gage height 10 feet. Control is shoals about 50 feet below gage; practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.40 feet at 4 p. m. January 18 (discharge, 2,330 second-feet); minimum stage, 0.08 foot at 5 p. m. July 23 (discharge, 20 second-feet).

1920–1926: Maximum stage recorded, 10.1 feet at 5 p. m. March 16, 1923 (discharge, 6,700 second-feet); minimum stage, 0.03 foot at 5 p. m. August 30, 1925 (discharge, 16 second-feet).

ICE.—Stage-discharge relation probably not affected by ice.

REGULATION.—Probably none.

ACCURACY.—Stage-discharge relation permanent during year. Rating curve well defined below 300 second-feet and extended above by comparison with records for Ararat River near Pilot Mountain. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except as noted in footnote to table of daily discharge. Records good.

The following discharge measurements were made:

February 20, 1926: Gage height, 0.68 foot; discharge, 151 second-feet.

May 27, 1926: Gage height, 0.31 foot; discharge, 55 second-feet.

Daily discharge, in second-feet, of Fisher River near Dobson, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	70	72	80	460	121	142	84	148	87	113	62
2	56	82	75	84	295	121	130	80	99	58	118	70
3	60	94	70	89	540	108	121	84	77	48	105	82
4	52	72	70	89	760	105	108	82	66	75	105	89
5	48	75	77	99	239	102	102	80	70	239	116	75
6	42	70	75	105	210	108	97	80	80	193	108	75
7	36	80	75	105	177	203	105	80	75	105	99	80
8	40	133	70	105	139	151	121	82	68	62	108	75
9	44	116	64	105	130	136	130	80	70	50	84	70
10	42	94	62	89	124	116	113	97	66	52	75	58
11	39	84	66	94	108	139	121	84	70	47	82	50
12	44	287	66	99	99	167	164	89	64	48	66	48
13	48	190	66	102	105	164	236	94	58	44	68	50
14	145	139	66	99	121	130	180	89	58	44	48	48
15	161	127	66	99	124	133	154	89	75	40	52	54
16	92	116	70	142	105	133	142	92	62	40	54	47
17	80	94	66	130	89	133	127	94	58	37	48	54
18	80	87	62	1,850	151	127	124	84	66	34	75	54
19	75	84	68	435	177	116	124	75	75	45	84	56
20	77	80	70	217	157	116	121	70	116	40	52	45
21	80	75	70	151	121	110	113	66	116	36	72	52
22	72	75	70	127	118	105	105	64	80	36	68	54
23	60	75	62	116	124	99	97	54	80	22	75	52
24	87	75	66	116	121	99	99	54	80	22	75	47
25	82	75	70	121	247	99	97	54	89	145	75	56
26	89	72	75	116	186	105	87	54	80	1,660	64	39
27	80	75	82	110	127	94	82	58	80	1,310	62	47
28	68	75	80	102	124	89	87	62	66	239	62	47
29	60	72	84	89	-------	89	84	70	58	243	75	33
30	56	70	84	92	-------	89	84	77	54	207	75	48
31	64	-------	80	411	-------	318	-------	99	-------	127	72	------

NOTE.—Discharge Jan. 17–19 and July 26 determined by approximate integration of graph estimated from two daily gage readings.

Monthly discharge of Fisher River near Dobson, N. C., for the year ending September 30, 1926

[Drainage area, 109 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	161	36	68.0	0.624	0.72
November	287	70	97.1	.891	.99
December	84	62	70.9	.650	.75
January	1,850	80	186	1.71	1.97
February	760	89	196	1.80	1.87
March	318	89	127	1.17	1.35
April	236	82	120	1.10	1.23
May	99	54	77.5	.711	.82
June	148	54	76.8	.705	.79
July	1,660	22	175	1.61	1.86
August	118	48	78.5	.720	.83
September	89	33	57.2	.525	.59
The year	1,850	22	110	1.01	13.77

SANTEE RIVER BASIN

SANTEE RIVER AT FERGUSON, S. C.

LOCATION.—At Ferguson boat landing three-quarters of a mile from railroad station, Orangeburg County, and 4 miles downstream from mouth of Eutaw Creek.

DRAINAGE AREA.—14,800 square miles (from United States Weather Bureau records and checked on base map).

RECORDS AVAILABLE.—December 1, 1907, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on right bank, installed November 23, 1921; attended by H. C. Savage.

DISCHARGE MEASUREMENTS.—Made from downstream side of abandoned steel railroad bridge 1 mile above gage, or from boat near gage.

CHANNEL AND CONTROL.—Channel up to gage height of 12 feet is deep, narrow, and composed mostly of limestone and marl; fairly permanent. Valley is a heavily wooded flat 4 miles wide with channel meandering through it and is completely overflowed every year. Flow is channel controlled and current is good at all stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 13.43 feet from 2 to 6 p. m. March 3 (discharge, 35,900 second-feet); minimum stage −0.11 foot at 8 p. m. October 14 (discharge, 2,830 second-feet).

1907–1926: Maximum stage recorded, 24.5 feet July 22, 1916 (discharge estimated, 368,000 second-feet); minimum stage, −0.75 foot September 2 1925 (discharge, 2,570 second-feet). Minimum stage caused by regulation of storage above.

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Two large hydroelectric plants on Broad River have fairly large storage reservoirs; there are several reservoirs on Wateree River, two of which are very large; and there is at least one reservoir on Saluda River. There are no daily fluctuations, probably because the nearest reservoir is more than 100 miles upstream. Weekly fluctuations during low stages are caused by shutdown of plants over week-ends.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well-defined below 16,000 second-feet and extended above. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspection of gage-height graph. Records good.

No discharge measurements made during the year.

Daily discharge, in second-feet, of Santee River at Ferguson, S. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,450	6,650	5,320	6,770	22,800	24,100	15,000	12,000	4,060	7,920	18,600	8,470
2	3,630	5,340	5,220	6,890	22,200	28,800	18,600	12,200	3,980	8,610	19,200	8,190
3	4,300	5,020	6,410	6,890	22,800	35,000	20,500	10,600	5,420	8,750	20,100	7,140
4	4,830	5,730	7,010	6,530	23,400	35,000	22,800	7,140	6,650	7,140	21,300	6,890
5	4,220	11,300	6,890	5,220	26,000	30,500	28,800	6,890	7,010	5,620	22,200	6,770
6	3,570	12,300	6,890	5,420	30,500	28,800	32,500	8,750	6,650	4,560	22,800	7,140
7	3,110	10,900	6,650	9,490	30,500	26,000	30,500	9,490	5,620	3,770	21,300	7,920
8	3,390	9,190	5,320	14,200	32,500	25,000	27,200	10,300	4,560	3,700	18,400	9,340
9	3,510	7,530	4,650	16,100	30,500	24,100	25,000	9,790	4,220	5,520	15,300	11,600
10	3,700	5,730	5,730	17,000	28,800	24,100	23,400	8,330	6,060	6,170	11,800	10,300
11	3,630	5,120	5,120	17,400	26,000	25,000	23,400	5,730	7,270	6,170	9,950	8,610
12	3,510	5,220	6,290	16,100	24,100	27,200	24,100	5,620	7,400	5,520	9,640	7,920
13	3,060	6,170	6,650	15,000	22,800	30,500	24,100	7,790	6,530	4,220	9,490	5,730
14	2,870	8,190	6,290	15,000	21,700	30,500	24,100	8,610	5,120	4,740	9,040	4,380
15	3,060	10,900	4,920	14,600	20,100	30,500	24,100	8,750	3,770	7,010	8,610	4,650
16	3,390	13,800	4,560	13,800	17,400	32,500	23,400	8,890	3,910	7,400	8,050	7,920
17	3,770	14,200	6,170	13,300	16,300	30,500	23,400	7,140	5,730	6,770	6,410	9,950
18	3,770	12,700	7,790	11,600	17,000	28,800	23,400	6,060	6,650	5,950	4,740	9,190
19	3,910	10,300	8,470	8,330	18,100	27,200	23,400	6,060	7,010	5,020	4,920	8,050
20	3,700	9,340	8,470	12,300	19,200	25,000	22,200	7,400	6,530	3,770	5,120	6,890
21	3,270	8,750	8,050	17,000	20,100	24,100	20,500	8,190	5,730	3,570	5,520	4,740
22	3,450	8,470	7,140	18,600	24,100	22,800	19,500	8,610	5,950	5,320	6,410	4,140
23	3,700	7,270	10,300	20,100	22,200	19,200	18,600	7,790	7,920	5,950	7,920	5,320
24	4,060	5,950	13,100	21,700	23,400	18,100	17,600	6,650	9,340	6,060	9,040	5,320
25	3,910	5,730	12,900	27,200	24,100	18,100	17,000	5,020	9,640	5,840	8,330	6,170

Daily discharge, in second-feet, of Santee River at Ferguson, S. C., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
26	3,980	6,170	9,950	32,500	24,100	17,600	14,800	4,650	8,610	5,730	7,660	6,290
27	4,060	6,770	6,650	30,500	24,100	17,200	10,600	6,060	7,400	6,290	7,660	5,520
28	8,890	6,530	5,420	27,200	23,400	16,700	9,340	7,140	6,530	9,950	9,040	4,220
29	12,700	6,170	4,740	25,000	-------	14,600	10,300	7,270	5,420	13,300	11,300	5,620
30	11,800	6,060	5,120	24,100	-------	10,300	11,300	5,950	5,420	15,500	14,400	6,770
31	9,040	-------	6,410	23,400	-------	10,300	-------	4,920	-------	17,600	11,300	-------

Monthly discharge of Santee River at Ferguson, S. C., for the year ending September 30, 1926

[Drainage area, 14,800 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	12,700	2,870	4,560	0.308	0.36
November	14,200	5,020	8,130	.549	.61
December	13,100	4,560	6,920	.468	.54
January	32,500	5,220	16,100	1.09	1.26
February	32,500	16,300	23,500	1.59	1.66
March	35,000	10,300	24,500	1.66	1.91
April	32,500	9,340	21,000	1.42	1.58
May	12,200	4,650	7,740	.523	.60
June	9,640	3,770	6,200	.419	.47
July	17,600	3,570	6,890	.466	.54
August	22,800	4,740	11,800	.797	.92
September	11,600	4,140	7,040	.476	.53
The year	35,000	2,870	12,000	.811	10.98

LINVILLE RIVER AT BRANCH, N. C.

LOCATION.—At wooden highway bridge 800 feet from Branch post office, Burke County, a quarter of a mile upstream from Lake James, 2 miles below mouth of Linville Gorge and about 12 miles from Nebo, N. C.

DRAINAGE AREA.—65 square miles (measured on topographic maps).

RECORDS AVAILABLE.—June 7, 1922, to September 30, 1926.

GAGE.—Vertical staff on downstream end of first bridge pier from right bank; read by J. M. Wall.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge.

CHANNEL AND CONTROL.—Channel wide and shallow, slightly curved above bridge and straight for 200 feet below; bed of gravel and boulders. Right bank wooded, not subject to overflow; left bank about 6 feet high, wooded and subject to overflow in extreme floods. Control is boulder and gravel shoal 200 feet downstream from gage; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.20 feet at 7 a. m. January 18 (discharge, 1,520 second-feet); minimum stage, 1.32 feet at 7 a. m. July 24 (discharge, 9 second-feet).

1922–1926: Maximum stage recorded, 6.2 feet at 7 a. m. January 11 and 5 p. m. September 28, 1924 (discharge, 3,880 second-feet); minimum stage, 1.28 feet at 5 p. m. September 8, 1925 (discharge, 7 second-feet).

ICE.—Stage-discharge relation not affected by ice.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve is well defined up to 2,000 second-feet and extended above. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table, except that for January 18 which was determined by approximate integration of graph based on two daily gage readings. Records good.

The following discharge measurements were made:
February 26, 1926: Gage height, 2.32 feet; discharge, 237 second-feet.
May 20, 1926: Gage height, 1.66 feet; discharge, 49 second-feet.
August 18, 1926: Gage height, 1.80 feet; discharge, 76 second-feet.

Daily discharge, in second-feet, of Linville River at Branch, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	27	38	45	311	163	215	76	59	18	223	59
2	13	32	35	52	243	163	163	72	52	32	200	59
3	16	32	41	41	380	122	140	70	38	19	144	55
4	20	35	41	48	380	125	134	76	36	22	119	63
5	20	32	55	86	272	119	125	70	35	86	104	48
6	16	32	113	102	215	113	113	67	41	41	140	163
7	15	32	65	74	185	207	107	63	41	45	110	128
8	12	48	57	67	163	219	333	59	35	35	102	97
9	15	134	52	55	174	167	272	65	36	32	91	231
10	15	65	45	48	163	154	207	61	38	24	76	122
11	17	48	41	59	131	170	192	59	34	19	63	170
12	14	84	41	63	104	150	215	91	32	18	94	128
13	14	356	38	41	131	144	356	81	29	22	63	102
14	20	125	38	38	137	131	311	65	35	16	89	97
15	38	76	45	52	188	131	260	63	29	16	72	79
16	41	76	35	45	157	113	239	70	29	16	61	70
17	35	67	35	55	134	119	203	84	29	12	84	55
18	29	59	41	1,260	140	119	174	63	32	15	97	52
19	35	52	35	540	227	137	167	59	29	12	81	54
20	25	52	38	333	239	137	147	55	29	14	81	50
21	24	45	48	239	200	137	134	52	35	13	107	59
22	20	45	59	231	174	125	119	43	35	12	94	55
23	17	39	76	167	157	119	113	41	32	14	72	55
24	21	36	48	137	144	134	113	45	35	10	67	45
25	67	38	59	144	231	119	107	38	32	20	181	35
26	91	36	52	125	251	113	97	35	29	20	227	48
27	52	48	34	128	203	116	97	36	29	45	144	57
28	41	52	22	104	157	99	89	39	24	131	102	52
29	24	48	16	91	-------	94	81	41	25	160	81	45
30	23	38	16	84	-------	91	79	35	22	935	67	45
31	24	-------	24	192	-------	243	-------	46	-------	333	61	------

Monthly discharge of Linville River at Branch, N. C., for the year ending September 30, 1926

[Drainage area, 65 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	91	12	26.6	0.409	0.47
November	356	27	59.6	.917	1.02
December	113	16	44.6	.686	.79
January	1,260	38	153	2.35	2.71
February	380	104	200	3.08	3.21
March	243	91	138	2.12	2.44
April	356	79	170	2.62	2.92
May	91	35	58.7	.903	1.04
June	59	22	33.9	.522	.58
July	935	10	71.2	1.10	1.27
August	227	61	106	1.63	1.88
September	231	35	79.3	1.22	1.36
The year	1,260	10	94.4	1.45	19.69

HENRY FORK NEAR HENRY RIVER, N. C.

LOCATION.—At highway bridge at site of old Link ford, Catawba County, on Hickory-Shelby county road, 2 miles downstream from town of Henry River, Burke County.

DRAINAGE AREA.—80.0 square miles (measured on topographic maps).

RECORDS AVAILABLE.—July 26, 1925, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder installed on downstream side of bridge pier; attended by J. W. Aderholdt.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.
CHANNEL AND CONTROL.—Channel straight for 500 feet above and below gage; bed of gravel and boulders with some ledge rock. Banks high and not subject to overflow. Control is rock ledge and boulders 500 feet below gage; permanent. Gage height of zero flow, 0.2 foot ±0.2 foot.
EXTREMES OF DISCHARGE.—Maximum stage recorded during period of record, 9.5 feet at 10 a. m. January 18, 1926 (discharge, 5,520 second-feet); minimum stage, 0.49 foot all day July 19 and 20, 1926 (discharge, 4.1 second-feet).
ICE.—Possibly slight ice effect for short periods.
DIVERSIONS.—Water supply of Morganton and part of supply of State Hospital for the Insane taken from headwaters and wasted into another tributary of Catawba River. Diversion estimated at 5 second-feet.
REGULATION.—Complete diurnal regulation by Henry River Manufacturing Co., 2 miles upstream.
ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 2,000 second-feet. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying mean daily gage height to rating table, or on days of considerable fluctuation of stage by approximate integration of gage-height graph drawn on basis of twice daily gage readings. Records good.

Discharge measurements of Henry Fork near Henry River, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 31	1.41	74	Feb. 4	2.76	505	May 20	1.34	67
Feb. 3	3.47	856	Feb. 11	1.34	76	Aug. 18	1.26	62

Daily discharge, in second-feet, of Henry Fork near Henry River, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	21	36	76	242	106	140	38	35	29	95	60
2	42	49	39	57	140	97	106	19	70	6.3	124	66
3	29	49	37	10	466	84	94	73	23	6.0	74	30
4	14	49	47	51	448	78	88	78	49	7.4	64	7.7
5	40	49	32	38	213	76	84	76	43	6.3	63	7.4
6	36	49	18	52	136	66	84	76	9.8	44	60	7.0
7	31	35	53	74	118	174	80	72	13	60	41	30
8	32	22	17	74	106	200	151	43	72	62	85	57
9	10	37	45	66	94	136	140	11	60	59	73	59
10	14	20	35	12	88	113	107	59	8.1	34	83	43
11	9.8	48	45	61	78	115	113	70	49	6.3	72	7.7
12	32	242	31	78	72	122	116	88	33	5.7	60	7.7
13	33	177	13	78	69	138	138	109	12	30	57	7.7
14	39	84	58	79	73	124	140	85	16	34	43	30
15	38	62	39	79	79	113	120	62	59	6.7	10	66
16	30	74	50	43	70	100	111	63	7.7	46	35	55
17	28	33	70	11	72	90	94	63	12	12	63	7.7
18	20	54	70	2,330	74	85	94	62	53	4.3	63	7.7
19	48	45	49	474	145	82	95	67	8.1	4.1	21	7.7
20	41	50	12	200	162	78	84	73	9.8	4.1	30	7.4
21	33	37	53	132	120	85	78	70	50	46	35	40
22	32	29	80	115	102	87	74	43	69	26	9.4	46
23	39	51	78	88	88	82	74	11	69	5.7	33	26
24	36	34	55	87	80	82	70	43	8.6	6.7	59	31
25	36	48	53	90	259	80	70	73	7.7	12	62	7.4
26	69	43	28	80	228	79	76	63	7.7	12	62	7.0
27	47	47	34	78	140	42	76	50	7.7	55	43	7.0
28	49	27	64	78	116	62	72	51	33	92	8.1	26
29	49	29	84	78	-------	76	72	7.0	67	173	7.7	29
30	49	69	82	55	-------	80	72	6.7	70	151	7.7	29
31	36	-------	79	205	-------	151	-------	32	-------	73	34	-------

Monthly discharge of Henry Fork near Henry River, N. C., for the year ending September 30, 1926

Month	Discharge in second-feet			Month	Discharge in second-feet		
	Maximum	Minimum	Mean		Maximum	Minimum	Mean
October	69	9.8	34.9	May	109	6.7	56.0
November	242	20	55.4	June	72	7.7	34.4
December	84	12	47.9	July	173	4.1	36.1
January	2,330	10	162	August	124	7.7	50.9
February	466	69	146	September	66	7.0	27.3
March	200	42	99.5				
April	151	70	97.1	The year	2,330	4.1	70.2

LITTLE SUGAR CREEK NEAR CHARLOTTE, N. C.

LOCATION.—Just below sewage disposal plant of the city of Charlotte and below nameless tributary from right, one-quarter of a mile below mouth of Brier Creek, and 5 miles south of Charlotte, Mecklenburg County.

DRAINAGE AREA.—41.4 square miles (measured on soil survey map).

RECORDS AVAILABLE.—July 3, 1924, to September 30, 1926.

GAGE.—Vertical enameled staff in two sections on right bank about 400 feet above sewage disposal plant; read by E. C. Grigston.

DISCHARGE MEASUREMENTS.—Made by wading at gage or from lower side of wagon bridge 500 feet downstream.

CHANNEL AND CONTROL.—Creek is a dredged channel through clay subsoil and occasional ledge rock. Control is a compact gravel bar resulting from the wash from a rock ledge just above.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.4 feet at 8 a. m. January 18 (discharge, 2,300 second-feet); minimum stage, 0.50 foot several times in October (discharge, 2 second-feet).

1924–1926: Maximum stage recorded, about 12.5 feet during night of August 5, 1925 (discharge estimated, 3,500 second-feet); minimum stage, 0.48 foot several times July 30 to August 1, 1925 (discharge, 1.6 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation subject to slight shifts. Rating curve fairly well defined between 2 and 500 second-feet and extended above and below. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table or on days of considerable variation in stage by approximate integration of gage-height graph drawn on basis of daily gage readings. Records fair.

The following discharge measurement was made:
October 4, 1925: Gage height, 0.52 foot; discharge, 2.55 second-feet.

Daily discharge, in second-feet, of Little Sugar Creek near Charlotte, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	3.8	7.2	8.1	57	26	39	13.9	8.1	9.0	10.0	9.0
2	2.2	368	6.9	9.0	36	26	32	12.8	8.1	7.2	9.0	9.0
3	3.4	16.0	7.2	9.0	565	23	27	11.8	6.6	6.6	7.7	8.1
4	2.4	8.6	7.2	59	74	21	25	13.4	5.9	6.6	7.7	8.1
5	2.0	6.2	7.2	84	42	19.8	24	12.3	6.6	10.4	10.9	8.1
6	2.0	6.6	5.9	30	32	19.1	24	11.8	8.1	6.2	7.2	8.1
7	2.0	5.6	6.2	19.8	29	369	23	10.4	6.6	9.0	6.6	11.3
8	2.2	15.4	6.6	28	26	54	29	10.4	5.9	6.2	58	7.7
9	2.2	10.0	6.6	21	26	35	26	10.9	6.2	5.9	7.7	7.2
10	2.0	7.7	6.6	20.5	23	30	24	10.4	5.6	5.9	9.5	8.6
11	2.2	6.9	6.6	17.7	20.5	196	24	136	5.6	6.2	9.0	6.9
12	2.0	108	6.6	25	19.8	78	23	50	5.3	5.9	8.1	6.2
13	2.2	23.0	6.6	24	19.1	54	45	43	4.6	5.3	7.7	5.9
14	12.8	10.4	12.3	20.5	19.1	37	26	25	12.3	4.6	10.4	5.6
15	4.6	8.6	7.7	19.1	19.1	36	23	21	6.2	23	6.9	5.0

Daily discharge, in second-feet, of Little Sugar Creek near Charlotte, N. C., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16	3.0	9.5	7.7	23	17.0	32	44	17.7	5.6	6.6	6.6	5.3
17	2.2	7.7	13.4	33	16.0	28	25	13.9	5.0	5.9	6.6	5.6
18	6.6	7.7	7.7	1,340	40	26	24	13.4	5.0	5.9	6.2	5.3
19	3.0	6.9	7.7	66	493	26	19.1	12.8	5.0	5.9	5.0	5.3
20	3.0	13.9	43	40	45	25	17.7	11.3	69	5.0	5.6	5.0
21	3.0	7.7	298	32	31	24	17.7	10.9	15.4	5.3	41	5.0
22	3.0	6.9	43	33	27	22	17.0	10.9	10.0	5.0	12.3	5.0
23	3.2	7.2	21	23	25	32	17.0	10.4	8.6	4.3	11.3	4.6
24	11.3	7.2	15.4	22	21	24	16.5	9.0	21	34	8.1	4.6
25	42	6.9	13.9	23	754	22	16.5	9.0	8.6	9.5	14.9	4.3
26	6.2	6.9	12.3	19.8	58	27	14.9	8.6	7.2	8.6	223	4.0
27	4.0	9.5	10.4	19.8	37	19.8	12.8	8.6	147	10.9	23	5.3
28	3.6	7.7	8.6	18.4	28	19.1	13.9	8.1	49	8.6	14.4	4.3
29	3.4	6.9	7.7	15.4	-------	23	13.9	8.6	12.8	610	11.3	4.3
30	3.0	6.9	8.6	36	-------	20.5	13.9	8.6	10.0	29	10.9	4.0
31	5.0	-------	7.7	222	-------	150	-------	8.1	-------	13.4	10.4	-------

Monthly discharge of Little Sugar Creek near Charlotte, N. C., for the year ending September 30, 1926

[Drainage area, 41.4 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	42	2.0	4.89	0.118	0.14
November	368	3.8	24.1	.582	.65
December	298	5.9	20.4	.493	.57
January	1,340	8.1	76.2	1.84	2.12
February	754	16.0	92.8	2.24	2.33
March	369	19.1	49.8	1.20	1.38
April	45.0	12.8	23.3	.563	.63
May	136	8.1	18.2	.440	.51
June	147	4.6	16.0	386	.43
July	610	4.3	28.6	.691	.80
August	223	4.6	18.9	.457	.53
September	11.3	4.0	6.22	.150	.17
The year	1,340	2.0	31.3	.756	10.26

BROAD RIVER NEAR BOILING SPRINGS, N. C.

LOCATION.—Half a mile above mouth of Sandy Run Creek and 3½ miles southwest of Boiling Springs, Cleveland County.

DRAINAGE AREA.—815 square miles (measured on base map).

RECORDS AVAILABLE.—June 26, 1925, to September 30, 1926.

GAGE.—Au continuous water-stage recorder on left bank; attended by United States Geological Survey engineers.

DISCHARGE MEASUREMENTS.—Made by wading or from highway bridge half a mile downstream.

CHANNEL AND CONTROL.—Channel straight above gage and curved below. Banks steep; subject to overflow at high stages. Control is a rock ledge with boulders covered in some places with drifting sand 150 feet below gage; probably subject to slight shifts.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.53 feet at 5.30 p. m. January 18 (discharge, 12,400 second-feet); minimum stage, 0.44 foot from 11 p. m. October 7 to 1 a. m. October 8 (discharge, 245 second-feet).

1925–26: Maximum stage recorded, that of January 18, 1926; minimum stage recorded, 0.29 foot from 11 p. m. September 21 to 1 a. m. September 22, 1925 (discharge, 186 second-feet).

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Diurnal regulation caused by operation of power plants on Second Broad and Green Rivers.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Operation of water-stage recorder satisfactory except as stated in footnote to table of daily discharge. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph except for days of wide range in stage for which discharge was approximately integrated. Records good except for estimated periods, which are fair.

Discharge measurements of Broad River near Boiling Springs, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Nov. 25	1.40	877	Feb. 9	2.14	1,520	July 23	0.86	466
Jan. 19	5.56	6,430	Apr. 15	2.44	1,970	Sept. 17	1.29	759
Jan. 20	3.50	3,010	June 15	1.05	584			

Daily discharge, in second-feet, of Broad River near Boiling Springs, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	490	555	590	662	1,840	1,120	1,520	898		430	1,620	400
2	430	815	590	625	1,620	1,170	1,220	700		430	2,180	370
3	400	815	625	625	2,060	1,170	1,080	738	525	460	1,170	370
4	335	590	625	625	3,900	1,080	898	815		330	1,080	588
5	370	555	625	775	2,790	1,080	855	898		325	1,080	490
6	340	555	625	940	2,180	1,030	898	855		355	855	330
7	300	662	555	775	1,730	2,680	1,080	815		345	1,040	1,300
8	355	460	555	775	1,620	1,840	1,320	738		460	1,120	625
9	430	522	590	700	1,420	1,520	1,620	625		355	700	522
10	460	555	590	662	1,270	1,320	1,120	662	500	335	662	555
11	350	522	625	662	1,170	1,420	1,120	662		370	625	1,460
12	345	1,350	590	738	1,120	1,730	1,320	985			522	1,730
13	360	4,050	625	625	1,030	1,420	1,730	1,840			815	738
14	400	1,520	625	662	815	1,220	1,620	1,120			738	1,030
15	1,270	898	700	700	815	1,080	1,520	898	490		300	855
16	775	815	700	625	898	1,170	1,420	738	490		460	898
17	555	855	700	590	985	1,170	1,270	775	490	400	738	625
18	430	775	662	8,440	985	1,120	1,030	662	609		430	700
19	522	775	625	7,660	1,320	1,030	985	775	555		345	460
20	460	815	625	3,180	1,730	1,170	985		490		738	590
21	430	815	625	2,180	1,220	1,080	1,080	675	490		1,420	625
22	430	775	775	2,180	1,030	898	1,080		522		738	430
23	430	700	855	1,840	1,030	985	1,080		555		490	590
24	430	662	815	1,420	1,080	985	1,030		590	555	490	490
25	2,120	738	775	1,270	2,000	985	775		625	453	967	555
26	940	555	738	1,270	2,420	1,080	775		490	430	1,140	350
27	590	662	738	1,270	1,620	985	855		460	703	522	590
28	522	700	700	1,170	1,270	625	985	600	430	2,420	700	430
29	490	460	662	1,120	-------	775	940		460	3,050	625	360
30	490	522	625	1,120	-------	855	940		460	4,660	430	370
31	490	-------	625	1,220	-------	1,620	-------		-------	3,050	430	-------

NOTE.—Recorder not operating May 20 to June 14 and July 12–23; discharge estimated by comparison with Second Broad River at Cliffside and precipitation records.

Monthly discharge of Broad River near Boiling Springs, N. C., for the year ending September 30, 1926

[Drainage area, 815 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	2,120	300	540	0.663	0.76
November	4,050	460	835	1.02	1.14
December	855	555	657	.806	.93
January	8,440	590	1,520	1.87	2.16
February	3,900	815	1,540	1.89	1.97
March	2,680	625	1,210	1.48	1.71
April	1,730	775	1,140	1.40	1.56
May	1,840		769	.944	1.09
June	625	430	511	.627	.70
July	4,660		784	.962	1.11
August	2,180	300	812	.996	1.15
September	1,730	330	648	.795	.89
The year	8,440	300	910	1.12	15.17

BROAD RIVER AT RICHTEX, S. C.

LOCATION.—One mile upstream from mouth of Little River at Richtex, Fairfield County, and 11 miles downstream from Parr Shoals hydroelectric plant.

DRAINAGE AREA.—4,800 square miles.

RECORDS AVAILABLE.—November 29, 1925, to September 30, 1926.

GAGE.—Au fuzee water-stage recorder on left bank inspected by J. A. Meriwether.

CHANNEL AND CONTROL.—Channel straight above and below gage; bed composed of sand, gravel, and boulders. Right bank about 10 feet high and subject to overflow during flood; left bank steep and subject to overflow during extreme floods. Control at low stages is rock ledge with rocky channel control during medium and high stages; probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 12.01 feet from 3.30 to 4.30 a. m. January 20 (discharge, 40,300 second-feet); minimum stage, 0.51 foot at 10 p. m. July 25 (discharge, 314 second-feet).

Highest known flood, that of July, 1916; gage height (estimated), 29.6 feet (discharge estimated, 208,000 second-feet).

ICE.—Stage-discharge relation not affected by ice.

REGULATION.—Complete regulation by operation of Parr Shoals hydroelectric plant.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 300 and 35,000 second-feet and extended above. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspection of gage-height graph or, for days of considerable fluctuation, by averaging discharge for intervals of day. Records good.

Discharge measurements of Broad River at Richtex, S. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Mar. 3	2.95	5,400	Mar. 10	4.60	10,700	June 20	0.92	797
Mar. 4	3.39	6,830	May 4	2.27	3,570			
Mar. 9	5.35	13,600	June 19	1.84	2,540			

Daily discharge, in second-feet, of Broad River at Richtex, S. C., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		2,280	3,680	21,400	7,700	19,400	3,440	1,900	1,930	12,800	2,890
2		2,060	3,950	14,500	6,520	11,500	975	1,980	890	7,020	2,220
3		2,300	2,210	11,500	6,810	6,810	2,430	1,910	1,670	6,790	2,260
4		2,430	3,680	19,400	5,650	5,070	2,900	1,790	1,530	6,430	2,570
5		3,150	5,940	17,500	5,360	6,230	2,320	1,640	1,300	5,250	1,400
6		1,790	9,700	10,800	3,840	5,360	3,410	1,280	1,260	3,630	5,990
7		2,900	8,340	8,020	7,080	4,500	3,900	1,770	1,430	4,630	7,280
8		2,660	8,020	7,400	21,000	7,460	2,130	2,250	1,710	3,570	3,510
9		2,660	8,340	7,400	14,900	12,200	1,500	1,980	2,570	4,440	3,340
10		2,900	6,230	6,520	9,360	7,700	2,460	2,190	939	4,950	2,970
11		3,950	6,520	6,230	8,680	6,230	2,530	1,810	1,440	3,900	3,010
12		3,150	5,650	5,940	16,000	8,020	2,360	472	2,170	4,110	1,010
13		1,800	5,940	4,220	12,200	7,100	2,830	1,130	2,030	3,330	2,510
14		3,150	5,070	3,150	8,340	8,680	4,220	548	1,720	3,130	5,130
15		3,150	5,360	5,070	7,700	7,700	2,100	1,410	1,450	1,290	4,170
16		3,950	4,980	6,230	6,810	6,810	2,780	1,060	945	2,570	2,430
17		4,220	2,510	5,650	5,940	5,650	3,680	934	450	1,800	2,650
18		3,950	5,750	5,070	5,940	5,070	2,510	1,160	935	1,900	2,940
19		3,950	34,000	8,210	5,940	5,940	2,720	2,020	1,780	1,590	1,180
20		2,320	36,900	18,300	4,430	5,360	2,920	2,240	2,080	1,390	2,120
21		6,810	23,800	12,200	2,230	4,780	1,960	4,150	2,160	2,820	1,980
22		7,400	13,700	8,020	5,650	4,500	2,320	2,680	2,050	6,420	2,000
23		6,810	9,360	6,810	5,940	5,070	1,110	3,150	1,160	4,650	1,940
24		5,220	8,680	6,230	5,940	4,080	2,780	2,410	1,040	4,110	1,800
25		2,660	8,020	13,900	5,650	1,180	2,060	1,830	375	3,510	1,300
26		3,150	7,700	29,400	5,650	3,760	2,010	2,320	1,360	4,770	792
27		2,900	6,810	20,600	3,160	3,410	2,320	1,140	3,580	11,800	1,750
28	2,590	4,780	5,940	9,360	746	3,680	938	2,350	5,330	11,300	1,160
29	1,900	4,780	6,810		4,640	3,950	1,730	1,510	8,130	4,100	1,150
30	2,620	3,600	7,100		5,070	4,780	947	1,740	17,900	3,820	1,140
31		3,150	11,700		12,800		1,950		21,000	1,810	

Monthly discharge of Broad River at Richtex, S. C., for the year ending September 30, 1926

[Drainage area, 4,800 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
December	7,400	1,790	3,550	0.740	0.85
January	36,900	2,210	9,110	1.90	2.19
February	29,400	3,150	10,700	2.23	2.32
March	21,000	746	7,340	1.53	1.76
April	19,400	1,180	6,400	1.33	1.48
May	4,220	938	2,390	.498	.57
June	4,150	472	1,830	.381	.43
July	21,000	375	3,040	.633	.73
August	12,800	1,290	4,630	.965	1.11
September	7,280	792	2,550	.531	.59

SECOND BROAD RIVER AT CLIFFSIDE, N. C.

LOCATION.—At Cliffside, Rutherford County, below small creek, a quarter of a mile downstream from dam of Cliffside Mills and 2 miles above mouth of river.

DRAINAGE AREA.—230 square miles (measured on base map).

RECORDS AVAILABLE.—June 21, 1925, to September 30, 1926.

GAGE.—Gurley weekly water-stage recorder on right bank, replaced by Au continuous water-stage recorder November 25; attended by Geological Survey engineers.

DISCHARGE MEASUREMENTS.—Made from cableway at gage.

CHANNEL AND CONTROL.—Channel slightly curved above and below gage. Bed rocky and irregular. Banks sloping, timbered, and subject to slight overflow. Control is an irregular rock ledge 50 feet below gage; probably permanent. About 14-foot fall to Broad River.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.74 feet at 12.30 p. m. January 19 (discharge, 3,860 second-feet); minimum stage, 0.58 foot several times in June and July (discharge, 18 second-feet).

1925–26: Maximum stage, from water-stage recorder, that of January 19, 1926; minimum stage, 0.44 foot from 4 to 6.45 a. m. June 21, 1925 (discharge, 9.6 second-feet).

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Large diurnal regulation produced by Cliffside Mills.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 5 and 4,000 second-feet. Operation of water-stage recorder satisfactory except as indicated in footnote to table of daily discharge. Daily discharge ascertained by applying mean daily gage height to rating table or, for days of considerable fluctuation, by averaging discharge for intervals of day. Records good except for estimated periods, which are fair.

Discharge measurements of Second Broad River at Cliffside, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Nov. 25	1.55	309	Jan. 20	2.45	979	June 15	1.34	203
Jan. 19	4.32	3,260	Do	2.04	635	July 23	1.23	172
Do	3.46	2,070	Apr. 15	1.88	519	Sept. 17	1.48	298

Daily discharge, in second-feet, of Second Broad River at Cliffside, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	45	153		474	359	404	124	140	101	591	102
2	99		118		351	274	278	70	127	97	929	105
3	50		133	125	567	273	173	252	112	95	400	108
4	32		166		940	235	185	207	134	21	289	86
5	119	120	134		557	232	315	164	111	78	166	26
6	108		60		466	163	215	139	22	74	189	151
7	72		140		259	686	228	133	128	85	210	355
8	68	36	140	175	340	561	250	110	118	86	293	141
9	77	170	121		236	394	318	55	118	74	236	110
10	48	160	123		279	335	161	218	117	69	149	136
11	33	53	133		236	308	256	153	119	50	140	105
12	126	392	110		230	402	351	253	84	76	138	90
13	118	887	56		171	343	376	423	21	98	114	172
14	84	494	147		132	322	371	283	104	83	114	128
15	396	88	141	125	304	358	277	142	106	93	53	117
16	189	263	152		198	295	284	90	100	94	146	107
17	90	150	123		183	274	162	238	110	69	120	136
18	42	163	113		179	264	207	147	85	21	97	96
19	190	145	148	2,500	269	200	310	126	65	63	78	28
20	105	213	78	778	433	201	212	111	35	54	129	129
21	82		200	484	316	167	191	142	163	60	291	120
22	94		221	551	316	321	198	123	123	50	174	125
23	100	150	203	407	254	247	193	35	110	57	180	109
24	83		111	240	241	189	136	190	120	44	156	103
25	478		124	348	493	221	91	138	171	54	137	87
26	298	69	104	276	708	258	256	127	80	96	151	28
27	140	162	112	216	435	170	191	124	33	190	91	89
28	115	132		210	339	95	183	149	142	850	105	97
29	88	46	125	222	-------	292	138	113	111	1,030	52	100
30	106	191		175	-------	220	134	43	96	1,670	140	97
31	88	-------		340	-------	277	-------	176	-------	1,080	110	-------

NOTE.—Operation of water-stage recorder unsatisfactory Nov. 1–8, 21–25, Dec. 29–31, and Jan. 1–19; discharge estimated by comparison with record of flow of Broad River near Boiling Springs

Monthly discharge of Second Broad River at Cliffside, N. C., for the year ending September 30, 1926

[Drainage area, 230 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	478	32	123	0.535	0.62
November	887	36	178	.774	.86
December	221	56	131	.570	.66
January			375	1.630	1.88
February	940	132	354	1.540	1.60
March	686	95	288	1.250	1.44
April	404	91	235	1.020	1.14
May	423	35	155	.674	.78
June	171	21	104	.452	.50
July	1,670	21	215	.935	1.08
August	929	52	199	.865	1.00
September	355	26	113	.491	.55
The year		21	205	.891	12.11

SANDY RUN CREEK NEAR BOILING SPRINGS, N. C.

LOCATION.—At county highway bridge, half a mile below mouth of Gray Creek 1½ miles above confluence with Broad River, and 2½ miles southwest of Boiling Springs, Cleveland County.

DRAINAGE AREA.—67 square miles.

RECORDS AVAILABLE.—May 5, 1925, to September 30, 1926.

GAGE.—Enameled vertical staff gage on right bank 100 feet above bridge; read by Mrs. Fannie Davis.

DISCHARGE MEASUREMENTS.—Made by wading or from bridge.

CHANNEL AND CONTROL.—Channel curved above and below gage. Banks high and subject to little overflow. Control is a rock ledge and boulders partly overlain with sand; fairly permanent. About 10-foot fall to Broad River.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 5.3 feet at noon January 18 and 8 a. m. March 7 (discharge, 1,220 second-feet); minimum stage, 0.32 foot September 26–28 and 30 (discharge, 14 second-feet).

1925–26: Maximum stage recorded, that of January 18 and March 7, 1926; minimum stage, 0.32 foot for several periods in September, 1925, and September, 1926 (discharge, 14 second-feet).

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Possibly slight regulation by small gristmill above station.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 15 and 200 second-feet and extended above. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except as stated in footnote to table of daily discharge. Records fair.

Discharge measurements of Sandy Run Creek near Boiling Springs, N. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Nov. 25	0.60	37.8	Apr. 15	0.99	84	July 23	0.38	18.9
Jan. 20	1.40	150	June 15	.55	35.4	Sept. 17	.48	27.1

Daily discharge, in second-feet, of Sandy Run Creek near Boiling Springs, N. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	53	35	55	100	81	93	53	34	26	158	30
2	33	142	40	49	73	80	69	54	33	26	76	30
3	35	63	39	55	150	73	68	60	32	26	77	26
4	30	54	35	68	305	65	66	212	32	24	54	26
5	30	46	35	87	118	64	60	212	58	24	48	24
6	26	45	35	533	98	351	54	56	35	25	42	92
7	24	40	35	525	126	898	83	70	35	26	118	150
8	22	45	33	94	81	134	142	69	32	25	252	142
9	23	40	33	73	73	126	212	60	32	25	54	81
10	25	39	33	55	66	94	158	212	31	42	150	69
11	24	39	33	55	60	142	94	77	30	37	110	55
12	23	142	35	53	59	126	142	73	30	34	70	31
13	23	118	35	40	55	102	231	90	30	29	54	30
14	134	93	45	40	61	98	94	63	48	26	42	42
15	142	54	54	39	56	88	84	54	60	44	35	54
16	48	48	45	39	53	77	79	52	39	69	33	48
17	35	56	40	69	53	69	76	69	26	23	31	41
18	32	52	44	809	64	70	76	64	98	22	202	32
19	35	50	44	262	252	69	64	56	99	19	193	30
20	33	46	45	150	80	64	66	52	76	19	118	26
21	33	46	69	110	66	158	60	42	45	19	134	26
22	32	45	64	328	60	262	69	54	37	19	134	26
23	35	41	53	212	54	184	64	69	35	26	96	25
24	30	44	59	99	61	73	63	64	33	16	126	18
25	679	42	46	77	272	66	58	83	32	56	184	16
26	84	39	42	73	150	73	58	77	32	102	60	14
27	59	48	40	88	134	80	55	61	60	118	54	14
28	52	46	66	77	88	73	53	44	83	58	42	14
29	48	41	98	64	-------	60	52	37	53	500	32	15
30	39	39	96	99	-------	54	50	39	30	375	37	14
31	41	-------	72	221	-------	63	-------	37	-------	202	32	------

NOTE.—Discharge Oct. 25, Jan. 6, 18, and Mar. 7 determined by approximate integration of graph estimated from two or more daily gage readings.

Monthly discharge of Sandy Run Creek near Boiling Springs, N. C., for the year ending September 30, 1926

[Drainage area, 67 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	679	22	62.8	0.937	1.08
November	142	39	56.5	.843	.94
December	98	33	47.7	.712	.82
January	809	39	148	2.21	2.55
February	305	53	102	1.52	1.58
March	898	54	130	1.94	2.24
April	231	50	86.4	1.29	1.44
May	212	37	74.7	1.11	1.28
June	99	26	44.3	.661	.74
July	500	16	67.2	1.00	1.15
August	252	31	91.9	1.37	1.58
September	150	14	41.4	.618	.69
The year	898	14	79.5	1.19	16.09

NOTE.—No record May 23, 30, June 6, 13, 26, 27, July 4, 10, 11, 18, 25, Aug. 1, 8, 15, 22, 29, Sept. 5, 12; gage height interpolated. Gage not read Sept. 19–30; discharge estimated from study of rainfall records at Columbia, S. C.

LITTLE RIVER AT RICHTEX, S. C.

LOCATION.—300 feet above highway bridge, 1¼ miles northeast of Richtex, Fairfield County, and 1½ miles above mouth.
DRAINAGE AREA.—237 square miles.
RECORDS AVAILABLE.—May 5 to September 30, 1926.
GAGE.—Staff gage in two sections on right bank; read by J. O. Culclasene, employee of Broad River Power Co.
DISCHARGE MEASUREMENTS.—Made from bridge or by wading.
CHANNEL AND CONTROL.—Channel straight for about 250 feet upstream and practically straight downstream. Both banks steep and wooded; subject to overflow during flood. Low-water control is ledge rock; channel control at high stages with backwater effect from Broad River during extreme floods.
EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.60 feet at 7.45 a. m. July 31 (discharge, 1,920 second-feet); minimum stage, 0.26 foot June 19, July 22, and 23 (discharge, 6.7 second-feet).
ICE.—Stage-discharge relation not affected by ice.
ACCURACY.—Stage-discharge relation permanent during year. Rating curve fairly well defined between 0 and 6,000 second-feet. Gage read to hundredths once daily except Sunday. Daily discharge ascertained by applying daily gage height to rating table except as indicated in footnote to table of daily discharge. Records fair except those for estimated periods, which are poor.

The following discharge measurements were made:
May 5, 1926: Gage height, 0.69 foot; discharge, 54 second-feet.
June 19, 1926: Gage height, 0.26 foot; discharge, 5.8 second-feet.
June 20, 1926: Gage height, 0.84 foot; discharge, 80 second-feet.

Daily discharge, in second-feet, of Little River at Richtex, S. C., for the year ending September 30, 1926

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1		16	14	450	21	16		9.9	14	16	16
2		16	13	107	226	17		9.9	13	14	14
3		16	23	92	47	18		9.9	10	11	14
4		16	18	53	30	19	28	6.7	7.6	9.9	
5	52	17	14	50	30	20	25	77	7.6	9.9	
6		16	9.9	47	119	21	25	75	7.6	862	
7		16	7.6	38	286	22	25	33	6.7	350	
8		14	9.9	36	70	23	23	21	6.7	99	
9		14	99	35	50	24	21	19	776	56	
10		13	40	33	33	25	19	19	350	99	9
11		13	18	25	25	26	17	18	215	127	
12		13	14	21	23	27	16	17	310	119	
13		12	17	19	21	28	25	16	63	67	
14		11	16	17	19	29	19	16	1,240	45	
15		11	14	16	16	30	18	14	1,540	38	
						31	16		1,920	30	

Monthly discharge of Little River at Richtex, S. C., for the year ending September 30, 1926

[Drainage area, 237 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
May 19–31	28	16	21.3	0.090	0.04
June	77	6.7	19.2	.081	.09
July	1,920	6.7	220	.928	1.07
August	862	9.9	96.5	.407	.47
September	286		38.9	.164	.18

SALUDA RIVER NEAR COLUMBIA, S. C.

LOCATION.—A quarter of a mile above site of old Saluda mill and 2 miles above confluence of Saluda and Broad Rivers which form the Congaree at Columbia, Richland County.

DRAINAGE AREA.—2,450 square miles.

RECORDS AVAILABLE.—August 14, 1925, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on left bank; attended by H. F. Miller.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Channel straight to control. Right bank a rocky, timbered, low bluff subject to overflow; left bank flood plain 300 feet wide, partly timbered, partly cultivated, and heavily fringed with trees along river. Control is an irregular, smooth granite ledge entirely across river just below gage; permanent. Gage height of zero flow, about −1.6 feet; determined August 31, 1925.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 7.75 feet at 1 p. m. March 31 (discharge, 23,300 second-feet); minimum stage, 0.43 foot at 11 p. m. July 23 (discharge, 188 second-feet).

1925–26: Maximum stage recorded, that of March 31, 1926 (discharge, 23,300 second-feet); minimum stage, 0.25 foot at 9 a.m. September 10, 1925 (discharge, 125 second-feet).

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Diurnal regulation produced by mills on headwaters.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph, except for days of wide range in stage for which discharge was approximately integrated. Records excellent.

Discharge measurements of Saluda River near Columbia, S. C., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Mar. 3	2.76	3,320	Mar. 12	4.90	9,830	June 19	1.17	708
Mar. 9	4.26	7,590	May 4	1.32	769			
Mar. 10	3.48	4,960	May 6	1.90	1,570			

Daily discharge, in second-feet, of Saluda River near Columbia, S. C., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	1,150	1,090	1,340	10,700	3,680	16,700	1,950	518	762	9,230	972
2	670	1,150	862	1,210	8,200	3,220	9,230	1,700	540	670	4,740	915
3	532	1,340	1,090	1,210	5,940	3,000	4,740	1,410	762	670	3,000	715
4	502	3,920	1,090	1,150	6,260	2,790	3,680	915	670	715	2,790	1,310
5	540	2,790	1,030	1,410	7,220	2,590	2,790	1,190	582	582	2,300	2,120
6	540	1,950	1,030	3,680	5,940	2,300	2,590	1,480	625	495	1,700	2,120
7	465	1,560	1,090	5,030	4,180	5,780	3,000	1,280	625	540	1,280	2,790
8	540	1,410	915	5,640	3,220	9,590	7,540	1,210	430	670	1,090	1,560
9	625	1,150	1,090	5,640	3,000	7,540	8,540	1,150	430	715	1,280	862
10	582	915	1,210	3,920	3,220	5,640	5,330	1,030	510	625	1,340	972
11	502	1,150	1,030	2,790	2,790	6,480	4,180	810	465	582	1,560	862
12	451	1,700	1,150	2,300	2,790	9,230	5,330	1,030	625	540	1,780	762
13	518	2,400	1,150	2,590	2,590	7,220	5,330	1,210	625	532	1,150	1,070
14	525	3,680	1,090	2,210	2,490	5,330	4,180	1,090	715	670	1,150	2,490
15	625	4,740	1,280	1,950	2,400	3,680	3,920	1,090	582	582	1,340	2,040
16	715	4,180	1,630	1,780	1,700	3,220	5,030	1,150	532	582	1,090	1,560
17	670	2,790	1,860	1,780	2,400	3,000	4,460	862	625	582	670	1,150
18	582	2,400	1,700	2,400	3,220	2,790	3,440	715	670	540	762	972
19	625	1,950	1,700	5,640	9,230	2,790	2,790	972	862	409	762	762
20	525	1,630	1,700	8,200	11,900	2,490	2,490	1,030	1,700	402	1,330	670

Daily discharge, in second-feet, of Saluda River near Columbia, S. C., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
21	625	1,560	2,790	8,880	9,590	2,490	2,790	915	1,630	330	1,180	540
22	715	1,630	3,000	9,950	5,640	2,490	2,590	862	1,410	402	582	525
23	715	1,410	2,790	7,870	3,920	2,400	2,400	810	1,480	240	582	715
24	762	915	2,300	4,740	3,440	2,590	2,400	715	1,210	1,750	715	670
25	972	1,280	1,860	3,920	10,900	2,590	2,400	510	1,030	1,190	1,000	625
26	1,780	1,410	1,480	3,680	18,800	2,590	2,040	670	810	4,350	4,100	670
27	1,560	1,150	1,210	3,680	14,300	2,790	1,630	810	715	1,700	3,680	862
28	1,480	862	1,090	3,220	8,540	2,490	2,120	762	862	2,400	2,790	582
29	1,340	810	1,340	2,790	-------	1,860	2,210	762	670	7,120	2,790	715
30	1,410	1,280	1,630	3,680	-------	1,700	2,040	670	762	11,300	1,630	810
31	1,410	-------	1,700	9,590	-------	18,000	-------	625	-------	12,100	810	------

Monthly discharge of Saluda River near Columbia, S. C., for the year ending September 30, 1926

[Drainage area, 2,450 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	1,780	451	780	0.318	0.37
November	4,740	810	1,880	.767	.86
December	3,000	862	1,480	.604	.70
January	9,950	1,150	4,000	1.63	1.88
February	18,800	1,700	6,230	2.54	2.64
March	18,000	1,700	4,330	1.77	2.04
April	16,700	1,630	4,260	1.74	1.94
May	1,950	510	1,010	.412	.48
June	1,700	430	791	.323	.36
July	12,100	240	1,770	.722	.83
August	9,230	582	1,940	.792	.91
September	2,790	525	1,110	.453	.51
The year	18,800	240	2,440	.996	13.52

SAVANNAH RIVER BASIN

CHATTOOGA RIVER NEAR TALLULAH FALLS, GA.

LOCATION.—300 feet above mouth of Camp Creek, 5½ miles above confluence with Tallulah River, and 8 miles east of Tallulah Falls, Rabun County.

DRAINAGE AREA.—256 square miles (measured on topographic maps).

RECORDS AVAILABLE.—January 1, 1917, to January 28, 1918; September 25, 1918, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder installed on right bank August 17, 1917; attended by employees of Georgia Railway & Power Co.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Section under cable may shift some. Control is a solid rock shoal about 100 feet below gage; permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.25 feet at 7 a. m. January 18 (discharge, 7,760 second-feet); minimum stage, 0.12 foot at 5 a. m. October 8 (discharge, 123 second-feet).

1917–1926: Maximum stage recorded, 12.2 feet March 24, 1917 (discharge, 13,900 second-feet); minimum stage, −0.02 foot from 10 a. m. September 21 to 10 a. m. September 22, 1925 (discharge, 94 second-feet).

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 150 and 2,500 second-feet and extended above. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting gage-height graph, except for days of wide range in stage, for which discharge was approximately integrated. Records good.

COOPERATION.—Gage-height record furnished by Georgia Railway & Power Co.

No discharge measurements made at this station during year.

Daily discharge, in second-feet, of Chattooga River near Tallulah Falls, Ga., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	285	338	320	1,040	755	920	630	390	355	1,240	390
2	149	430	320	320	865	755	755	630	390	410	1,100	372
3	178	390	320	320	1,100	705	755	630	390	338	865	355
4	173	320	320	492	1,100	705	705	605	390	390	655	338
5	151	285	492	980	865	655	655	605	430	450	538	338
6	132	270	515	755	810	655	655	605	430	430	515	430
7	127	270	430	582	755	1,820	1,030	582	372	492	492	450
8	132	710	390	560	705	1,240	3,360	582	355	372	450	410
9	146	655	390	492	705	980	1,710	560	355	338	390	390
10	141	430	355	470	655	865	1,310	560	338	320	390	338
11	127	355	338	450	655	920	1,170	560	320	320	390	355
12	130	1,740	320	450	560	920	1,100	538	320	285	515	338
13	136	1,390	320	430	605	920	1,100	538	320	285	390	320
14	225	705	338	390	605	810	980	538	355	285	372	410
15	515	560	390	390	605	810	980	538	410	270	355	355
16	302	605	390	390	605	755	865	538	390	270	372	338
17	225	515	372	685	560	755	865	515	390	270	390	372
18	210	450	355	5,350	655	705	865	492	372	270	430	390
19	195	410	338	1,880	1,170	705	810	492	372	255	538	355
20	167	410	430	1,170	980	705	810	492	372	255	492	338
21	157	390	450	980	865	705	755	470	372	255	410	320
22	154	355	470	1,240	810	655	755	470	390	240	430	338
23	149	338	450	980	755	655	755	450	430	240	390	538
24	387	338	410	920	705	655	755	430	372	320	438	470
25	1,170	320	390	865	1,420	655	705	430	355	302	980	390
26	538	338	355	810	1,100	655	705	430	338	270	630	355
27	320	372	338	755	920	605	705	410	355	302	515	372
28	270	390	263	705	810	582	705	410	430	560	450	355
29	255	355	390	705	-------	582	655	410	372	492	410	338
30	225	338	355	655	-------	605	655	410	338	1,100	390	338
31	225	-------	320	920	-------	1,240	-------	390	-------	920	390	------

Monthly discharge of Chattooga River near Tallulah Falls, Ga., for the year ending September 30, 1926

[Drainage area, 256 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	1,170	127	244	0.953	1.10
November	1,740	270	491	1.92	2.14
December	515	263	376	1.47	1.70
January	5,350	320	852	3.33	3.84
February	1,420	560	821	3.21	3.34
March	1,820	582	798	3.12	3.60
April	3,360	655	952	3.72	4.15
May	630	390	514	2.01	2.32
June	430	320	374	1.46	1.63
July	1,100	240	376	1.47	1.70
August	1,240	355	526	2.05	2.36
September	538	320	373	1.46	1.63
The year	5,350	127	556	2.17	29.51

TUGALOO RIVER NEAR HARTWELL, GA.

LOCATION.—Three-quarters of a mile upstream from Beaverdam Creek and 11 miles north of Hartwell, Hart County, Ga.

DRAINAGE AREA.—905 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 28, 1925, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on right bank; attended by P. N. O'Barr.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Channel straight for 1,000 feet above and below gage. Banks fairly steep and high; not subject to overflow. Control is a solid rock outcrop 1,000 feet downstream from gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.76 feet at 9 p. m. January 18 (discharge estimated, 15,400 second-feet); minimum stage, estimated, −0.10 foot October 11 (discharge, 190 second-feet).

1925–26: Maximum stage recorded, that of January 18, 1926; minimum stage, that of October 11, 1925.

ICE.—No ice effect.

DIVERSIONS.—None.

REGULATION.—Pronounced diurnal regulation produced by power plants above.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 300 and 2,000 second-feet and extended above and below. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by averaging gage heights of bihourly periods determined by inspection of gage-height graph, except for days of wide range in stage, for which discharge was approximately integrated, or as stated in footnote to table of daily discharge. Records good.

Discharge measurements of Tugaloo River near Hartwell, Ga., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Feb. 16	2.15	1,900	June 14	0.77	427	Sept. 20	0.73	388
Do	1.78	1,330	Do	1.48	912	Sept. 21	2.75	2,440
Feb. 17	2.27	2,040	June 15	2.28	1,820	Do	2.16	1,540
Do	1.67	1,170	Do	1.79	1,250			

Daily discharge, in second-feet, of Tugaloo River near Hartwell, Ga., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	350	1,060	1,220	910	2,360	1,390	2,510	1,570	910	1,060	1,690	1,570
2	350	1,160	1,390	410	2,080	2,080	1,950	1,220	1,280	910	2,220	1,760
3	372	1,480	1,220	650	2,830	1,570	1,950	690	1,150	865	2,360	1,540
4	325	520	1,220	580	2,510	1,570	1,110	1,570	1,060	650	1,750	1,650
5	288	430	1,760	3,000	2,220	1,570	910	1,570	1,140	650	865	1,280
6	240	623	990	1,820	1,690	2,080	1,570	1,450	1,110	410	1,160	917
7	210	1,720	410	1,570	1,450	3,940	1,820	1,390	495	986	1,080	1,950
8	210	910	910	1,390	1,060	3,180	4,350	1,940	1,270	1,110	730	1,600
9	220	580	1,340	1,060	1,950	2,360	5,440	730	1,100	910	550	1,570
10	220	1,250	866	820	2,220	2,360	3,490	580	1,060	910	1,010	1,610
11	200	495	1,480	615	1,450	2,830	1,950	1,420	910	820	1,440	2,240
12	262	3,820	730	1,160	1,450	2,510	1,390	1,610	960	390	1,940	1,610
13	515	4,580	615	1,060	1,690	1,950	3,640	1,280	865	1,090	1,160	450
14	520	3,000	495	1,060	1,330	1,390	3,360	1,460	550	910	960	1,290
15	410	1,400	1,870	1,010	865	1,010	1,220	1,330	1,280	910	650	1,760
16	325	2,300	1,390	1,110	1,690	2,080	1,950	1,160	1,470	820	410	1,750
17	275	2,000	960	520	1,690	1,570	2,160	820	1,180	910	2,080	1,720
18	275	1,800	775	10,500	1,950	1,950	1,010	1,270	1,010	615	1,770	1,490
19	288	1,700	698	8,390	4,350	2,450	1,060	1,470	960	340	1,740	1,420
20	250	1,700	1,370	3,740	1,950	820	1,950	1,360	690	1,160	1,230	410
21	230	1,330	650	2,510	1,390	1,060	1,690	1,110	520	1,160	1,420	1,280
22	220	926	960	3,000	1,060	910	1,570	1,090	1,060	956	1,320	1,650
23	230	450	1,280	2,830	1,950	2,220	1,690	820	1,110	1,100	470	1,610
24	800	903	1,010	1,390	2,220	1,570	1,690	470	1,260	865	1,300	1,240
25	2,500	1,330	520	1,400	3,000	1,450	1,690	1,390	820	690	2,510	950
26	1,540	1,490	470	2,220	2,510	1,820	690	1,500	1,060	355	1,810	1,090
27	1,180	783	450	1,700	2,220	1,690	1,570	1,410	775	1,000	1,900	450
28	1,260	1,390	430	1,650	1,450	1,160	1,570	1,200	550	1,330	2,010	1,290
29	410	450	992	1,600	-------	730	1,570	864	1,060	1,390	1,100	1,110
30	536	495	1,010	1,690	-------	1,690	1,570	775	910	2,510	994	868
31	1,320	-------	1,010	2,080	-------	3,740	-------	1,140	-------	2,450	1,380	-------

NOTE.—Recorder not operating Oct. 1-2 and Nov. 15-20; discharge estimated by comparison with Chattooga River near Tallulah Falls.

Monthly discharge of Tugaloo River near Hartwell, Ga., for the year ending September 30, 1926

[Drainage area, 905 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	2,500	200	527	0.582	0.67
November	4,580	430	1,400	1.55	1.73
December	1,870	410	984	1.09	1.26
January	10,500	410	2,050	2.27	2.62
February	4,350	865	1,950	2.15	2.24
March	3,940	730	1,890	2.09	2.41
April	5,440	690	2,000	2.21	2.47
May	1,940	470	1,210	1.34	1.54
June	1,470	495	986	1.09	1.22
July	2,450	340	975	1.08	1.24
August	2,510	410	1,390	1.54	1.78
September	2,240	410	1,370	1.51	1.68
The year	10,500	200	1,390	1.54	20.86

OCHLOCKONEE RIVER BASIN

OCHLOCKONEE RIVER AT OCHLOCKONEE, FLA.

LOCATION.—At highway bridge 100 feet upstream from Seaboard Air Line Railway bridge, half a mile west of Ochlockonee station, Leon County, and 8 miles west of Tallahassee.

DRAINAGE AREA.—1,050 square miles (measured on base maps).

RECORDS AVAILABLE.—June 20 to September 30, 1926.

GAGE.—Vertical staff in two sections, one on either bank; read by Miss Irene Graves. Prior to July 15, gage consisted of two vertical sections on right bank. Both gages set to same datum, and read practically the same.

DISCHARGE MEASUREMENTS.—Made from highway bridge.

CHANNEL AND CONTROL.—Channel curved above gage and straight for 500 feet below. Banks heavily wooded. Left bank high and not subject to overflow; right bank overflowed at stages above 20 feet. Control not determined.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 23.8 feet September 25, 26, and 27 (discharge, 6,850 second-feet); minimum discharge, 225 second-feet June 26, 27, and 28.

REGULATION.—None.

ACCURACY.—Stage-discharge relation shifted on July 1. Rating curves used before and after the change, well defined. Gage read to tenths twice daily prior to September 11 and once daily subsequent to that date. Daily discharge ascertained by applying daily or mean daily gage height to rating table. Records good.

Discharge measurements of Ochlockonee River at Ochlockonee, Fla., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
June 18	11.81	343	July 2	12.75	640	July 9	14.87	1,140
June 21	11.80	354	July 7	13.58	806			
June 26	11.00	225	July 8	14.17	960			

Daily discharge, in second-feet, of Ochlockonee River at Ochlockonee, Fla., for the year ending September 30, 1926

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		464	1,230	773	16		622	664	322
2		622	1,530	581	17		912	729	289
3		842	1,630	502	18			1,330	773	257
4		984	1,730	464	19			1,480	796	257
5		912	1,730	601	20		333	1,460	819	257
6		865	1,700	888	21		350	1,060	729	581
7		842	1,560	1,200	22		316	707	643	2,140
8		936	1,380	1,180	23		284	601	581	3,200
9		1,160	1,130	842	24		269	541	541	4,650
10		1,180	1,010	664	25		254	502	502	6,850
11		1,100	960	561	26		225	622	561	6,850
12		912	936	483	27		225	865	773	6,850
13		796	842	483	28		225	1,130	842	5,570
14		707	729	445	29		254	707	888	4,540
15		664	664	409	30		269	796	936	3,660
					31			912	936	

Monthly discharge of Ochlockonee River at Ochlockonee, Fla., for the year ending September 30, 1926

[Drainage area, 1,050 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
June 20-30	350	225	273	0.260	0.11
July	1,480	464	878	.836	.96
August	1,730	502	983	.936	1.08
September	6,850	257	1,880	1.79	2.00

OCHLOCKONEE RIVER NEAR BLOXHAM, FLA.

LOCATION.—At highway bridge on Tallahassee-Bristol highway, 1 mile west of Bloxham, Gadsden County, 7 miles below mouth of Little River, 11 miles above mouth of Taluga River, and 27 miles west of Tallahassee.

DRAINAGE AREA.—1,660 square miles (measured on base maps).

RECORDS AVAILABLE.—June 20 to September 30, 1926.

GAGE.—Vertical staff in two sections on right bank, 200 feet below highway bridge; read by A. P. Nicholson and C. M. Stoutamire.

DISCHARGE MEASUREMENTS.—Made from cable 50 feet below gage.

CHANNEL AND CONTROL.—Channel straight 500 feet above and 200 feet below gage. Left bank steep and high; right bank subject to overflow during extreme high stages. Bed composed of clay; smooth and uniform. Control not determined.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 15.5 feet at 6.30 p. m. September 27 (discharge, 8,050 second-feet); minimum stage, 1.5 feet at 4.30 p. m. September 19 (discharge, 550 second-feet).

REGULATION.—Possibly slight diurnal regulation caused by small gristmills on tributaries above station.

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve well defined. Gage read to tenths once daily prior to September 10; read to hundredths since that date. Daily discharge ascertained by applying daily gage height to rating table. Records good.

Discharge measurements of Ochlockonee River near Bloxham, Fla., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
July 2	2.85	852	July 7	5.78	1,780	July 10	5.60	1,870
July 3	3.10	950	July 8	5.02	1,530	Aug. 18	4.10	1,210
July 6	5.53	1,780	July 9	5.40	1,770	Sept. 22	10.65	4,090

Daily discharge, in second-feet, of Ochlockonee River near Bloxham, Fla., for the year ending September 30, 1926

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		910	1,540	1,260	16		1,030	1,090	610
2		880	1,680	1,090	17		1,000	1,220	570
3		970	1,860	970	18		1,300	1,260	570
4		1,160	1,960	940	19		1,540	1,260	550
5		1,300	2,000	1,860	20	880	1,640	1,220	1,190
6		1,750	2,140	1,860	21	755	1,580	1,090	3,490
7		1,820	2,300	1,860	22	705	1,220	1,000	4,190
8		1,580	2,060	1,860	23	730	1,060	940	4,330
9		1,720	1,860	1,580	24	655	940	880	6,280
10		1,780	1,580	1,440	25	655	855	855	6,760
11		1,720	1,440	1,060	26	655	830	1,470	7,510
12		1,500	1,960	855	27	655	1,300	2,620	8,050
13		1,220	1,860	780	28	910	1,540	2,460	7,690
14		1,120	1,610	730	29	940	1,440	1,780	6,840
15		1,160	1,220	680	30	880	1,090	1,580	6,040
					31		1,090	1,360	

NOTE.—Gage not read Aug. 23; discharge interpolated.

Monthly discharge of Ochlockonee River near Bloxham, Fla., for the year ending September 30, 1926

[Drainage area, 1,660 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
June 20-30	940	655	765	0.461	0.19
July	1,820	830	1,290	.777	.90
August	2,620	855	1,590	.958	1.10
September	8,050	550	2,780	1.67	1.86

APALACHICOLA RIVER BASIN

CHATTAHOOCHEE RIVER AT WEST POINT, GA.

LOCATION.—Near West Point waterworks pumping plant, just below Oseligee Creek, one-fourth mile east of Alabama-Georgia State line in Troup County, and 1 mile upstream from West Point railroad station.

DRAINAGE AREA.—3,300 square miles.

RECORDS AVAILABLE.—July 30, 1896, to September 30, 1926.

GAGE.—Au continuous water-stage recorder in concrete stilling well on right bank, 500 feet below West Point waterworks pumping plant, and the former staff gage; inspected by Will Speer and C. E. Sloop.

DISCHARGE MEASUREMENTS.—Made from the Montgomery Street bridge 1 mile downstream or by boat or wading during extremely low stages. No tributaries enter between gage and bridge.

CHANNEL AND CONTROL.—Bed rough and rocky; fairly permanent. Banks subject to overflow at high stages. Control for ordinary stages is a rock ledge extending across river just below gage; for higher stages, Langdale Dam 5 miles downstream forms control, and during extreme floods the Goat Rock Dam probably has some effect.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 13.7 feet at 8 a. m. April 1 (discharge, 28,500 second-feet); minimum stage, 1.83 feet at 11 p. m. October 1 (discharge, 354 second-feet).

1896–1926: Maximum stage recorded, 30.0 feet at 2 p. m. December 10, 1919 (discharge, 134,000 second-feet); minimum stage, 1.64 feet September 12, 1925 (discharge, 224 second-feet).

REGULATION.—Operation of power plants a great distance upstream causes some diurnal fluctuation.

ACCURACY.—Stage-discharge relation not permanent. Rating curve well defined below 30,000 second-feet and fairly well defined above. Operation of water-stage recorder satisfactory except as noted under table of daily discharge. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Chattahoochee River at West Point, Ga., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 27	6.06	8,180	Jan. 22	10.72	18,800	May 6	3.65	3,180
Dec. 11	3.14	2,090	Do	10.16	18,100	July 20	2.40	1,230
Jan. 19	11.90	22,400	Jan. 23	8.24	13,400	Sept. 5	2.94	1,820
Jan. 20	11.32	21,500	Do	7.85	12,300	Sept. 13	3.38	2,620
Do	11.18	21,600	Jan. 24	7.20	11,300			
Jan. 21	11.54	22,300	Mar. 2	4.84	5,380			
Do	11.68	22,500	May 3	3.71	3,270			

Daily discharge, in second-feet, of Chattahoochee River at West Point, Ga., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	440	2,100	2,260	2,480	5,120	6,880	26,440	3,360	2,000	2,960	12,700	1,970
2	480	5,780	2,070	2,480	5,120	5,780	15,700	3,460	2,760	2,260	24,400	1,860
3	1,310	10,300	1,980	2,670	6,000	5,450	10,000	3,260	2,580	2,000	22,400	1,880
4	1,250	7,100	1,970	7,100	6,440	5,020	7,320	3,160	2,670	2,300	13,200	1,600
5	714	4,700	2,390	17,200	6,440	4,700	6,220	3,160	3,060	2,090	10,500	1,830
6	678	3,460	2,670	20,400	6,440	4,600	5,450	3,060	3,260	2,760	7,100	2,090
7	936	2,960	2,210	16,400	5,560	9,580	5,230	3,060	2,480	2,760	4,800	2,480
8	586	2,960	2,160	13,200	5,120	12,700	5,560	3,060	2,090	3,060	5,780	4,600
9	440	4,600	2,230	11,000	4,800	12,900	5,450	3,060	2,170	2,960	4,380	3,260
10	894	4,280	2,090	8,430	4,800	11,200	6,880	2,860	2,210	2,390	3,360	2,760
11	936	4,180	2,050	6,660	4,490	10,300	8,200	2,860	2,210	3,860	4,280	2,960
12	936	3,860	1,760	5,560	4,180	11,200	6,880	3,160	1,510	3,860	4,910	4,490
13	776	4,700	1,930	4,910	3,960	8,890	5,780	2,960	1,750	2,760	5,560	2,960
14	936	6,660	1,900	4,600	4,070	7,540	5,340	2,760	3,060	1,670	3,860	1,750
15	3,160	9,810	2,760	4,280	3,760	6,880	5,230	2,860	2,480	1,640	3,760	1,760
16	1,900	6,220	4,280	3,960	3,560	6,220	5,020	3,160	2,480	1,360	3,360	1,570
17	1,920	4,180	4,800	4,180	3,560	5,560	4,910	2,960	2,100	1,260	4,600	1,440
18	2,160	3,260	4,600	16,400	6,880	5,340	4,700	2,670	2,860	1,130	3,360	1,730
19	1,880	3,160	4,070	23,500	15,700	5,020	4,280	2,580	2,580	1,150	2,760	1,440
20	1,310	2,860	6,880	21,800	20,400	4,910	3,960	2,480	2,390	1,130	3,160	1,280
21	1,100	2,760	6,440	22,100	13,900	5,020	3,860	2,860	2,480	1,160	4,700	1,490
22	1,180	2,480	6,000	19,400	10,000	4,800	3,760	3,160	2,260	1,370	6,000	1,720
23	964	2,390	5,450	13,200	6,880	4,600	3,860	2,860	3,060	1,520	3,660	1,750
24	1,100	2,100	4,800	10,700	6,000	4,700	4,600	2,480	3,160	1,540	3,760	1,670
25	3,060	2,170	4,280	8,430	15,200	4,380	4,600	2,120	3,560	2,050	5,340	2,210
26	9,580	2,120	3,760	7,100	19,100	4,380	4,280	2,260	3,460	1,850	5,450	2,760
27	8,660	2,090	3,260	6,220	12,400	4,600	3,960	2,090	5,230	3,660	5,780	1,920
28	6,660	2,020	2,960	5,780	9,350	4,380	3,560	1,920	4,800	5,560	4,380	1,490
29	3,460	2,190	2,580	5,230	-------	4,180	3,360	1,900	2,960	5,450	3,060	1,520
30	2,670	2,300	2,390	5,120	-------	4,910	3,260	2,210	4,180	10,000	2,300	1,570
31	1,920	-------	2,210	4,910	-------	22,100	-------	1,880	-------	9,120	2,040	-------

NOTE.—Recorder not operating Aug. 2, 3, Sept. 12 and 13; discharge estimated.

Monthly discharge of Chattahoochee River at West Point, Ga., for the year ending September 30, 1926

[Drainage area, 3,300 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	9,580	440	2,060	0.624	0.72
November	10,300	2,020	3,990	1.21	1.35
December	6,880	1,760	3,260	.988	1.14
January	23,500	2,480	9,850	2.98	3.44
February	20,400	3,560	7,830	2.37	2.47
March	22,100	4,180	7,060	2.14	2.47
April	26,400	3,260	6,250	1.89	2.11
May	3,460	1,880	2,760	.836	.96
June	5,230	1,510	2,800	.848	.95
July	10,000	1,130	2,860	.867	1.00
August	24,400	2,040	6,280	1.90	2.19
September	4,600	1,280	2,130	.645	.72
The year	26,400	440	4,750	1.44	19.52

CHIPOLA RIVER NEAR ALTHA, FLA.

LOCATION.—At Willis highway bridge, 1 mile above Look-and-Tremble Shoal, 3 miles above mouth of Tenmile Creek, and 4 miles southwest of Altha, Calhoun County.

DRAINAGE AREA.—740 square miles.

RECORDS AVAILABLE.—November 21, 1912, to December 31, 1913; September 21, 1921, to September 30, 1926.

GAGE.—Chain gage attached to bridge, installed September 21, 1921; read by E. H. S. Beall.

DISCHARGE MEASUREMENTS.—Made from single span steel highway bridge.

CHANNEL AND CONTROL.—Bed is rough with bottom of soft limestone; both banks steep and are rarely overflowed. Rock shoal, 1 mile below gage, forms excellent control for low and medium stages. High-water control indefinite.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 33.55 feet, crest of flood during later part of September (discharge, approximately 25,000 second-feet); minimum stage, 8.5 feet at 3.10 p. m. October 20 (discharge, 430 second-feet).

1912–1913, 1921–1926: Maximum and minimum stage and discharge, same as given above.

REGULATION.—Slight regulation during low-water season caused by small power plant located on Dry Creek, several miles above gage.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined below 6,000 second-feet and extended above. Gage read to hundredths once daily except Sundays and holidays. Daily discharge ascertained by applying daily gage height to rating table, except as noted under footnote to table of daily discharge. Records good below 6,000 second-feet and fair above.

Discharge measurements of Chipola River near Altha, Fla., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Mar. 5	15.50	3,570	July 14	11.15	1,760
Do	15.45	3,520	Sept.— (Flood crest)	33.55	[a] 25,000

[a] Flow computed by Kutter's formula, from data obtained Nov. 13.

Daily discharge, in second-feet, of Chipola River near Altha, Fla., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	627	738	928	1,280	3,390	6,420	3,840	1,780	1,140	1,620	1,620	3,650
2	627	710	874	1,340	3,210	5,400	3,760	1,680	1,140	1,440	1,620	3,390
3	655	710	874	1,740	3,690	4,300	4,450	1,570	1,140	1,390	1,660	3,020
4	641	710	874	2,140	3,580	3,840	5,020	1,740	1,190	1,620	1,620	2,720
5	627	710	820	2,220	3,430	3,390	5,580	1,530	1,440	1,860	1,660	2,630
6	599	682	820	6,840	3,280	3,130	5,330	1,440	1,340	2,100	1,780	2,540
7	571	682	820	7,180	3,300	3,360	5,190	1,440	1,240	2,570	1,780	2,450
8	571	724	820	8,060	3,320	3,580	4,770	1,390	1,340	2,910	1,780	2,410
9	571	765	820	8,410	3,280	3,430	4,410	1,390	1,240	2,870	1,780	2,300
10	543	874	874	8,410	3,240	3,390	4,160	1,390	1,240	2,790	1,390	2,260
11	500	982	820	8,410	3,100	3,760	4,100	1,340	1,290	2,740	1,530	2,100
12	458	928	820	8,410	2,910	3,910	4,050	1,340	1,190	2,680	1,480	2,000
13	458	928	847	7,880	2,760	3,910	3,690	1,340	1,160	2,490	1,900	1,900
14	487	928	874	8,130	2,620	3,720	3,650	1,340	1,140	2,260	1,980	1,480
15	515	955	874	7,220	2,490	3,540	3,430	1,340	1,090	1,940	2,020	1,340
16	515	982	928	6,870	2,370	3,210	3,360	1,390	1,090	1,740	2,060	1,390
17	543	982	874	6,000	2,450	2,950	3,210	1,420	1,090	1,620	2,020	1,340
18	500	928	874	5,120	3,170	2,910	3,000	1,440	1,040	1,530	2,020	1,340
19	458	928	820	4,300	7,570	2,790	2,790	1,390	1,240	1,440	2,100	------
20	430	874	820	3,800	8,690	2,640	2,570	1,340	1,190	1,340	2,100	------
21	599	820	820	3,320	9,250	2,500	2,570	1,700	1,140	1,240	1,980	------
22	487	847	874	3,240	8,400	2,370	2,450	1,780	1,090	1,440	1,940	------
23	487	874	928	3,170	7,540	2,410	2,330	1,570	1,140	1,240	1,900	------
24	487	874	928	3,410	7,710	2,410	2,300	1,460	1,040	1,240	1,740	------
25	598	874	928	3,650	7,780	2,330	2,200	1,340	1,190	1,340	1,700	------
26	710	928	928	3,540	7,460	3,170	2,100	1,480	1,290	1,440	3,540	------
27	820	982	975	3,540	7,010	3,060	2,060	1,340	1,930	1,530	4,700	------
28	874	982	1,040	3,390	6,720	3,040	1,860	1,240	2,570	1,240	4,630	------
29	874	955	1,100	3,240	-------	3,020	1,820	1,190	2,600	1,390	4,300	------
30	765	928	1,160	3,320	-------	3,170	1,740	1,190	2,100	1,530	3,980	------
31	765	-------	1,220	3,360	-------	4,050	-------	1,160	-------	1,620	3,840	------

NOTE.—Gage not read Sundays or holidays; discharge interpolated for these days except Feb. 21, for which discharge was estimated. Severe flood occurred on Sept. 20 and lasted beyond end of month; during this time gage was rendered inaccessible and no gage readings were reported.

Monthly discharge of Chipola River near Altha, Fla., for the year ending September 30, 1926

[Drainage area, 740 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	874	430	592	0.800	0.92
November	982	682	859	1.16	1.29
December	1,220	820	902	1.22	1.41
January	8,410	1,280	4,870	6.58	7.59
February	9,250	2,370	4,780	6.46	6.73
March	6,420	2,330	3,390	4.58	5.28
April	5,580	1,740	3,390	4.58	5.11
May	1,780	1,160	1,430	1.93	2.22
June	2,600	1,040	1,340	1.81	2.02
July	2,910	1,240	1,810	2.45	2.82
August	4,700	1,390	2,260	3.05	3.52
September 1–18	3,650	1,340	2,240	3.03	2.03

CHOCTAWHATCHEE RIVER BASIN

CHOCTAWHATCHEE RIVER NEAR NEWTON, ALA.

LOCATION.—Near highway bridge on Newton-Ozark road, 1 mile north of Newton, Dale County, and 8 miles above mouth of Little Choctawhatchee River.

DRAINAGE AREA.—720 square miles (measured on base map of Alabama).

RECORDS AVAILABLE.—June 11 to October 13, 1906; April 22, 1907, to August 22, 1908; October 20, 1911, to August 3, 1912; November 29, 1921, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder in concrete stilling well on left bank, 700 feet above highway bridge; installed April 11, 1925; inspected by L. L. Davenport.

DISCHARGE MEASUREMENTS.—Made from cable 100 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed composed of marl; permanent. Low-water control is low marl shoal 100 feet below gage; reasonably permanent. High water control not determined.

EXTREMES OF DISCHARGE.—Maximum stage during year, 23.2 feet at midnight September 22 (discharge, 14,700 second-feet); minimum stage, −0.52 foot at 10 a. m. October 13 (discharge, 109 second-feet).

1906–1908, 1911–12, 1921–1926: Maximum stage recorded, 25.8 feet January 11, 1925 (discharge, approximately 16,400 second-feet); minimum stage, −1.30 feet several days during September, 1925 (discharge, 62 second-feet).

REGULATION.—Slight regulation during low water from operation of gristmills above station.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 1,500 second-feet, fairly well defined between 1,500 and 6,000 second-feet. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying mean daily gage height to rating table except as indicated in footnote to table of daily discharge. Records good below 1,500 second-feet and fair above.

The following discharge measurements were made:
October 28, 1925: Gage height, 0.96 foot; discharge, 386 second-feet.
March 4, 1926: Gage height, 210 feet; discharge, 963 second-feet.
July 14, 1926: Gage height, 2.72 feet; discharge, 1,400 second-feet.

Daily discharge, in second-feet, of Choctawhatchee River near Newton, Ala., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	520	295	443	720	1,620	1,220	13,200	610	327	511	1,220	378
2	447	336	411	665	2,260	1,030	7,920	605	1,420	443	1,220	342
3	467	360	411	665	2,200	1,030	3,960	665	2,070	381	1,030	318
4	278	345	407	840	1,620	965	2,980	640	1,480	357	720	300
5	217	321	475	1,190	1,320	900	2,460	585	1,060	484	605	364
6	174	292	427	2,000	1,390	932	2,140	520	870	665	720	435
7	161	275	395	1,940	1,360	3,630	2,140	488	693	1,000	750	407
8	155	370	403	2,920	1,190	3,630	2,070	484	595	1,450	640	357
9	140	520	392	2,520	1,060	3,440	1,810	475	498	1,220	520	312
10	124	447	378	2,140	965	2,780	1,680	451	415	1,100	480	321
11	122	443	364	1,740	900	2,260	2,330	580	367	965	431	342
12	125	1,480	360	1,450	840	1,810	2,330	693	339	780	415	399
13	122	1,880	360	1,260	840	1,620	2,070	720	321	900	415	399
14	139	1,390	354	1,100	840	1,420	1,810	810	300	1,190	415	378
15	230	2,520	1,880	1,000	840	1,290	1,620	965	292	1,740	480	315
16	282	2,140	2,460	932	780	1,190	1,390	840	357	1,130	810	275
17	306	1,680	2,780	1,100	750	1,100	1,260	640	780	750	1,060	255
18	360	1,160	1,940	1,940	1,420	1,030	1,160	565	870	580	840	258
19	415	840	1,880	1,940	2,850	1,000	1,060	484	640	451	615	272
20	357	665	1,940	1,810	2,400	965	965	552	580	384	529	2,400
21	285	595	1,810	1,620	2,070	965	900	640	451	345	443	12,900
22	320	542	1,810	1,550	1,880	900	840	395	384	407	395	14,300
23	205	502	1,520	1,420	1,550	965	1,160	542	870	506	395	11,800
24	193	476	1,290	1,160	1,360	965	1,260	467	840	455	427	5,710
25	209	451	1,160	1,220	1,620	965	1,130	407	565	439	493	2,980
26	228	435	932	1,260	1,680	2,200	932	367	443	336	1,000	2,200
27	327	475	665	1,220	1,740	1,940	810	345	435	303	1,450	1,810
28	360	511	665	1,290	1,450	1,680	750	330	443	399	1,100	1,680
29	348	475	750	1,190	-------	1,550	665	306	730	595	780	1,420
30	295	451	693	1,260	-------	3,180	615	315	605	1,030	556	1,190
31	278	-------	720	1,320	-------	10,600	-------	300	-------	1,160	443	-------

NOTE.—Discharge estimated Feb. 28 to Mar. 30 on account of missing gage height.

Monthly discharge of Choctawhatchee River near Newton, Ala., for the year ending September 30, 1926

[Drainage area, 720 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	520	122	261	0.362	0.42
November	2,520	275	755	1.05	1.17
December	2,780	354	983	1.37	1.58
January	2,920	665	1,430	1.99	2.29
February	2,850	750	1,460	2.03	2.11
March	10,600	900	1,910	2.65	3.06
April	13,200	615	2,180	3.03	3.38
May	965	300	541	.751	.87
June	2,070	292	668	.928	1.04
July	1,740	303	724	1.01	1.16
August	1,450	395	690	.958	1.10
September	14,300	255	2,160	3.00	3.35
The year	14,300	122	1,140	1.58	21.53

MOBILE RIVER BASIN

COOSAWATTEE RIVER NEAR CARTERS, GA.

LOCATION.—One mile upstream from mouth of Talking Rock Creek and 1½ miles upstream from old station at highway bridge at Carters, Murray County.

DRAINAGE AREA.—376 square miles (measured on topographic maps).

RECORDS AVAILABLE.—September 12, 1925, to September 30, 1926. At station 1½ miles downstream, August 15, 1896, to December 31, 1908; December 20, 1918, to September 30, 1923.

GAGE.—Gurley weekly recorder attached to upstream right abutment of highway bridge; inspected by R. P. Messer.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Channel fairly straight at gage; curves below control. Bed consists of rock and gravel. Left bank high; right bank subject to overflow during extremely high water. Control is rock and gravel about 150 feet downstream; probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 6.9 feet at 7 a. m. January 18 (discharge, 6,600 second-feet); minimum stage, 0.68 foot at 11 a. m. September 22, 1925 (discharge, 59 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—Only slight diurnal fluctuation caused by operation of old grist-mills upstream.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 70 and 2,500 second-feet and extended above. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspection of gage-height graph or, for days of considerable fluctuation by averaging discharge for intervals of day. Records good.

Discharge measurements of Coosawattee River near Carters, Ga., during the period August 14, 1925, to September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1925	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*	1926	*Feet*	*Sec.-ft.*
Aug. 14	0.90	119	Feb. 19	3.00	1,410	Feb. 22	2.08	692
Aug. 15	1.29	279	Feb. 20	2.42	942			
Do	1.19	226	Feb. 21	2.19	774			

Daily discharge, in second-feet, of Coosawattee River near Carters, Ga., for the period September 12, 1925, to September 30, 1926

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		101	258	393	344	646	646	1,000	615	444	320	855	368
2		254	320	368	344	646	615	855	646	471	418	818	368
3		284	293	344	696	747	584	892	646	444	368	646	344
4		200	249	393	2,010	930	555	855	679	418	368	526	320
5		368	232	471	1,320	818	555	818	646	418	344	498	444
6		526	232	471	892	818	526	747	584	418	418	526	393
7		254	232	393	782	892	2,030	782	584	393	471	418	368
8		184	1,380	368	892	712	1,160	1,530	584	368	498	368	344
9		162	679	344	747	712	1,000	1,160	584	368	646	344	344
10		154	444	344	615	747	930	1,000	584	368	471	320	368
11		95	344	344	584	747	930	930	584	368	615	393	320
12	86	122	444	320	526	712	1,000	892	584	344	393	368	320
13	84	212	471	306	526	615	930	968	584	344	320	320	302
14	84	311	555	344	471	526	892	892	615	344	316	584	298
15	89	344	471	555	471	471	855	855	615	393	288	418	288
16	86	368	471	584	444	471	818	818	712	393	275	344	280
17	79	444	393	498	638	471	782	782	615	368	302	747	275
18	74	418	344	498	3,990	646	712	747	555	344	320	615	275
19	76	306	344	712	1,600	1,600	712	712	526	368	393	584	254
20	74	232	320	646	1,080	930	679	712	526	526	471	646	254
21	66	196	320	782	930	782	782	679	526	418	444	1,000	254
22	64	192	302	679	818	679	712	679	498	471	444	584	254
23	69	184	288	555	1,080	646	712	930	471	679	418	555	245
24	95	782	275	498	968	615	712	892	471	471	418	498	262
25	162	1,670	271	471	892	818	679	818	471	393	368	646	254
26	165	646	280	418	818	818	712	747	471	368	393	646	249
27	122	393	418	393	782	712	712	679	444	368	624	498	241
28	130	320	555	418	712	679	679	679	418	368	584	526	232
29	150	275	498	471	679	-------	646	646	418	368	418	393	236
30	116	254	444	393	646	-------	679	646	418	344	444	368	236
31	-------	254	-------	368	615	-------	1,450	-------	418	-------	471	368	-------

Monthly discharge of Coosawattee River near Carters, Ga., for the years ending September 30, 1925 and 1926

[Drainage area, 376 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1925					
September 12–30	165	64	98.5	0.262	0.19
1925–26					
October	1,670	95	339	.902	1.04
November	1,380	232	404	1.07	1.19
December	782	306	456	1.21	1.40
January	3,990	344	900	2.39	2.76
February	1,600	471	736	1.96	2.04
March	2,030	526	819	2.18	2.51
April	1,530	646	845	2.25	2.51
May	712	418	551	1.47	1.70
June	679	344	405	1.08	1.20
July	646	275	421	1.12	1.29
August	1,000	320	530	1.41	1.63
September	444	232	300	.798	.89
The year	3,990	95	558	1.48	20.16

COOSA RIVER AT CHILDERSBURG, ALA.

LOCATION.—At Central of Georgia Railway bridge, half a mile west of Childersburg, Talladega County, and 35 miles above site of lock 12.
DRAINAGE AREA.—8,390 square miles (determined by Alabama Power Co.).
RECORDS AVAILABLE.—February 22, 1914, to September 30, 1926.
GAGE.—Gurley printing water-stage recorder attached to downstream end of second pier from right bank, installed May 5, 1914; inspected by W. J. McSherdon. Sea-level elevation of zero of gage is 421.00 feet (United States Corps of Engineers' datum).
DISCHARGE MEASUREMENTS.—Made from bridge.
CHANNEL AND CONTROL.—Channel straight for half a mile below gage. Left bank high; right bank subject to overflow at extremely high stages. Control not well defined. Bed of stream probably permanent.
EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 14.64 feet at 10 a. m. January 22 (discharge, 54,800 second-feet); minimum stage, 0.84 foot October 1 (discharge, 1,320 second-feet).
1914–1926: Maximum stage, from water-stage recorder, 24.7 feet from 3 to 9 and 11 to 12 p. m. July 11, 1916 (discharge, 121,000 second-feet); minimum discharge, 1,300 second-feet for 10 days in September, 1925 (gage height, 0.8 foot).
REGULATION.—None.
ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined below 75,000 second-feet and extended above. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by averaging hourly gage heights. Records good.
COOPERATION.—Complete records furnished by the Alabama Power Co.

The following discharge measurement was made:
September 3, 1925: Gage height, 2.45 feet; discharge, 4,700 second-feet.

Daily discharge, in second-feet, of Coosa River at Childersburg, Ala., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,340	5,730	3,920	5,990	11,800	18,500	32,800	6,770	4,040	4,160	18,100	5,480
2	1,420	6,510	4,280	5,860	11,800	15,400	35,800	6,510	4,280	3,920	22,800	5,000
3	1,420	5,000	4,280	6,380	14,300	12,800	35,400	6,380	4,400	3,920	25,400	4,880
4	1,420	4,280	4,160	11,100	18,100	11,300	29,200	6,250	4,640	3,810	22,800	4,760
5	1,420	6,510	4,040	26,200	19,300	10,200	20,800	5,990	4,640	3,700	22,800	4,520
6	1,420	5,730	3,920	33,600	20,800	9,740	15,400	5,860	4,280	3,480	17,700	4,280
7	1,680	5,000	3,810	36,800	19,700	19,300	12,800	5,860	4,280	3,480	12,400	4,640
8	2,080	9,100	4,040	39,500	17,300	28,300	11,900	5,860	4,160	3,590	9,260	4,520
9	2,280	13,200	4,400	35,900	14,600	31,800	11,400	5,600	4,160	4,400	7,900	4,520
10	2,080	15,400	4,400	28,300	14,300	33,200	11,400	5,480	4,520	4,160	6,640	4,760
11	1,880	16,500	4,160	23,800	13,500	37,700	14,300	5,600	4,400	4,160	3,480	4,760
12	1,880	15,400	3,920	19,300	12,100	31,000	13,700	5,730	4,280	4,880	5,480	4,760
13	2,480	17,700	3,700	16,500	11,100	25,000	12,600	5,600	3,920	5,000	5,480	4,760
14	2,700	18,100	3,920	13,900	10,100	22,000	12,100	5,480	3,590	5,000	7,040	4,640
15	2,700	17,700	8,800	12,400	9,420	20,000	12,600	5,480	3,480	4,640	8,050	4,520
16	2,700	17,700	14,600	11,300	8,950	17,700	12,600	5,480	3,480	3,920	7,180	4,160
17	4,040	13,500	19,300	14,300	8,650	15,000	12,300	5,480	3,480	3,480	7,180	3,810
18	6,250	9,740	18,500	45,700	10,100	13,500	11,300	5,480	3,810	3,180	6,900	3,480
19	7,320	7,600	17,300	52,600	21,200	12,300	10,100	5,600	4,160	3,060	6,770	3,300
20	6,250	6,510	25,000	52,100	24,200	11,400	9,100	5,990	3,920	2,940	8,500	3,180
21	5,000	5,730	28,300	49,100	25,400	10,800	8,500	6,120	3,920	2,820	8,800	3,060
22	4,280	5,240	31,400	54,100	25,800	10,200	8,050	6,380	4,040	2,820	8,950	3,060
23	3,810	5,000	29,600	50,100	22,000	9,900	7,900	6,120	4,400	3,380	9,580	3,180
24	3,380	4,760	27,800	43,700	16,900	9,900	8,050	5,990	5,730	2,940	13,400	3,480
25	5,240	4,520	22,400	35,900	16,500	9,900	8,050	5,480	6,510	2,820	17,700	3,180
26	8,800	4,280	12,800	27,400	20,400	9,900	8,950	5,120	8,050	2,820	14,600	3,480
27	11,800	4,040	12,400	20,800	22,000	9,580	9,260	4,760	7,900	3,180	13,900	3,700
28	12,400	4,040	9,580	16,900	20,800	9,260	8,650	4,520	6,640	5,360	15,800	3,590
29	10,800	3,920	8,350	14,600	-------	8,950	7,600	4,400	5,360	8,500	13,200	3,480
30	7,900	3,810	7,320	13,000	-------	10,200	7,040	4,230	4,520	9,100	9,100	3,300
31	5,730	-------	6,770	11,900	-------	25,800	-------	4,160	-------	10,800	6,770	-------

NOTE.—Discharge computed from staff gage readings Sept. 9–12.

Monthly discharge of Coosa River at Childersburg, Ala., for the year ending September 30, 1926

[Drainage area, 8,390 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	12,400	1,340	4,320	0.515	0.59
November	18,100	3,810	8,740	1.04	1.16
December	31,400	3,700	11,500	1.37	1.58
January	54,100	5,860	26,700	3.18	3.67
February	25,800	8,650	16,500	1.97	2.05
March	37,700	8,950	16,800	2.00	2.31
April	36,800	7,040	14,000	1.67	1.86
May	6,770	4,160	5,610	.669	.77
June	8,050	3,480	4,630	.552	.62
July	10,800	2,820	4,300	.513	.59
August	25,400	3,480	11,700	1.40	1.61
September	5,480	3,060	4,070	.485	.54
The year	54,100	1,340	10,700	1.28	17.35

COOSA RIVER AT MITCHELL DAM, NEAR VERBENA, ALA.

LOCATION.—In sec. 15, T. 21 N., R. 16 E., St. Stephens base and meridian, half a mile below Mitchell Dam, 6 miles northeast of Verbena, Chilton County, and 14 miles below site of Lock 12.

DRAINAGE AREA.—9,830 square miles (Alabama Power Co.).

RECORDS AVAILABLE.—July 7, 1925, to September 30, 1926.

GAGE.—Gurley printing recorder, in timber shelter on right bank; referred to staff gage in three sections near the same location. Elevation of zero of gage is 270.00 feet above mean sea level.

CHANNEL AND CONTROL.—Channel rough and rocky; permanent. Both banks high and wooded; not subject to overflow. Control is series of rock shoals 800 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 14.6 feet during nights of January 17 and 18 (discharge, 72,800 second-feet); minimum stage, 1.25 feet October 4 (discharge, 80 second-feet), represents only leakage at Mitchell Dam.

1925–26: Maximum stage recorded, that of January 17 and 18, 1926; minimum stage, 1.25 feet August 16 and October 4, 1925 (discharge, 80 second-feet).

REGULATION.—Large diurnal fluctuation caused by operations at Mitchell Dam.

ACCURACY.—Stage-discharge relation probably permanent. Rating curve only fairly well defined for low stages. Operation of water-stage recorder not entirely satisfactory. Daily discharge ascertained by averaging discharge obtained by applying to rating table gage heights for half-hour periods during day. Records only fair.

COOPERATION.—Complete records furnished by Alabama Power Co.

Discharge measurements of Coosa River at Mitchell Dam, near Verbena, Ala., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Nov. 22	3.45	3,750	Jan. 28	8.11	24,500
Nov. 26	2.38	1,780	July 25	1.45	132

Daily discharge, in second-feet, of Coosa River at Mitchell Dam, near Verbena, Ala., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,350	4,030	-------	11,300	16,400	19,100	40,300	7,490	5,540	4,380	12,300	10,780
2	1,550	9,540	-------	7,420	11,500	21,400	40,700	7,460	5,970	4,950	33,300	10,390
3	180	7,960	-------	4,430	19,900	17,800	43,100	9,080	4,960	920	28,700	6,340
4	80	6,130	-------	25,300	19,400	19,200	34,100	10,020	5,510	1,450	27,400	2,230
5	930	5,680	-------	52,800	19,300	18,600	22,900	10,340	910	1,000	28,900	240
6	1,350	4,820	260	42,600	23,900	17,200	21,700	8,160	1,050	6,540	21,900	2,460
7	1,780	-------	5,110	43,200	22,000	12,900	19,200	9,520	6,500	3,930	21,100	5,790
8	1,450	-------	5,100	52,200	18,600	32,200	13,000	2,770	5,400	4,380	10,300	5,360
9	1,090	-------	5,090	44,900	17,400	37,400	12,700	610	5,440	6,750	17,100	6,670
10	140	-------	4,410	36,400	19,800	38,800	11,700	7,330	3,810	2,720	10,840	7,580
11	140	-------	4,310	26,100	16,900	51,600	12,600	6,380	3,330	1,880	5,230	8,240
12	730	-------	1,760	27,800	18,600	39,300	23,600	6,400	1,040	7,230	6,030	3,320
13	750	-------	160	28,700	16,300	30,200	18,100	9,040	2,610	5,210	8,510	7,050
14	1,940	-------	-------	26,400	10,800	26,400	13,400	6,950	5,350	4,900	9,230	5,930
15	800	-------	-------	27,000	11,000	20,900	15,400	5,430	2,570	5,990	4,910	6,070
16	3,550	-------	-------	20,600	10,860	23,700	17,000	2,800	4,370	4,680	7,510	6,620
17	3,340	-------	-------	25,500	10,140	23,200	17,000	7,350	1,630	1,740	9,020	6,020
18	5,680	-------	-------	66,000	13,600	20,400	9,440	8,120	2,250	200	9,550	4,860
19	6,770	-------	26,400	49,900	27,600	20,700	11,800	6,710	1,960	5,730	10,470	310
20	7,070	-------	33,400	61,000	34,900	19,400	12,700	7,700	280	1,600	9,630	4,600
21	8,070	-------	29,200	57,500	26,900	12,700	13,100	7,040	5,260	1,310	8,990	4,860
22	5,600	-------	38,400	63,400	29,100	13,400	13,000	3,540	4,670	2,470	6,600	5,540
23	4,340	-------	32,300	61,700	23,400	12,800	13,000	3,660	6,920	3,610	12,000	2,940
24	4,390	-------	33,400	48,000	21,000	11,600	12,600	6,950	7,120	570	12,400	4,080
25	2,310	-------	26,900	38,700	23,000	11,700	9,580	7,820	6,910	150	17,500	1,700
26	8,780	-------	13,600	34,000	26,300	12,200	10,610	9,560	5,990	4,260	18,500	160
27	11,900	-------	14,200	20,900	28,400	11,800	8,540	8,410	3,580	4,760	17,400	3,340
28	11,700	-------	13,700	22,000	22,400	10,300	9,330	3,720	8,330	5,720	17,400	4,220
29	11,900	-------	12,500	18,900	-------	12,700	9,320	1,910	6,810	9,170	12,570	4,600
30	12,000	-------	13,700	16,600	-------	19,200	8,900	1,480	4,310	16,800	13,400	4,550
31	10,500	-------	12,500	7,150	-------	37,900	-------	6,150	-------	16,600	13,300	-------

NOTE.—Recorder not operating properly Nov. 7 to Dec 5 and Dec. 14-18; discharge not determined. Discharge computed Jan. 20-22 from record at Childersburg and Sept. 13-17 from power output to Mitchell Dam.

Monthly discharge of Coosa River at Mitchell Dam, near Verbena, Ala., for the year ending September 30, 1926

[Drainage area, 9,830 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	12,000	80	4,260	0.433	0.50
November 1-6	9,540	4,030	6,360	.648	.14
January	66,000	4,430	34,500	3.51	4.05
February	34,900	10,140	20,000	2.04	2.12
March	51,600	10,300	21,800	2.22	2.56
April	43,100	8,540	17,300	1.76	1.96
May	10,300	610	6,450	.656	.76
June	8,330	280	4,350	.443	.49
July	16,800	150	4,570	.465	.54
August	33,300	4,910	14,300	1.45	1.67
September	10,800	160	4,900	.498	.56

COOSA RIVER AT LOCK 18, NEAR WETUMPKA, ALA.

LOCATION.—In sec. 22, T. 19 N., R. 18 E., half a mile below lock 18 dam site and 7 miles above junction with Tallapoosa River at Wetumpka.

DRAINAGE AREA.—10,200 square miles (Alabama Power Co.).

RECORDS AVAILABLE.—July 4, 1912, to September 30, 1914; December 3, 1925, to September 30, 1926. The Alabama Power Co. has obtained staff-gage readings twice daily since July 1, 1912.

GAGE.—Gurley printing recorder in concrete house on right bank; installed December 3, 1925.

DISCHARGE MEASUREMENTS.—Made from cable one-fourth mile above gage.

CHANNEL AND CONTROL.—Bed composed of rock and gravel, banks steep and not subject to overflow. Control is rock shoal 2,500 feet downstream from gage; permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 199.0 feet at 10 a. m. March 11 (discharge, 62,800 second-feet); actual maximum for year probably occurred in January but recorder was not operating. Minimum stage recorded, 183.0 feet September 20 and 27 (discharge, 250 second-feet).

1912–1914, 1926: Maximum stage, that of March 11, 1926; minimum stage, 182.44 feet at 10.30 a. m. September 28, 1925 (discharge, 134 second-feet).

REGULATION.—Flow almost completely regulated during low and medium stages by hydroelectric plants at Lock 12 and Mitchell Dam.

ACCURACY.—Rating curve well defined below 60,000 second-feet. Operation of water-stage recorder rather unsatisfactory. Staff gage read twice daily December 12–16 and June 8 to July 27. For periods recorder operated, daily discharge ascertained by averaging discharge for each half hour, and for periods staff gage was used, gage-height graph was estimated on basis of two daily readings. For other periods daily discharge was estimated on basis of the flow at Mitchell Dam. Records for periods when recorder was operating satisfactorily are good; for all others, fair to poor.

COOPERATION.—Complete records furnished by Alabama Power Co.

Discharge measurements of Coosa River at Lock 18, near Wetumpka, Ala., during the years ending September 30, 1924–1926

Date	Gage height		Discharge	Date	Gage height		Discharge
	Slope gage [a]	Recording gage			Slope gage [a]	Recording gage	
1924	*Feet*	*Feet*	*Sec.-ft.*	1924	*Feet*	*Feet*	*Sec.-ft.*
Jan. 3	191.36	191.08	17,400	Aug. 26	186.62	186.55	2,560
Jan. 28	194.20	193.80	30,000	Sept. 15	184.32	184.28	763
Jan. 29	193.44	193.10	26,700	1925			
Do	194.28	193.86	29,900	Jan. 21	206.81	205.28	85,100
Jan. 30	190.78	190.52	13,100	Jan. 22	204.92	203.55	76,100
Do	194.10	193.70	30,300	Jan. 23	202.75	201.56	65,000
Jan. 31	190.55	190.30	13,300	Apr. 8	190.10	189.88	11,600
Do	192.30	192.00	21,900	Sept. 25	184.85	184.70	1,090
Feb. 1	189.75	189.53	10,600	Do	184.04	183.98	630
Do	188.95	188.75	7,580	Sept. 27	183.20	183.14	282
Do	188.85	188.62	7,610	Sept. 28	182.52	182.48	140
Feb. 13	190.20	189.96	11,900	Do	182.46	182.42	134
Mar. 12	193.96	193.57	29,300	1926			
Mar. 13	195.30	194.85	35,900	Jan. 8	198.10	197.29	51,900
Mar. 14	192.28	192.00	17,900	Jan. 25	194.24	193.95	27,500
Apr. 15	190.60	190.40	12,800	Apr. 2	195.13	194.62	33,200
Do	192.48	192.18	22,800	Do	194.64	194.20	30,900
Apr. 16	191.58	191.30	17,100	May 12	188.13	187.91	5,260
Apr. 23	198.60	197.80	54,600	May 24	188.06	187.83	5,940
Do	198.17	197.40	51,000	July 28	186.63	186.42	4,200
Do	197.98	197.22	52,000	Sept. 9	186.07	185.94	2,070
Apr. 24	198.95	198.10	57,100				
May 26	186.73	186.65	3,000				
Do	186.59	186.50	2,540				

[a] At site of former gaging station 500 feet below Lock 18.

Daily discharge, in second-feet, of Coosa River at Lock 18, near Wetumpka, Ala., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1			16,100	21,100	40,000	7,620	5,610	6,290	28,200	9,760
2			12,900	22,700	39,400	4,950	5,560	4,270	33,500	10,180
3	6,800		20,500	17,600	42,800	6,670	5,640	2,650	29,800	6,280
4	8,760		21,800	18,300	36,100	8,710	5,620	1,520	25,400	3,000
5	6,460		20,000	17,400	27,300	9,000	2,000	700	28,700	1,000
6	1,370		22,600	14,100	20,900	9,000	1,500	4,970	24,400	1,220
7	2,680		24,800	14,300	19,000	9,000	5,500	6,290	23,000	5,030
8	4,760		18,600	29,800	12,100	4,000	5,640	4,450	14,000	5,080
9	4,900		18,200	34,800	12,100	3,000	5,160	5,100	16,000	5,100
10	3,710		20,000	37,100	12,300	6,000	5,620	1,620	12,000	6,610
11	3,680		17,400	45,900	9,940	5,610	3,040	5,330	7,000	6,460
12	2,150		18,500	39,200	25,400	5,800	2,450	5,560	7,000	4,000
13	1,930		16,400	31,500	17,100	8,680	2,450	6,740	9,000	6,000
14	1,930		10,800	25,800	12,300	6,810	5,100	6,170	9,620	5,500
15	5,860		10,900	23,000	14,400	5,170	3,040	3,710	5,450	5,430
16	11,800		11,100	22,100	16,200	4,190	6,610	7,060	5,880	5,530
17	13,770		9,770	21,500	16,600	5,120	5,530	2,590	7,850	6,170
18	8,960		13,600	18,500	9,540	8,710	3,570	1,370	9,130	3,890
19			29,900	19,000	10,020	7,060	3,040	2,310	9,600	1,120
20			34,500	18,100	11,900	6,570	1,910	2,310	10,580	1,870
21			28,300	11,600	11,900	7,560	5,100	2,310	8,430	4,450
22			32,000	11,700	12,000	3,570	6,570	3,600	5,330	5,160
23			25,100	11,800	12,900	3,130	8,100	5,330	12,900	2,590
24			22,600	10,130	12,700	6,290	9,820	1,370	12,800	3,040
25			30,500	10,310	9,480	6,530	6,610	1,120	18,300	2,650
26		27,500	26,300	10,850	9,050	8,160	8,430	1,320	17,700	920
27		26,300	27,100	10,850	8,690	8,630	5,800	4,270	15,900	1,420
28		24,400	24,100	9,620	6,740	5,480	8,430	5,160	17,200	3,600
29		20,400		10,510	9,820	2,450	5,800	8,100	9,670	4,270
30		22,400		18,600	9,660	3,150	5,800	17,900	11,900	3,940
31		10,700		37,800		4,970		25,400	11,900	

NOTE.—Discharge Dec. 12–16 and June 8 to July 27 based on two staff gage readings daily. Discharge estimated by comparison with flow at Mitchell Dam May 5–10, June 5–7, Aug. 7–13, Sept. 4, 5, 12–14.

Monthly discharge of Coosa River at Lock 18, near Wetumpka, Ala., for the year ending September 30, 1926

[Drainage area, 10,200 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
December 3–18	13,800	1,370	5,600	0.551	0.33
January 26–31	27,500	10,700	22,000	2.16	.48
February	34,500	9,770	20,900	2.06	2.14
March	45,900	9,620	20,800	2.05	2.35
April	42,800	6,740	16,900	1.66	1.85
May	9,000	2,450	6,180	.608	.70
June	9,820	1,500	5,170	.509	.57
July	25,400	700	5,060	.498	.57
August	33,500	5,330	14,800	1.46	1.68
September	10,200	920	4,380	.431	.48

TALLAPOOSA RIVER NEAR CRAGFORD, ALA.

LOCATION.—In sec. 28, T. 20 S., R. 10 E., Huntsville base and meridian, 400 feet above mouth of Crooked Creek, 2½ miles east of Cragford, Clay County, and 9 miles below mouth of Little Tallapoosa River.

DRAINAGE AREA.—1,460 square miles (Alabama Power Co.).

RECORDS AVAILABLE.—October 28, 1922, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder on left bank, installed October 23, 1923; inspected by McKinley Heard.

DISCHARGE MEASUREMENTS.—Made from cable 400 feet above gage during medium and high stages. Low-water measurements made from boat.

CHANNEL AND CONTROL.—Channel rough and rocky; probably permanent. Left bank high; right bank is overflowed during high stages. Control for low and medium stages is rocky shoal 200 feet below gage; high-water control not defined.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.25 feet at 9.30 a. m. January 18 (discharge, 16,600 second-feet); minimum stage, 1.00 foot October 13 (discharge, 120 second-feet).

1922–1926: Maximum stage recorded, 19.6 feet at 7 a. m. January 18, 1925 (discharge, 46,300 second-feet, revised determination); minimum stage, 0.65 foot September 11, 1925 (discharge, 30 second-feet.)

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined between 30 and 43,000 second-feet and extended beyond these limits. Water-stage recorder operated satisfactorily except as indicated in footnote to table of daily discharge. Daily discharge ascertained by applying mean daily gage height to rating table. Records good below 8,000 second-feet; others fair.

COOPERATION.—Complete records furnished by Alabama Power Co.

The following discharge measurement was made:
March 10, 1926: Gage height, 3.32 feet; discharge, 2,820 second-feet.

Daily discharge, in second-feet, of Tallapoosa River near Cragford, Ala., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	230	1,320	600	750	1,650	2,470	8,560	1,210	970	950	9,510	800
2	230	5,370	560	800	1,650	2,180	4,900	1,210	1,420	850	13,360	750
3	460	2,740	520	900	2,280	2,050	3,370	1,210	1,780	700	9,220	700
4	600	1,440	600	3,240	2,620	1,900	2,550	1,210	2,300	700	6,250	700
5	440	1,100	950	9,510	2,180	1,770	2,260	1,150	1,210	700	4,090	940
6	360	800	850	7,280	1,990	1,710	2,110	1,100	1,000	850	2,470	1,510
7	360	700	700	3,920	1,710	6,200	1,990	1,050	1,000	1,170	1,830	1,210
8	290	2,680	600	4,180	1,650	5,620	2,050	1,000	900	4,390	2,060	800
9	360	4,650	520	3,890	1,650	3,370	2,110	950	750	1,440	1,440	700
10	360	2,300	520	3,200	1,900	2,940	1,900	950	850	1,500	1,590	1,120
11	230	1,320	480	2,400	1,710	5,800	2,110	1,100	800	2,910	2,280	1,000
12	170	1,710	480	1,990	1,510	4,900	2,110	1,100	700	1,270	1,990	900
13	120	2,550	480	1,770	1,380	3,700	1,990	1,100	650	1,050	1,590	800
14	280	1,970	560	1,510	1,380	2,880	1,830	1,210	1,520	900	1,320	650
15	600	1,270	3,500	1,380	1,380	2,550	1,710	1,270	2,270	750	1,100	750
16	800	1,000	3,040	1,380	1,320	2,330	1,650	1,270	1,270	600	1,050	600
17	1,010	900	2,110	2,130	1,210	2,180	1,710	1,150	900	520	1,380	520
18	1,000	800	1,590	14,330	3,400	2,050	1,590	1,050	900	520	1,320	520
19	750	650	1,600	10,690	10,620	1,900	1,510	950	850	520	1,100	480
20	480	650	4,060	5,830	8,800	1,830	1,440	1,000	900	480	900	440
21	360	600	5,080	4,440	4,540	1,830	1,380	1,210	910	440	1,320	480
22	280	560	5,820	7,390	3,110	1,770	1,320	1,320	810	440	1,770	800
23	280	560	3,200	4,350	2,400	1,770	2,110	1,050	1,510	650	1,440	1,000
24	280	520	1,990	3,040	2,110	1,770	2,050	950	2,290	900	2,110	750
25	2,380	520	1,510	2,550	7,850	1,650	1,710	900	1,710	1,150	4,920	700
26	3,040	480	1,270	2,260	6,910	1,650	1,590	900	1,270	900	4,620	700
27	1,440	520	1,100	1,990	4,350	1,830	1,320	800	1,830	2,930	2,110	650
28	900	600	950	1,830	3,110	1,770	1,270	800	1,440	4,300	1,510	600
29	700	600	900	1,650	-------	1,710	1,210	750	1,210	2,430	1,150	560
30	520	600	800	1,590	-------	2,480	1,210	750	1,000	5,150	950	520
31	440	-------	800	1,510	-------	12,200	-------	750	-------	5,000	950	-------

NOTE.—Recorder graph May 1–24 and September 4–11 corrected on basis of staff-gage readings.

Monthly discharge of Tallapoosa River near Cragford, Ala., for the years ending September 30, 1923, 1925, and 1926

[Drainage area, 1,460 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1922–23					
November	1,350	540	728	0.499	0.56
December	9,550	710	2,130	1.46	1.68
January	6,490	1,130	2,090	1.43	1.66
February	18,700	1,350	5,080	3.48	3.62
March	8,220	1,960	3,140	2.15	2.48
April	12,300	1,700	3,120	2.14	2.39
May	14,700	1,700	4,140	2.84	3.28
June	5,000	1,350	2,330	1.60	1.78
July	2,090	710	1,250	.856	.99
August	3,290	810	1,460	1.00	1.15
September	1,130	380	561	.384	.43
1924–25					
October	800	230	369	.253	.29
November	440	290	333	.228	.25
December	9,700	360	1,610	1.10	1.27
January	40,000	1,100	7,330	5.02	5.79
February	4,090	1,440	2,240	1.53	1.60
March	12,900	1,210	2,720	1.86	2.15
April	3,200	800	1,530	1.05	1.17
May	2,110	600	918	.629	.73
June	800	290	542	.371	.41
July	1,990	230	548	.375	.43
August	440	50	188	.129	.15
September	520	50	112	.077	.09
The year	40,000	50	1,540	1.05	14.33
1925–26					
October	3,040	120	637	.436	.50
November	5,370	480	1,380	.945	1.05
December	5,820	480	1,540	1.06	1.22
January	14,330	750	3,670	2.52	2.90
February	10,620	1,210	3,080	2.11	2.20
March	12,200	1,650	2,930	2.01	2.32
April	8,560	1,210	2,150	1.47	1.64
May	1,320	750	1,050	.719	.83
June	2,300	650	1,230	.842	.94
July	5,150	440	1,520	1.04	1.20
August	13,360	900	2,860	1.96	2.26
September	1,510	440	755	.518	.58
The year	14,330	120	1,900	1.30	17.64

NOTE.—Above monthly tables supersede those published in previous reports for the years ending September 30, 1923 and 1925, computed on basis of revised discharge, in second-feet, for the following days: (1923) Feb. 13, 14,400; Feb. 14, 18,700; Feb. 15, 13,900; (1925) Jan. 11, 15,200; Jan. 17, 17,000; Jan. 18, 40,000; Jan. 19, 29,500; Jan. 20, 24,500; and Jan. 21, 16,300.

TALLAPOOSA RIVER AT WADLEY, ALA.

LOCATION.—In sec. 12, T. 22 S., R. 10 E., Huntsville base and meridian, in Wadley, Randolph County, 13 miles below Crooked Creek dam site.

DRAINAGE AREA.—1,660 square miles (Alabama Power Co.).

RECORDS AVAILABLE.—September 1, 1923, to September 30, 1926.

GAGE.—Vertical staff in 3 sections on right bank opposite depot; read by R. H. Drake.

DISCHARGE MEASUREMENTS.—Made from highway bridge, 3,300 feet upstream from gage.

CHANNEL AND CONTROL.—Bed composed of mud, rock, and gravel. Both banks subject to overflow above a stage of 10 feet. Control is rock and gravel shoal 300 feet below gage; probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 13.6 feet at 4 p. m. August 1 (discharge, 20,300 second-feet); minimum stage recorded, 2.5 feet on October 13 (discharge, 150 second-feet).

1923–1926: Maximum stage recorded, 26.3 feet at 4 p. m. January 18, 1925 (discharge, 46,900 second-feet revised). Minimum stage, 2.2 feet for 8 days during September, 1925 (discharge, 60 second-feet).

REGULATION.—Slight diurnal fluctuation during extreme low water caused by small mill dams.

ACCURACY.—Rating curve well defined between 80 and 31,000-second-feet and extended beyond these limits. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage heights to rating table. Records good.

COOPERATION.—Complete records furnished by Alabama Power Co.

Discharge measurements of Tallapoosa River at Wadley, Ala., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 16	3.10	765	Mar. 9	5.64	3,960	Mar. 11	7.44	7,480
Jan. 6	8.63	9,830	Do	5.36	3,820	Apr. 1	8.92	10,800
Jan. 19	9.73	12,900	Mar. 11	7.41	7,360	Aug. 3	9.84	12,800

Daily discharge, in second-feet, of Tallapoosa River at Wadley, Ala., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	240	1,380	620	860	1,940	2,890	10,530	1,380	920	860	15,700	1,040
2	210	5,930	620	860	1,940	2,540	6,500	1,310	1,520	800	15,600	860
3	500	3,910	620	1,380	2,960	2,260	4,540	1,240	1,520	680	11,600	800
4	620	2,330	740	4,220	3,030	2,120	3,030	1,240	3,240	860	7,160	800
5	330	1,100	1,100	12,400	2,610	2,000	2,540	1,240	1,940	1,040	4,950	2,120
6	210	920	980	9,840	2,120	2,060	2,400	1,170	1,040	1,100	3,100	2,400
7	210	740	800	5,560	1,940	8,300	2,330	1,100	980	800	2,260	1,520
8	180	2,680	680	5,560	1,800	6,310	2,400	1,100	860	5,560	2,400	980
9	280	4,540	620	4,220	1,940	3,910	2,400	1,100	740	1,800	1,520	920
10	330	2,820	620	3,610	2,120	2,960	2,330	1,100	920	980	1,100	1,170
11	240	1,520	620	2,890	2,000	7,450	2,610	1,240	860	2,680	2,610	1,100
12	180	2,470	620	2,330	1,730	5,740	2,400	1,170	680	1,240	2,330	1,040
13	150	2,890	620	2,000	1,590	4,540	2,330	1,100	620	980	1,730	800
14	380	2,330	980	1,730	1,520	3,610	2,190	1,240	1,170	860	1,380	1,040
15	800	1,450	3,910	1,520	1,520	2,960	2,060	1,240	2,540	680	1,240	800
16	740	1,040	3,610	1,520	1,380	2,680	2,000	1,240	1,730	560	1,100	800
17	1,240	920	2,470	4,060	1,380	2,540	1,940	1,240	1,800	500	1,730	740
18	1,040	860	1,800	17,400	3,910	2,260	1,870	1,100	1,170	500	2,260	620
19	860	800	2,540	12,700	12,900	2,190	1,800	1,100	920	380	1,100	560
20	560	740	4,860	7,260	10,530	2,190	1,660	1,170	860	380	1,100	560
21	330	740	6,310	4,540	6,310	2,060	1,590	1,240	980	380	1,100	560
22	280	680	7,260	10,530	3,610	2,060	1,520	1,100	1,040	380	1,800	920
23	280	620	4,220	5,560	2,890	2,060	1,870	980	1,730	620	1,450	1,170
24	440	620	2,330	4,860	2,400	2,000	2,610	920	2,680	800	2,260	860
25	2,190	620	1,730	3,030	10,530	1,940	1,870	860	1,870	1,590	5,840	680
26	3,760	620	1,520	2,680	8,300	2,060	1,730	860	1,170	800	6,020	680
27	1,660	620	1,450	2,400	4,860	2,000	1,590	860	2,470	2,190	2,540	680
28	980	620	1,170	2,120	3,310	1,870	1,520	740	1,520	4,860	1,520	500
29	800	620	1,040	1,940	-------	2,060	1,380	740	1,100	2,680	1,240	560
30	620	620	980	1,800	-------	2,260	1,380	740	920	5,560	1,040	440
31	500	-------	920	1,800	-------	15,700	-------	740	-------	6,120	1,040	-------

Monthly discharge of Tallapoosa River at Wadley, Ala., for the years ending September 30, 1925 and 1926

[Drainage area, 1,660 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
1924–25					
October	740	210	344	0.207	0.24
November	500	280	395	.238	.27
December	10,990	500	1,820	1.10	1.27
January	43,400	1,380	8,220	4.95	5.71
February	5,380	1,660	2,580	1.55	1.62
March	14,900	1,520	3,100	1.87	2.16
April	3,310	1,100	1,890	1.14	1.27
May	3,310	740	1,140	.686	.79
June	1,660	380	721	.435	.49
July	2,470	280	689	.415	.48
August	620	80	224	.135	.16
September	980	60	160	.096	.11
The year	43,400	60	1,780	1.07	14.57
1925–26					
October	3,760	150	682	.411	.47
November	5,930	620	1,590	.958	1.07
December	7,260	620	1,880	1.13	1.30
January	17,400	860	4,620	2.78	3.20
February	12,900	1,380	3,680	2.22	2.31
March	15,700	1,870	3,470	2.09	2.41
April	10,530	1,380	2,560	1.54	1.72
May	1,380	740	1,080	.651	.75
June	3,240	620	1,380	.831	.93
July	6,120	380	1,590	.958	1.10
August	15,700	1,040	3,480	2.10	2.42
September	2,400	440	924	.557	.62
The year	17,400	150	2,240	1.35	18.30

NOTE.—Monthly discharge for the year ending Sept. 30, 1925, as given in the above table supersedes the figures published in Water-Supply Paper 602 because of a revision of daily discharge, in second-feet, for the following days: Jan. 11, 18,200; Jan. 18, 43,400; Jan. 19, 34,500; Jan. 20, 29,700; Jan. 21, 18,500; Mar. 18, 14,900.

TALLAPOOSA RIVER AT STURDIVANT, ALA.

LOCATION.—2,000 feet above bridge of Central of Georgia Railway, which is one-fourth mile west of Sturdivant, Tallapoosa County, and 5 miles below mouth of Hillabee Creek.

DRAINAGE AREA.—2,460 square miles.

RECORDS AVAILABLE.—July 19, 1900, to July 29, 1926, when station was abandoned because of backwater from Cherokee Bluffs Dam.

GAGE.—Staff gage in three sections on right bank, installed September 22, 1923; read by B. F. Neighbors and J. H. Saxon.

DISCHARGE MEASUREMENTS.—Made from a plank walk resting on lower members of deck of railroad bridge.

CHANNEL AND CONTROL.—Bed rough and rocky; permanent. Water overflows banks at extreme high stages. Control is a series of rock ledges and shoals below gage; permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.5 feet at 4 p. m. January 18 (discharge, 28,600 second-feet); minimum stage, −0.6 foot at 4 p. m. October 11 (discharge, 190 second-feet).

1900–1926: Maximum stage recorded, 33.3 feet at noon December 11, 1919 (discharge, 104,000 second-feet); minimum stage, −1.7 feet September 26, 1925 (discharge, 25 second-feet).

REGULATION.—Practically none.

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve well defined between 250 and 30,000 second-feet. Gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

COOPERATION.—Complete records furnished by the Alabama Power Co.

No discharge measurements made during year.

Daily discharge, in second-feet, of Tallapoosa River near Sturdivant, Ala., for the year ending September 30, 1926

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	565	-------	1,510	3,240	4,920	15,110	2,200	1,270	3,240
2	495	-------	1,430	3,840	3,920	10,630	2,210	1,610	2,820
3	565	-------	1,430	5,550	3,840	6,430	2,090	2,380	2,440
4	565	-------	10,120	5,100	3,530	5,190	1,990	6,230	1,840
5	540	-------	23,030	4,750	3,390	4,580	1,990	2,690	1,560
6	430	-------	13,350	4,410	3,460	4,080	1,890	1,520	3,240
7	320	-------	7,720	3,610	12,230	3,840	1,890	1,430	2,890
8	270	1,230	6,850	3,240	11,420	3,920	1,840	1,350	4,500
9	230	1,110	7,950	3,390	6,430	3,690	1,790	1,270	3,100
10	200	1,010	5,650	3,240	4,920	3,530	1,790	1,310	1,650
11	200	980	6,430	2,960	8,890	3,760	1,840	1,940	2,760
12	335	940	3,920	2,820	8,650	4,160	2,100	1,430	2,630
13	285	900	3,610	2,830	7,060	3,920	2,150	1,470	2,500
14	335	870	3,170	2,560	5,550	3,530	2,090	2,100	2,380
15	665	1,270	2,830	2,570	5,100	3,390	1,990	2,760	1,890
16	1,230	4,160	2,630	2,440	4,670	3,240	1,990	3,310	1,430
17	1,390	3,920	2,760	2,320	4,240	3,100	1,990	1,690	1,120
18	1,520	3,030	25,960	6,030	4,080	2,960	1,990	4,080	1,080
19	1,270	4,160	20,570	16,330	3,920	2,960	1,990	2,890	1,040
20	1,150	4,750	12,790	16,330	3,680	2,820	1,990	2,040	1,010
21	1,080	6,640	6,640	8,180	3,690	3,030	1,890	1,890	1,010
22	1,080	9,620	14,510	6,430	3,530	3,240	1,990	1,940	1,080
23	1,190	6,430	9,130	4,580	3,390	3,690	1,890	2,500	1,510
24	1,470	3,240	5,650	3,920	3,240	5,460	1,790	2,260	1,430
25	6,430	2,830	5,190	16,950	3,100	3,530	1,700	2,210	2,380
26	5,280	2,380	4,410	16,330	3,240	3,240	1,650	2,440	1,560
27	3,380	1,990	4,660	8,650	3,100	2,960	1,510	4,410	1,990
28	2,150	1,740	4,080	5,560	2,960	2,500	1,390	3,920	6,850
29	1,350	1,470	3,540	-------	3,100	2,320	1,270	2,690	7,060
30	980	1,650	3,240	-------	4,320	2,210	1,190	4,160	-------
31	840	1,430	3,030	-------	25,220	-------	1,150	-------	-------

NOTE.—Gage not read Nov. 1 to Dec. 7; discharge not determined.

Monthly discharge of Tallapoosa River near Sturdivant, Ala., for the year ending September 30, 1926

[Drainage area, 2,460 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	6,430	200	1,220	0.496	0.57
December 8–31	9,620	870	2,820	1.15	1.03
January	25,960	1,430	7,350	2.99	3.45
February	16,950	2,320	6,010	2.44	2.54
March	25,220	2,960	5,570	2.26	2.61
April	15,110	2,210	4,230	1.72	1.92
May	2,210	1,150	1,850	.752	.87
June	6,230	1,270	2,440	.992	1.11
July 1–29	7,060	1,010	2,410	.980	1.06

TALLAPOOSA RIVER AT CHEROKEE BLUFFS, NEAR TALLASSEE, ALA.

LOCATION.—In sec. 36, T. 20 N., R. 21 E., St. Stephens base and meridian, 200 feet below Double Bridge Ferry, 1,000 feet below mouth of Wind Creek, three-fourths of a mile below Martin Dam, and 9 miles north of Tallassee, Elmore County.

DRAINAGE AREA.—3,000 square miles (Alabama Power Co.).

RECORDS AVAILABLE.—July 1, 1912, to September 14, 1914; October 1, 1922, to September 30, 1926.

GAGE.—Gurley 7-day water-stage recorder in concrete well on right bank, installed September 10, 1923; inspected by employees of Alabama Power Co.

DISCHARGE MEASUREMENTS.—Made from cable 250 feet upstream from gage during medium and high stages. Low-water measurements made from a boat, from footbridge at cofferdam, or by wading.

CHANNEL AND CONTROL.—Channel of sand and gravel; somewhat shifting. Control is large rock shoal 700 feet below gage; probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 6.50 feet at 11 a. m. January 5 (discharge, 33,800 second-feet); minimum stage recorded, —0.7 foot September 19–22 (discharge, 6 second-feet, caused by shutting off flow at Martin Dam).

1912–1914, 1922–1926: Maximum stage recorded, 10.8 feet January 19, 1925 (discharge, 87,500 second-feet); minimum natural discharge, 90 second-feet September 2–6 and and 9, 1925.

REGULATION.—The flow was more or less regulated during the year through construction operations at Martin Dam, three-fourths mile upstream. Complete closure was made at dam on June 8 and reservoir was filling from that time until September 6. During most of this period, flow past gage was only leakage past dam. Power plant started operation on August 29 and flow thereafter was completely regulated.

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve well defined below 50,000 second-feet and extended above. Water-stage recorder operated satisfactorily. Daily discharge ascertained by applying mean daily gage height to rating table prior to August 29 and after that date by averaging hourly discharge. Records good.

COOPERATION.—Complete records furnished by Alabama Power Co.

Discharge measurements of Tallapoosa River at Cherokee Bluffs, near Tallassee, Ala., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	*Sec.-ft.*		*Feet*	*Sec.-ft.*		*Feet*	*Sec.-ft.*
Oct. 15	0.68	383	Oct. 23	0.85	522	June 13	—0.64	6.7
Do	.68	375	Feb. 2	2.12	3,530			
Oct. 23	.85	518	June 13	—.64	6.8			

Daily discharge, in second-feet, of Tallapoosa River at Cherokee Bluffs, near Tallassee, Ala., for the the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	970	1,170	1,170	1,620	3,240	5,350	16,130	2,160	790	16	450	950
2	620	4,120	1,170	1,620	3,750	4,510	10,960	2,160	790	13	450	930
3	620	8,270	1,070	1,750	5,790	4,120	8,270	2,160	790	13	235	810
4	560	4,120	1,070	14,470	6,010	3,930	6,970	2,450	1,500	11	105	780
5	620	2,300	2,160	31,900	4,920	3,750	5,130	2,450	2,600	8	60	60
6	790	1,750	2,160	19,780	4,310	3,580	4,920	2,160	2,020	19	50	1,120
7	620	1,620	1,880	11,530	4,120	11,530	4,310	1,880	620	70	70	1,140
8	620	3,070	1,620	10,680	4,120	13,020	4,310	2,160	310	35	80	2,110
9	560	5,790	1,390	9,060	3,750	8,270	4,310	2,160	30	22	45	2,890
10	400	5,790	1,280	6,720	3,750	5,790	4,310	1,880	11	16	35	3,090
11	350	3,070	1,170	5,350	3,580	8,270	4,920	2,160	8	19	270	1,830
12	310	3,070	1,170	4,310	3,580	9,590	4,710	2,600	8	16	90	230
13	400	5,130	1,170	3,750	3,410	6,970	4,120	2,600	7	16	45	2,210
14	400	4,120	1,170	3,240	3,410	5,350	3,930	2,450	8	13	40	3,070
15	400	3,240	1,280	3,070	3,410	4,710	3,930	2,160	8	8	35	3,070
16	620	2,450	4,510	3,070	3,240	4,310	3,580	2,750	11	7	35	2,910
17	1,170	1,880	4,120	11,240	3,070	4,120	3,410	1,750	11	7	35	2,910
18	1,390	1,750	3,240	26,500	6,010	3,750	3,240	2,020	8	7	40	2,750
19	1,880	1,500	2,910	21,500	13,350	3,750	3,070	2,020	50	6	35	70
20	1,390	1,390	4,710	12,110	16,480	3,750	2,910	1,880	35	6	70	2,050
21	1,170	1,390	6,970	10,960	11,530	3,750	2,750	1,750	19	6	200	3,780
22	790	1,170	9,060	11,820	6,720	3,580	2,750	1,620	16	6	200	4,260
23	620	1,170	7,750	10,400	5,130	3,580	3,240	2,020	16	8	200	3,900
24	620	1,170	4,920	6,970	4,120	3,580	4,710	2,160	16	16	235	3,830
25	2,160	1,170	3,580	5,790	13,690	3,410	3,930	1,500	13	35	270	1,440
26	6,240	1,170	2,910	5,350	18,650	3,580	2,910	970	11	70	235	290
27	4,510	1,170	2,450	4,510	9,860	3,410	2,750	1,280	45	25	145	3,430
28	2,450	1,170	2,020	4,120	6,720	3,240	2,450	1,390	30	22	70	4,890
29	1,620	1,170	1,750	3,750	-------	3,070	2,300	1,500	22	25	120	4,430
30	1,170	1,170	1,750	3,750	-------	5,130	2,160	1,170	19	13	420	4,970
31	1,170	-------	1,620	3,410	-------	27,400	-------	700	-------	120	590	-------

NOTE.—Recorder not operating properly Jan. 16–22, June 9–15, and Aug. 14–20; discharge computed rom daily staff gage readings.

Monthly discharge of Tallapoosa River at Cherokee Bluffs, near Tallassee, Ala., for the year ending September 30, 1926

[Drainage area, 3,000 square miles]

Month	Discharge in second-feet				Run-off in inches
	Maximum	Minimum	Mean	Per square mile	
October	6,240	310	1,200	0.400	0.46
November	8,270	1,170	2,580	.860	.96
December	9,060	1,070	2,750	.917	1.06
January	31,900	1,620	8,840	2.95	3.40
February	18,600	3,070	6,420	2.14	2.23
March	27,400	3,070	5,880	1.96	2.26
April	16,100	2,160	4,580	1.53	1.71
May	2,750	700	1,940	.647	.75
June	2,600	7	327	.109	.12
July	120	6	22	.007	.008
August	590	35	160	.053	.061
September	4,970	60	2,340	.780	.87
The year	31,900	6	3,060	1.02	13.89

MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of flow obtained at the gaging stations and reported in the preceding pages, measurements were made at other points, as shown by the following table:

Miscellaneous discharge measurements in south Atlantic and eastern Gulf of Mexico drainage basins during the year ending September 30, 1926

Date	Stream	Tributary to	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Mar. 30	Craig Creek	James River	400 feet above mouth of Johns Creek at Newcastle, Va.		96
30	Meadow Creek	Craig Creek	800 feet above mouth of creek at Newcastle, Va.		14
30	Johns Creek	do	do		121
July 30	Turbine No. 3	James River	Reusens power plant		[a] 700
30	do	do	do		[b] 458
30	Turbine No. 2	do	do		[c] 666
30	do	do	do		[d] 471
30	Turbine No. 1	do	do		[c] 632
30	do	do	do		[d] 480
Oct. 4	Long Creek	Catawba River	At former gaging station near Gastonia, N. C.		6.22
5	Big Cold Creek	Yadkin-Pee Dee Basin.	150 yards above intake of city water works, Concord, N. C.		1.60
31	Henry Fork	Catawba River	Above pond (60 feet below highway bridge) of Henry River Mills, Henry River, N. C.		29.3
Aug. 21	Cape Fear River	Atlantic Ocean	At U. S. Weather Bureau gage at highway bridge at Fayetteville, N. C.	3.00	591
Jan. 22	North Pacolet River	Santee River	At former gaging station near Tryon, N. C.	2.89	155
June 17	Ochlockonee River	Gulf of Mexico	At Stuarts Bridge near Havana, Fla.	74.35	341
21	do	do	do	74.00	304
July 3	do	do	do	76.38	832
7	do	do	do	75.96	687
9	do	do	do	77.47	1,060
10	do	do	do	77.40	1,070
2	Little River	Ochlockonee River	At Quincy Bridge near Midway, Fla.		172
Nov. 2	Ichawaynochaway Creek.	Flint River	At Baker County dam site near Elmodel, Ga.	71.18	363
Oct. 30	do	do	At Barnetts Bridge near Elmodel, Ga.	1.06	458
31	do	do	do	1.00	432
Nov. 1	do	do	do	.87	405
July 15	do	do	do	2.03	904

[a] Output of generator, 1,000 kilowatts.
[b] Output of generator, 500 kilowatts.
[c] Output of generator, 750 kilowatts.
[d] Output of generator, 375 kilowatts.

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