UNITED STATES DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

GEOLOGICAL SURVEY

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SURFACE WATER SUPPLY *of the* UNITED STATES

1938

PART 2

SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS

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ILLUSTRATION

SURFACE WATER SUPPLY OF SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS, 1938

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of stage and flow made on streams, lakes, and reservoirs in the United States during the water year ending September 30, 1938. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,800 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1935, 3,830 gaging stations were being maintained by the Geological Survey and cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private 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 9.

DEFINITION OF TERMS

The units in which stream-flow data are presented in this report and other terms used herein are 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 when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

"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 its surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

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

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons and represents a run-off of 0.0372 inches from one square mile.

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

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

EXPLANATION OF DATA

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 nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

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

The data presented for each gaging station in the area covered by this report usually comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by the shifting-control method, the slope method, or other special methods.

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage, obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge, unless otherwise qualified. The peak discharge for the year with the time of its occurrence is given below the table of monthly discharge for some stations. Selected lower peaks are also given if the peak discharge exceeded the mean discharge for that day by more than 10 percent. This supplementary information is generally not given for stations having drainage areas of less than 10 square miles or more than 10,000 square miles.

The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For flashy floods the mean daily discharge is determined from gage-height graphs based on gage readings made once or twice daily or oftener, as stated in the station description. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage height except for stations on streams subject to sudden or rapid fluctuation. For stations subject to such fluctuation the mean daily gage height may not indicate the true mean daily discharge, which must be obtained by averaging the discharge for intervals of the day or by using the discharge integrator, an instrument for obtaining the mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the figures for that month given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity

A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLENTANGY RIVER, DELAWARE, OHIO.

B. RECORDER HOUSE AND MEASURING CABLE ON KAWEAH RIVER, THREE RIVERS, CALIF.

TYPICAL RIVER-MEASUREMENT STATIONS.

given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

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

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

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

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

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

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

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

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

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

Augusta, Maine, Statehouse.
Boston, Mass., 945 Post Office Building.
Hartford, Conn., 203 Federal Building.
Albany, N. Y., 526 Federal Building.
Trenton, N. J., 228 Federal Building.
Harrisburg, Pa., 490 Education Building.
Charlottesville, Va., University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 119 United States Courthouse.
Atlanta, Ga., Georgia School of Technology.
Ocala, Fla., Post Office Building.
Montgomery, Ala., 507 Post Office Building.
Chattanooga, Tenn., 442 Post Office Building.
Louisville, Ky., 641 Federal Building.
Columbus, Ohio, 404 Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 316 Federal Building.
Urbana, Ill., 14 Post Office Annex.
Madison, Wis., 337 N. State Capitol.
St. Paul, Minn., 808 New Post Office Building.
Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
St. Louis, Mo., 906 Customhouse, 1114 Market Street.
Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
Topeka, Kans., 305 Federal Building.
Fort Smith, Ark., 6 Post Office Building.
Austin, Tex., State Highway Building.
Santa Fe, N. Mex., 204 United States Courthouse.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 230 Customhouse.
Salt Lake City, Utah, 303 Federal Building.
Idaho Falls, Idaho, 204 Federal Building.
Boise, Idaho, 429 Federal Building.
Helena, Mont., 412 Federal Building.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 208 Federal Office Building.
Los Angeles, Calif., G-31 Post Office and Courthouse.
Honolulu, Hawaii, 225 Federal Building.

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

Records of flow of streams in the United States have been published in the reports tabulated as follows:

Stream-flow data in reports of the 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	....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93)....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.

Stream-flow data in reports of the Geological Survey--Continued

Report	Character of data	Year
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)...	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.- The reports that contain records after 1901 are given in the table on page 6.

The table on the following page gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1938. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data from 1910 to 1920 for ary station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published under "Miscellaneous discharge measurements" at the end of each report, the streams and points of measurement listed appearing in the same relative order as the streams and gaging stations in the body of the report. An index of the records obtained prior to 1904 has been published in Water-Supply Paper 119.

Numbers of water-supply papers containing results of stream measurements, 1899-1938

(For basins included see p. 3)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	m 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, n 100	99	k 98, 99	99	100	100	100	100	100	100
1904.....	o 124, p 125, q 126	q 126, 127	128	129	k 128, 130	130, r 131	k 128, 131	132	133	133, s 134	134	135	135	135
1905.....	o 165, p 166, q 167	q 167, 168	169	170	171	172	k 169, 173	174	175, t 177	176, s 177	177	178	178	u 177, 178
1906.....	o 201, p 202, q 203	q 203, 204	205	206	207	208	k 205, 209	210	211, t 213	212, s 213	213	214	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s 251	251	252	252	252
1909.....	261	262	263	264	265	266	267	268	269	270, s 271	271	272	272	272
1910.....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911.....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912.....	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913.....	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914.....	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915.....	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916.....	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917.....	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918.....	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20..	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928.....	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1931.....	711	712	713	714	715	716	717	718	719	720	721	722	723	724
1932.....	726	727	728	729	730	731	732	733	734	735	736	737	738	739
1933.....	741	742	743	744	745	746	747	748	749	750	751	752	753	754
1934.....	756	757	758	759	760	761	762	763	764	765	766	767	768	769
1935.....	781	782	783	784	785	786	787	788	789	790	791	792	793	794
1936.....	801	802	803	804	805	806	807	808	809	810	811	812	813	814
1937.....	821	822	823	824	825	826	827	828	829	830	831	832	833	834
1938.....	851	852	853	854	855	856	857	858	859	860	861	862	863	864

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in 21st Annual Report, part 4.
b James River only.
c Gallatin River.
d Green and Gunnison Rivers and Colorado River above Gunnison River.
e Mojave River only.
f Kings and Kern Rivers and south Pacific slope basins.
g Rating tables and index to Water-Supply Papers 47-62 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52. Monthly discharge for 1900 in 22d Annual Report, part 4.
h Wissahickon and Schuylkill Rivers to James River.
i Scioto River.
j Loup, Platte, and Elkhorn Rivers and tributaries below Platte River.
k Tributaries of Mississippi River from east.
m Lake Ontario and tributaries to St. Lawrence River proper.
n Hudson Bay only.
o New England rivers only.
p Hudson River to Delaware River, inclusive.
q Susquehanna River to Yadkin River, inclusive.
r Platte and Kansas Rivers.
s The Great Basin in California, except Truckee and Carson River Basins.
t Below junction with Gila River.
u Rogue, Umpqua, and Siletz Rivers only.

From time to time reports have been published that are compilations of records for various areas, usually a single State or drainage basin. These reports contain records previously published (some of which have been revised), as well as some records not contained in the annual series of water-supply papers. The following table gives the numbers and titles of these reports, arranged in alphabetical order by States and drainage basins.

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
		STATE
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447	1918	California, Surface water supply of the southern Pacific slope of.
597e	1927	California, Surface water supply of Sacramento River Basin.
636d	1927	California, Surface water supply of San Joaquin River Basin.
636e	1927	California, Surface water supply of Pacific slope basins in.
637a	1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1900	Colorado, Water resources of.
197	1905	Georgia, Water resources of.
415	1915	Massachusetts, Surface water of.
230	1906	Nebraska, Surface water supply of.
370	1910	Oregon, Surface water supply of.
850	1937	Texas, Summary of records of surface waters of.
424	1916	Vermont, Surface waters of.
492	1919	Washington, Summary of hydrometric data in.
469	1921	Wyoming, Surface waters of, and their utilization.
		DRAINAGE BASIN
395	1914	Colorado River (Colo., Utah, etc.) and its utilization, 1916.
617	1927	Colorado River, upper (Colo., Utah), and its utilization, 1929.
517	1920	Great Salt Lake Basin, Water powers of, 1924.
618	1926	Green River (Wyo., Utah) and its utilization, 1930.
198	1906	Kennebec River Basin (Maine), Water resources of, 1907.
		Milk River. (See St. Mary and Milk Rivers.)
536	1920	New-Kanawha River Basin (W. Va., Va., N. C.), Surface water supply of, 1925.
279	1909	Penobscot River Basin (Maine), Water resources of, 1912.
192	1906	Potomac River Basin (W. Va., Va., Md., etc.), 1907.
358	1913	Rio Grande Basin (N. Mex., Tex., etc.), Water resources of, 1888-1913.
491	1917	St. Mary and Milk Rivers (Mont. and Canada), Water supply of, 1920.
109	1904	Susquehanna River Basin (Pa., Md.), Hydrography of, 1905.

In addition to the records noted above, records of discharge have been published in State reports. Some of these are not contained in the publications of the Geological Survey or are revisions of records previously published in its water-supply papers. The following table contains a list of these reports.

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama....	1915	Bull. 17, Water powers of Alabama....	Geological Survey of Alabama.
Arkansas...	1928	Stream gaging report 1.....	Arkansas Geological Survey.
Georgia....	1920	Bull. 38, Water powers of Georgia....	Geological Survey of Georgia.
Illinois...	1937	Stream flow data of Illinois.....	Division of Waterways.
Do.....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Indiana....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	[a]1930	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	1932	Stream-flow records of Iowa.....	Iowa State Planning Board.
Kansas.....	[b]1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	[c]1924	.....do.....	Do.

State reports containing compilation of records of discharge--Continued

State	Year ending	Report	Issued by
Kansas.....	[d]1928	Surface waters of Kansas.....	Kansas State Board of Agriculture.
Do.....	[e]1935	Stream-flow data of Kansas.....	Do.
Kentucky...	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Minnesota..	1912	Water resources investigation of Minnesota.	State Drainage Commission.
Missouri...	1926	Reports of Bureau of Geology and Mines, vol. 20, 2d series, Water Resources of Missouri.	Missouri Bureau of Geology and Mines.
Nebraska...	[l]14	1st hydrographic report.....	Bureau of Water Power, Irrigation and Drainage.
Do.....	[f]1928	2d hydrographic report.....	Do.
New Jersey.	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	[g]1934	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico.	1925	Surface water supply of New Mexico....	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Do.....	[h]1936	Bull. 39, Discharge records of North Carolina streams.	Do.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	[i]1924	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	[j]1930	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	[k]1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	[l]1932	Stream-flow records of Pennsylvania...	Department of Forests and Waters.
Tennessee..	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.....	[m]1930	Bull. 40, Surface waters of Tennessee.	Do.
Utah.....	1905	5th Biennial Report, State Engineer...	Office of the State Engineer.
Virginia...	1927	Bull. 31, Water resources of Virginia.	Conservation and Development Commission.
Washington.	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin..	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	[n]1923	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

a Includes records for the years 1927-30.
b Includes records for the years 1895-1919.
c Includes records for the years 1919-24.
d Includes records for the years 1924-28.
e Includes records for the years 1928-35.
f Includes records for the years 1914-28.
g Includes records for the years 1928-34.
h Includes records for the years 1889-1936; records of daily and monthly discharge are not included.
i Includes records for the years 1914-24.
j Includes records for the years 1924-30.
k Includes records for the years 1930-36.
l Includes records for the years 1928-32.
m Includes average weekly discharge for the years 1920-30.
n Includes records for the years 1914-23.

Note.- In addition to the records contained in the reports listed above, the following States have issued annual or biennial reports in which are contained records of discharge: California, Colorado, Idaho, Indiana, Missouri, Montana, Nebraska, New Mexico, New York (also New York City Board of Water Supply), North Dakota, Oregon, Pennsylvania, Utah, Washington, and Wyoming.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations in the area covered by this report at which records of discharge were collected during the year ending September 30, 1937, by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by	Remarks
Apalachicola River.	Blountstown, Fla.....	1937-38	Corps of Engineers, U. S. Army.	Unpublished.
Bogue Chitto River.	Near Bush, La.....	1936-38	....do.....	Do.
Chattahoochee River.	Eufaula, Ala.....	1937-38	....do.....	Do.
Chattooga River....	Gaylesville, Ala.....	1937-38	....do.....	Do.
Chickasawhay River.	Shubuta, Miss.....	1936-38	....do.....	Do.
Coosa River.....	Near Leesburg, Ala.....	1937-38	....do.....	Do.
Do.....	Near Lincoln, Ala.....	1937-38	....do.....	Do.
Savannah River.....	Augusta, Ga., at 13th Street Bridge.	1932-38	....do.....	Do.
Do.....	New Savannah Bluff lock and dam at Butler Creek.	1936-38	....do.....	Do.
Tallapoosa River...	Milstead, Ala.....	1937-38	....do.....	Do.
Tombigbee River, East Fork of	Bigbee, Miss.....	1937-38	....do.....	Do.
Warrior River, Locust Fork of.	Near Cleveland, Ala., at Graves Bridge.	1936-38	....do.....	Do.
West Pearl River...	Near Pearl River, La.....	1937-38	....do.....	Do.

Note.- The Soil Conservation Service begin in 1938 to make studies of run-off from three areas of less than 30 acres each in the vicinity of Chatham, Va. and four areas of less than 60 acres each in the vicinity of Americus, Ga. Records of these studies are in the files of that organization.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Alabama, with the Alabama Geological Survey, Walter B. Jones, State geologist. In Florida, with the State Road Department, A. B. Hale, chairman; the Okeechobee Flood-Control District, A. W. Young, executive secretary; the city of Jacksonville, P. M. Ulsch and F. M. Valz, chairmen of city commission; and the city of Tampa, J. S. Long, superintendent of water department. In Georgia, with the Division of Mines, Mining & Geology of the Georgia Department of Natural Resources, R. F. Burch, Jr., commissioner, Capt. Garland Peyton, director, and Richard W. Smith, acting director. In Mississippi, with the Mississippi Geological Survey, W. C. Morse, director. In North Carolina, with the North Carolina Department of Conservation and Development, R. Bruce Etheridge, director. In South Carolina, with the South Carolina State Highway Department, Ben M. Sawyer, chief highway commissioner; the city of Spartanburg, D. W. Hendrix, chairman of board of public works; and the town of Duncan, W. A. Moore, mayor. In Virginia, with the Virginia Conservation Commission, W. C. Hall, chairman.

Acknowledgment is due also to the Corps of Engineers, United States Army, to the United States Soil Conservation Service, and to the United States Weather Bureau for financial assistance in collecting the records published herein.

Assistance in collecting records was also rendered by the following municipalities, organizations, corporations, and individuals: In Alabama, by the Alabama Power Co.; in Florida, by the Florida Power Corporation; in Georgia, by the city council of Augusta, the Georgia Power Co., the Crisp County Power Commission, and the Superior Pine Products Co.; in North Carolina, by the Carolina Power and Light Co., and the cities of Durham and Charlotte; in South Carolina, by the Columbia Railway & Navigation Co., the Lexington Water Power Co., and the South Carolina Electric & Gas Co.; and in Virginia, by the Appalachian Electric Power Co., Virginia Electric & Power Co., and Virginia Public Service Co.

Funds for the construction, repair, and improvement of gaging stations were allocated to the Geological Survey by the Federal Emergency Administration of Public Works.

DIVISION OF WORK

The data for stations in the several States were collected and prepared for publication under supervision of district engineers as follows: In Alabama and Mississippi, D. H. Barber; in Florida, D. S. Wallace; in Georgia except for Augusta Canal near Augusta, F. M. Bell; in North Carolina, E. D. Burchard; in South Carolina and for Augusta Canal near Augusta, Ga., A. E. Johnson; and in Virginia, J. J. Dirzulaitis.

JAMES RIVER BASIN

Jackson River at Falling Spring, Va.

Location.- Water-stage recorder, lat. 37°52'36", long. 79°58'39", at Smith Bridge, 1 mile south of Falling Spring post office, Alleghany County, and 1½ miles downstream from Falling Springs Creek. Zero of gage is 1,333.49 feet above mean sea level.
Drainage area.- 409 square miles.
Records available.- April 1925 to September 1938.
Average discharge.- 13 years, 474 second-feet.
Extremes.- Maximum discharge during year, 7,220 second-feet Oct. 28 (gage height, 10.92 feet), from rating curve extended above 3,500 second-feet; minimum, 84 second-feet Sept. 7 (gage height, 3.04 feet).
1925-38: Maximum discharge, 14,100 second-feet Mar. 17, 1936 (gage height, 14.74 feet), from rating curve extended above 3,500 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 58 second-feet at times in September and October 1930 (gage height, 2.90).
Remarks.- Records excellent except those for periods of missing gage heights, July 21, 22, July 24 to Aug. 3, Aug. 6-9, which were computed on basis of records for stations on Potts and Dunlap Creeks and Cowpasture River and for James River at Lick Run and are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-28				Oct. 29 to Sept. 30			
3.2	116	5.0	778	3.2	108	4.6	530
3.4	161	5.5	1,050	3.4	147	5.0	706
3.6	218	6.0	1,360	3.6	195	5.5	970
3.8	280	7.0	2,150	3.8	250	6.0	1,300
4.0	348	8.0	3,200	4.0	311	7.0	2,140
4.3	462	9.0	4,420	4.3	415		
4.6	590	10.0	5,830				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	830	572	397	463	311	411	299	401	247	320	92
2	102	683	502	422	386	296	379	274	362	230	300	94
3	113	594	434	404	358	311	351	250	376	214	1,500	92
4	391	506	383	372	344	372	324	233	324	195	514	92
5	533	445	362	351	324	401	299	230	280	180	397	89
6	475	408	379	328	299	441	280	228	247	165	1,200	88
7	348	365	344	390	292	526	286	214	228	158	750	86
8	280	334	289	422	274	530	302	200	222	147	1,200	88
9	239	305	289	362	253	494	314	198	200	147	850	89
10	224	280	239	321	244	514	328	190	182	156	514	88
11	203	259	244	337	268	660	321	182	175	143	383	86
12	183	250	256	318	706	594	305	175	190	132	318	89
13	169	286	230	308	941	530	305	168	185	126	259	92
14	164	296	228	277	830	498	292	178	170	128	219	110
15	156	268	222	259	660	804	283	331	154	124	192	122
16	144	253	228	239	572	856	274	397	152	121	178	122
17	136	244	510	230	506	804	265	379	252	113	168	126
18	134	230	660	239	463	730	262	351	376	128	170	128
19	2,010	219	660	230	445	616	344	411	283	154	154	122
20	3,200	217	551	211	448	551	386	572	321	228	139	117
21	1,570	206	494	236	434	506	390	1,000	706	270	130	121
22	1,110	190	441	471	393	452	445	830	660	470	122	117
23	1,460	172	404	706	390	415	514	638	518	239	117	110
24	1,200	163	362	730	401	393	502	1,520	408	1,270	113	103
25	885	165	328	1,500	390	362	471	1,690	376	630	110	98
26	680	170	305	2,050	383	485	426	1,120	334	470	105	95
27	2,650	222	277	1,260	379	660	386	1,260	392	370	103	130
28	5,530	430	283	912	358	551	351	912	456	670	100	112
29	2,870	706	337	683	-	490	321	754	351	370	97	100
30	1,690	730	354	616	-	460	311	594	289	230	95	95
31	1,120	-	368	551	-	427	-	482	-	330	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	30,072	5,530	102	970	2.37	2.73
November	10,426	830	163	348	.851	.95
December	11,535	660	222	372	.910	1.05
Calendar year 1937	214,355	5,530	94	587	1.44	19.51
January	16,132	2,050	211	520	1.27	1.46
February	12,204	941	244	436	1.07	1.11
March	16,040	856	296	517	1.26	1.45
April	10,428	514	262	348	.851	.95
May	16,263	1,690	168	525	1.28	1.48
June	9,570	706	152	319	.780	.87
July	8,205	1,200	113	265	.648	.75
August	10,911	1,500	94	352	.861	.99
September	3,093	130	86	103	.252	.28
Water year 1937-38	154,879	5,530	86	424	1.04	14.07

Peak discharge.- Oct. 20 (2:30 a.m.) 4,420 sec.-ft.; Oct. 28 (5 a.m.) 7,220 sec.-ft.

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James River at Lick Run, Va.

Location.- Water-stage recorder, lat. 37°47', long. 79°47', at highway bridge at Lick Run, Botetourt County, three-quarters of a mile downstream from confluence of Cowpasture and Jackson Rivers. Zero of gage is 978.30 feet above mean sea level.

Drainage area.- 1,369 square miles.

Records available.- April 1925 to September 1938.

Average discharge.- 13 years, 1,588 second-feet.

Extremes.- Maximum discharge during water year 1935-36, 51,600 second-feet Mar. 18 (gage height, 25.65 feet), from rating curve extended above 28,000 second-feet; minimum, 224 second-feet (revised) Sept. 29 (gage height, 1.51 feet).

Maximum discharge during water year 1936-37, 28,700 second-feet Jan. 21 (gage height, 17.45 feet); minimum, 254 second-feet (revised) Oct. 8, Aug. 6 (gage height, 1.61 feet).

Maximum discharge during water year 1937-38, 24,800 second-feet Oct. 28 (gage height, 15.78 feet); minimum, 297 second-feet Oct. 3 (gage height, 1.73 feet).

1925-38: Maximum discharge, 51,600 second-feet Mar. 18, 1936 (gage height, 25.65 feet), from rating curve extended above 28,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 153 second-feet Oct. 11, 1930 (gage height, 1.51 feet).

Maximum stage known, 29.1 feet, from floodmarks, sometime in November 1877 (discharge, about 65,800 second-feet).

Highest stage during flood of March 1913, 27.2 feet, from floodmarks (discharge, about 57,700 second-feet).

Remarks.- Records good except those for period of ice effect, Dec. 26, 1935, to Jan. 1, 1936 (computed on basis of weather records, gage heights, and records for stations on Dunlap and Potts Creeks and Jackson and Cowpasture Rivers and for James River at Buchanan), and those for periods of missing or faulty gage heights, Dec. 20, 1936, to Jan. 9, 1937, Mar. 9, 1937, June 10-17, July 6-18, 1938 (computed on basis of records for stations on Potts, Dunlap, and Catawba Creeks and Jackson and Cowpasture Rivers and for James River at Buchanan), which are fair.

Revisions.- Records for water years 1935-36 and 1936-37, published herewith, supersede those published in previous water-supply papers.

Rating table, Mar. 19, 1936 to Sept. 30, 1938 (gage height, in feet, and discharge in second-feet)

1.6	251	3.0	898	8.0	7,640
1.8	324	3.5	1,260	10.0	11,600
2.0	406	4.0	1,750	12.0	15,900
2.3	538	5.0	2,910	14.0	20,500
2.6	682	6.0	4,300		

Discharge, in second-feet, 1935-38

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	348	436	2,050	800	1,120	3,960	3,300	927	474	313	305	282
2	348	382	1,670	1,460	1,240	3,410	3,500	898	457	332	279	272
3	339	358	1,380	10,200	1,200	3,020	4,920	898	435	352	272	279
4	334	343	1,160	11,700	1,280	2,700	3,570	956	440	348	272	290
5	320	339	1,040	6,520	1,620	2,520	3,040	956	501	340	262	297
6	339	330	916	5,120	1,520	2,460	8,380	870	457	377	276	290
7	339	416	854	5,570	1,330	2,340	12,200	842	440	682	282	265
8	339	840	867	5,880	1,120	2,160	6,570	788	479	501	282	258
9	334	750	1,880	7,680	1,200	1,940	4,920	788	497	402	265	258
10	325	610	2,580	10,600	1,160	1,830	7,640	761	556	372	278	254
11	320	598	2,280	6,850	1,040	1,830	6,230	1,010	543	389	321	254
12	320	1,110	1,880	5,270	965	1,880	5,080	1,260	815	488	297	248
13	320	6,850	2,210	4,380	1,160	2,160	4,300	1,170	927	613	320	242
14	320	4,970	6,360	4,100	11,800	2,280	3,570	1,220	1,020	524	316	242
15	320	2,640	5,880	3,960	18,000	2,280	3,170	1,020	708	470	282	242
16	339	1,830	4,970	5,570	12,800	2,280	2,980	927	584	377	297	239
17	320	1,520	4,240	4,970	7,880	22,500	2,610	842	506	340	423	236
18	307	1,470	3,280	4,100	11,000	39,100	2,250	815	506	313	336	233
19	302	1,380	2,400	8,260	8,790	14,400	1,970	815	533	316	297	242
20	298	1,280	2,160	10,600	5,720	10,400	1,800	870	474	332	276	239
21	302	1,160	1,720	6,040	4,240	13,700	1,650	898	440	316	276	230
22	302	1,040	1,280	4,520	3,410	9,550	1,500	788	393	297	286	236
23	307	1,000	1,420	3,680	2,760	7,640	1,400	734	368	282	286	236
24	311	923	1,420	2,760	2,460	7,280	1,260	682	364	279	320	239
25	302	828	1,160	2,400	2,520	6,570	1,170	632	364	297	360	233
26	293	782	900	2,340	5,980	5,400	1,130	613	360	348	344	230
27	293	776	850	2,000	8,790	5,720	1,090	584	344	344	313	233
28	289	965	900	1,620	7,360	7,640	1,020	561	328	332	435	233
29	652	2,520	900	1,470	4,970	6,230	988	529	316	492	431	236
30	840	2,640	850	1,570	-	4,920	956	497	309	364	328	390
31	575	-	750	1,380	-	4,000	-	488	-	348	297	-

Discharge, in second-feet, of James River at Lick Run, Va., 1935-38--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	734	360	316	5,900	4,000	1,860	927	2,910	618	336	301	4,150
2	594	368	324	11,000	3,850	1,650	898	2,430	594	321	294	2,370
3	423	364	348	17,000	3,170	1,500	870	2,140	564	313	286	1,600
4	340	364	377	10,000	2,730	1,400	842	1,860	594	316	272	1,220
5	279	410	398	6,200	2,490	1,400	870	1,700	570	340	276	1,090
6	279	423	494	4,000	2,190	1,400	988	1,650	815	427	265	1,170
7	276	457	8,200	3,400	1,920	1,350	1,060	1,500	613	389	276	2,250
8	272	474	5,380	3,800	2,020	1,400	1,020	1,300	538	353	364	2,140
9	276	466	2,990	3,400	3,190	1,400	1,020	1,220	492	356	301	1,600
10	297	457	2,020	2,980	8,200	1,350	1,090	1,130	452	323	487	1,220
11	301	440	1,650	2,490	5,400	1,300	1,060	1,020	444	353	918	1,020
12	309	423	2,430	2,190	3,850	1,220	988	988	466	403	734	898
13	301	406	3,040	2,080	3,170	1,170	927	988	423	403	657	815
14	279	398	2,310	2,080	2,850	1,260	927	1,220	398	393	710	734
15	268	398	1,860	2,310	2,550	1,800	1,090	1,450	385	535	488	657
16	432	385	1,600	3,710	2,310	1,750	1,350	1,350	402	547	385	575
17	3,490	372	1,650	4,500	2,550	1,650	1,260	1,260	444	435	340	524
18	5,080	364	2,020	8,960	2,250	1,700	1,170	1,170	419	419	364	474
19	2,140	344	1,970	7,100	2,250	1,970	1,090	1,090	448	381	364	461
20	1,300	340	3,100	15,000	2,080	1,920	1,020	1,350	440	419	364	427
21	956	340	3,400	22,600	2,370	1,920	988	1,350	427	547	410	410
22	788	332	2,700	11,400	7,340	1,800	988	1,220	492	657	414	393
23	682	328	2,200	6,920	6,740	1,650	956	1,130	510	503	734	381
24	603	324	1,800	5,720	4,760	1,550	898	1,060	470	410	956	360
25	533	324	1,700	5,560	3,710	1,500	3,230	956	393	368	1,750	348
26	488	332	1,700	6,920	2,980	1,400	18,700	870	364	340	5,820	340
27	452	336	1,700	5,240	2,370	1,220	10,800	870	364	324	4,410	336
28	419	324	2,800	3,850	2,080	1,130	6,570	842	372	303	2,190	356
29	398	309	3,600	3,850	-	1,090	4,760	798	385	294	1,400	348
30	377	301	3,100	3,710	-	1,020	3,710	734	352	297	1,220	332
31	360	-	4,000	3,360	-	988	-	682	-	340	3,500	-

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	324	2,850	2,140	1,450	1,600	956	1,450	956	1,450	893	1,550	377
2	313	2,310	1,700	1,450	1,300	870	1,300	898	1,300	842	1,220	360
3	368	1,970	1,500	1,350	1,170	927	1,220	842	1,600	815	6,330	348
4	1,710	1,650	1,300	1,220	1,130	1,550	1,090	788	1,500	783	4,150	348
5	2,370	1,450	1,260	1,170	1,090	1,550	1,020	761	1,170	734	3,240	340
6	1,800	1,300	1,300	1,090	1,020	1,550	956	761	988	640	7,100	332
7	1,300	1,170	1,260	1,300	988	1,860	988	708	898	600	4,000	324
8	988	1,060	1,060	1,600	956	1,750	1,060	657	842	540	4,920	320
9	815	988	1,020	1,400	898	1,550	1,170	657	761	520	8,200	320
10	761	956	898	1,220	870	1,750	1,260	622	660	540	3,850	316
11	708	898	734	1,220	870	2,850	1,260	594	650	520	2,430	313
12	657	870	734	1,220	1,650	2,550	1,170	575	650	480	1,800	309
13	594	1,090	870	1,130	2,490	2,140	1,130	552	640	440	1,400	320
14	575	1,220	842	1,060	2,370	1,920	1,090	603	580	420	1,090	336
15	561	1,130	815	956	2,020	2,080	1,020	815	540	410	956	381
16	524	1,020	815	898	1,750	2,310	988	1,020	520	390	870	406
17	488	988	1,170	870	1,550	2,310	956	927	560	380	815	435
18	470	927	2,020	870	1,400	2,370	927	870	1,220	400	761	427
19	7,840	898	2,080	870	1,350	2,080	988	927	1,220	492	708	419
20	16,100	842	1,750	815	1,300	1,860	1,170	2,000	1,610	783	618	402
21	6,400	815	1,500	870	1,260	1,700	1,130	2,790	6,570	927	561	406
22	3,850	788	1,400	1,750	1,130	1,500	1,220	2,310	5,720	2,430	520	385
23	4,600	708	1,260	2,370	1,090	1,350	1,600	1,750	3,570	6,060	483	372
24	3,710	657	1,170	2,430	1,090	1,260	1,650	1,910	2,430	5,240	457	348
25	2,610	632	1,060	5,620	1,090	1,170	1,550	4,450	1,970	2,670	427	332
26	2,080	657	988	7,640	1,060	1,440	1,400	2,910	1,750	1,700	406	324
27	8,260	887	956	4,450	1,060	2,730	1,260	4,300	1,600	1,300	393	324
28	21,900	2,310	988	3,040	1,060	2,190	1,130	3,430	1,500	1,800	381	368
29	11,200	2,670	1,260	2,370	-	1,360	1,060	3,850	1,260	1,130	372	336
30	5,890	2,550	1,400	2,140	-	1,650	988	2,490	1,020	1,130	364	336
31	4,000	-	1,400	1,860	-	1,550	-	1,860	-	2,430	356	-

Peak discharge.- Oct. 20 (4:30 a.m.) 20,700 sec.-ft ; Oct. 28 (11 a.m.) 24,800 sec.-ft.; Jan. 26 (3 a.m.) 9,550 sec.-ft.; Aug. 9 (7:30 a.m.) 11,800 sec.-ft.

Monthly discharge, in second-feet, of James River at Lick Run, Va., 1935-38--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-in
October 1935	10,997	840	289	355	0.259	
November	41,086	6,850	330	1,370	1.00	
December	62,207	6,360	750	2,007	1.47	
Calendar year 1935	784,075	35,300	262	2,148	1.57	
January 1936	153,370	11,700	800	4,947	3.61	
February	134,335	18,000	965	4,632	3.38	
March	204,100	39,100	1,830	6,584	4.81	
April	104,164	12,200	956	3,472	2.54	
May	25,639	1,260	488	827	.604	
June	14,938	1,020	309	498	.364	
July	11,880	682	279	383	.280	
August	9,614	435	262	310	.226	
September	7,658	390	230	255	.186	
Water year 1935-36	779,988	39,100	230	2,131	1.56	21.
October 1936	28,726	8,490	268	927	.677	
November	11,263	474	301	375	.274	
December	71,677	8,200	316	2,312	1.69	1.
Calendar year 1936	777,364	39,100	230	2,124	1.55	21.1
January 1937	197,230	22,600	2,080	6,362	4.65	
February	95,370	8,200	1,920	3,406	2.49	5.3
March	45,718	1,970	988	1,475	1.08	2.5
April	72,067	16,700	842	2,402	1.75	1.2
May	40,228	2,910	682	1,298	.948	1.9
June	14,268	815	352	476	.348	1.09
July	12,165	657	294	392	.286	.39
August	31,250	5,820	265	1,008	.736	.33
September	28,999	4,150	332	967	.706	.85
Water year 1936-37	648,961	22,600	265	1,778	1.30	.79
October 1937	113,766	21,900	313	3,670	2.68	17.63
November	38,261	2,850	632	1,275	.931	3.09
December	38,650	2,140	734	1,247	.911	1.04
Calendar year 1937	727,972	22,600	265	1,994	1.46	1.05
January 1938	57,699	7,640	815	1,861	1.36	19.77
February	36,612	2,490	870	1,308	.955	1.57
March	55,183	2,850	870	1,730	1.30	.99
April	35,201	1,650	927	1,173	.857	1.50
May	48,583	4,450	552	1,567	1.14	.96
June	46,749	6,570	520	1,558	1.14	1.31
July	38,454	6,060	380	1,242	.906	1.27
August	60,728	8,200	356	1,959	1.43	1.04
September	10,664	435	309	355	.259	1.65
Water year 1937-38	580,550	21,900	309	1,591	1.16	.29
						15.76

James River at Buchanan, Va.

Location.- Water-stage recorder, lat. 37°31'50", long. 79°40'45", at Chesapeake & Ohio Railway station at Buchanan, Botetourt County, 300 feet upstream from bridge on U. S. Highway 11, 1,000 feet upstream from Purgatory Creek, and 1⅛ miles downstream from Looney Creek. Zero of gage is 802.56 feet above mean sea level.
Drainage area.- 2,084 square miles.
Records available.- August 1895 to September 1938.
Average discharge.- 39 years (1898-1912, 1913-38), 2,546 second-feet.
Extremes.- Maximum discharge during year, 35,600 second-feet Oct. 20 (gage height, 15.36 feet); minimum, 534 second-feet Sept. 27, 28 (gage height, 2.08 feet).
1895-1938: Maximum discharge, about 92,200 second-feet Mar. 27, 1913 (gage height, 31 feet, from floodmarks), from rating curve extended above 45,000 second-feet on basis of velocity-area studies, computation of peak flow over dam at Balcony Falls during flood of Mar. 18, 1936, and comparison of peak discharge and total run-off of that flood at this station with those at other stations in James River Basin; minimum, 255 second-feet several days in September 1932 (gage height, 1.60 feet).
Remarks.- Records excellent. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Oct. 20, July 24 to Sept. 30				Oct. 21 to July 23			
2.0	486	6.0	6,600	2.3	600	5.0	4,240
2.3	682	7.0	9,020	2.6	820	6.0	6,440
2.6	910	8.0	11,800	3.0	1,200	7.0	8,960
3.0	1,320	10.0	17,900	3.5	1,780	8.0	11,800
3.5	1,940	12.0	24,200	4.0	2,470	10.0	17,900
4.0	2,680	14.0	30,800				
5.0	4,480						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	647	5,090	3,370	2,400	2,700	1,490	2,180	1,500	2,470	1,540	4,180	668
2	626	3,940	2,780	2,320	2,250	1,350	1,980	1,410	2,040	1,400	2,920	682
3	668	3,280	2,400	2,180	1,980	1,360	1,840	1,300	2,180	1,330	10,200	654
4	2,540	2,860	2,180	1,980	1,910	1,910	1,720	1,200	2,320	1,310	11,100	633
5	5,090	2,540	2,040	1,840	1,780	2,700	1,600	1,130	1,910	1,180	6,380	626
6	3,710	2,250	2,040	1,780	1,660	2,540	1,470	1,090	1,600	1,060	15,700	599
7	2,760	2,040	2,040	2,110	1,600	2,620	1,480	1,040	1,390	955	9,540	592
8	2,080	1,910	1,780	2,620	1,500	2,620	1,720	973	1,260	874	7,770	572
9	1,680	1,780	1,660	2,540	1,420	2,400	2,250	928	1,120	847	15,100	566
10	1,500	1,600	1,540	2,180	1,350	2,540	2,470	892	1,070	892	8,010	559
11	1,340	1,520	1,210	2,040	1,330	4,340	2,320	856	1,200	833	4,880	559
12	1,230	1,720	1,070	2,040	1,660	4,240	2,110	812	1,060	756	3,620	559
13	1,130	2,780	1,270	1,910	2,860	3,560	1,980	788	982	684	2,840	559
14	1,120	2,780	1,310	1,780	3,020	3,020	1,840	812	892	642	2,300	579
15	1,080	2,400	1,330	1,600	2,700	2,940	1,720	1,000	796	628	1,940	647
16	1,020	2,040	1,310	1,490	2,400	3,200	1,660	1,300	740	600	1,680	668
17	946	1,910	1,540	1,400	2,180	3,110	1,540	1,290	788	587	1,620	696
18	902	1,720	2,400	1,380	1,980	3,110	1,490	1,180	1,270	587	1,480	704
19	13,400	1,600	2,780	1,340	1,910	2,940	1,540	1,210	1,780	820	1,380	704
20	31,800	1,500	2,540	1,280	1,840	2,620	1,660	2,620	2,320	1,080	1,240	696
21	13,900	1,410	2,250	1,270	1,780	2,400	1,720	5,090	10,800	1,720	1,110	675
22	7,410	1,330	2,040	2,110	1,660	2,180	1,780	3,460	13,900	6,280	1,020	654
23	6,680	1,220	1,910	3,280	1,600	1,980	2,400	2,700	8,690	17,100	946	633
24	7,160	1,120	1,780	3,650	1,600	1,840	2,780	2,320	5,090	16,900	894	599
25	4,870	1,060	1,660	7,150	1,600	1,780	2,540	4,260	3,840	7,530	846	566
26	3,650	1,080	1,540	13,000	1,600	1,840	2,320	4,040	3,370	4,580	807	553
27	8,580	1,290	1,440	8,170	1,600	3,280	2,040	4,980	2,860	3,350	777	534
28	31,100	2,860	1,520	5,420	1,600	3,280	1,840	5,420	2,540	3,530	740	534
29	21,000	4,140	1,910	3,940	-	2,700	1,660	5,200	2,180	3,220	711	592
30	11,200	3,940	2,540	3,460	-	2,470	1,540	4,240	1,780	3,100	696	572
31	7,160	-	2,470	3,110	-	2,320	-	3,020	-	5,180	668	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	197,979	31,800	626	6,386	3.06	3.53
November	66,710	5,090	1,060	2,224	1.07	1.19
December	59,650	3,370	1,070	1,924	.923	1.06
Calendar year 1937	1,213,346	36,900	432	3,324	1.60	21.65
January	92,770	13,000	1,270	2,993	1.44	1.66
February	53,070	3,020	1,330	1,895	.909	.95
March	80,680	4,340	1,350	2,603	1.25	1.44
April	57,190	2,780	1,470	1,906	.915	1.02
May	68,061	5,420	788	2,196	1.05	1.21
June	84,238	13,900	740	2,808	1.35	1.51
July	91,100	17,100	587	2,939	1.41	1.63
August	123,095	15,700	668	3,971	1.91	2.20
September	18,434	704	534	614	.295	.33
Water year 1937-38	992,977	31,800	534	2,720	1.31	17.73

Peak discharge.- Oct. 20 (11:30 a.m.) 35,600 sec.-ft.; Oct. 28 (5:30 p.m.) 34,900 sec.-ft.; July 23 (6:45 p.m.) 27,200 sec.-ft.; Aug. 3 (10:30 p.m.) 17,600 sec.-ft.; Aug. 6 (7:45 a.m.) 19,700 sec.-ft.; Aug. 9 (3 a.m.) 18,200 sec.-ft.

James River at Holcombs Rock, Va.

Location.- Water-stage recorder, lat. 37°30', long. 79°15', at Holcombs Rock, Bedford County, half a mile downstream from Pedlar River. Zero of gage is 548.53 feet above mean sea level.
Drainage area.- 3,250 square miles.
Records available.- January 1900 to September 1915 (gage heights only), August 1931 to September 1938. December 1926 to June 1931 at Salt Creek 2 miles downstream.
Average discharge.- 10 years (1927-30, 1931-38), 3,887 second-feet.
Extremes.- Maximum discharge during year, 59,000 second-feet Oct. 20 (gage height, 22.52 feet); minimum, 329 second-feet July 6 (gage height, 3.78 feet); minimum daily discharge, 716 second-feet Sept. 12.
1926-38: Maximum discharge, 98,000 second-feet Mar. 18, 1936 (gage height, 30.78 feet), from rating curve extended above 50,000 second-feet on basis of determination of peak flow over Reusens dam and comparison of peak discharge and total run-off of flood at this station with those for other stations in the James River Basin; minimum, about 112 second-feet July 28, 1930; minimum daily discharge, 223 second-feet July 28, 1930.
Maximum stage known, 31.3 feet sometime in March 1913, from floodmarks, (discharge, about 100,000 second-feet).
Remarks.- Records excellent except those for periods of missing or faulty gage heights, Oct. 4-12, Apr. 25, 26, Aug. 13-17, Sept. 18, which were computed on basis of records for stations at Buchanan and Bent Creek and are fair. Flow regulated by power plants above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

4.3	724	7.0	5,150	16.0	31,000
4.6	1,030	8.0	7,250	18.0	39,100
5.0	1,510	10.0	11,800	20.0	47,700
5.5	2,250	12.0	17,000		
6.0	3,120	14.0	23,500		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,180	8,940	5,960	3,410	4,360	2,220	3,180	2,220	3,140	2,360	6,580	1,060
2	1,040	7,020	5,080	3,100	3,720	2,230	3,080	2,120	2,780	2,080	4,800	1,120
3	1,110	5,890	4,280	3,190	3,140	2,130	2,740	1,960	2,540	1,940	15,600	1,260
4	4,300	5,090	3,600	3,040	2,840	2,140	2,760	1,720	2,900	1,840	18,200	930
5	7,900	4,540	3,320	2,890	2,960	3,120	2,520	1,500	2,740	1,890	12,200	975
6	6,600	3,900	3,580	2,760	2,660	3,340	2,380	1,760	2,280	1,580	15,300	1,000
7	4,600	3,510	3,440	3,050	2,700	3,480	2,260	1,580	2,060	1,510	17,800	1,020
8	3,500	3,260	3,160	3,730	2,520	3,440	2,550	1,560	1,810	1,330	16,100	942
9	2,900	3,100	2,810	3,930	2,340	3,320	3,580	1,460	1,520	1,300	20,600	880
10	2,600	2,740	2,510	3,600	2,290	3,280	3,540	1,450	1,610	1,340	16,500	912
11	2,400	2,480	2,510	3,280	2,140	4,800	3,600	1,380	1,840	1,340	10,100	1,020
12	2,200	2,910	1,720	3,220	2,400	5,990	3,370	1,320	1,840	1,270	7,340	716
13	2,040	7,080	2,200	2,960	2,970	4,980	3,140	1,240	1,520	1,070	5,000	915
14	2,000	5,500	2,160	2,850	3,960	4,500	2,970	1,540	1,330	1,020	4,100	885
15	2,060	4,770	2,340	2,700	3,860	4,280	2,700	1,500	1,340	990	3,200	1,000
16	1,780	3,800	2,100	2,420	3,440	4,560	2,730	1,650	1,250	910	2,800	1,130
17	1,640	3,390	2,490	2,210	2,800	4,440	2,400	1,900	1,390	928	2,800	1,130
18	1,620	3,120	3,040	2,220	2,900	4,530	2,390	1,740	2,190	978	2,400	1,200
19	24,600	2,940	3,820	2,180	2,840	4,450	2,470	1,710	2,880	1,180	2,460	1,040
20	52,100	2,930	3,880	2,150	2,600	3,940	2,480	2,360	4,940	1,720	2,010	1,060
21	25,900	2,590	3,460	2,180	2,720	3,820	2,580	6,330	9,340	2,560	1,900	1,060
22	13,700	2,580	3,100	2,690	2,490	3,460	2,660	4,780	18,600	5,990	1,690	1,000
23	9,940	2,320	2,770	3,720	2,520	3,040	3,200	3,640	12,900	19,400	1,490	910
24	10,500	2,250	2,840	4,790	2,430	2,960	3,780	3,180	8,080	25,800	1,520	908
25	8,010	2,060	2,680	8,480	2,480	2,830	3,800	3,830	5,960	12,600	1,340	934
26	6,240	2,020	2,470	15,400	2,600	2,920	3,600	5,600	4,900	7,740	1,340	865
27	10,800	2,710	2,320	11,900	2,380	3,520	3,040	5,030	4,810	5,640	1,390	834
28	36,700	4,500	2,460	8,140	2,480	4,940	2,710	6,830	3,800	5,760	1,110	782
29	32,600	7,310	2,660	6,040	-	3,970	2,620	5,680	3,380	5,180	1,140	858
30	17,200	6,840	3,250	5,200	-	3,660	2,320	5,820	2,920	4,790	1,210	936
31	11,700	-	3,470	4,910	-	3,290	-	4,260	-	5,720	1,170	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	311,460	52,100	1,040	10,050	3.09	3.56
November	122,090	8,940	2,020	4,070	1.25	1.40
December	95,480	5,960	1,720	3,080	.948	1.09
Calendar year 1937	1,867,862	52,100	518	5,117	1.57	21.38
January	132,340	15,400	2,150	4,269	1.31	1.51
February	79,540	4,360	2,140	2,841	.874	.91
March	113,580	5,990	2,130	3,664	1.13	1.30
April	87,150	3,800	2,260	2,905	.894	1.00
May	86,650	6,830	1,240	2,960	.880	1.01
June	118,590	18,600	1,250	3,953	1.22	1.36
July	129,756	25,800	910	4,186	1.29	1.49
August	201,190	20,600	1,110	6,490	2.00	2.31
September	29,282	1,260	716	976	.300	.33
Water year 1937-38	1,509,108	52,100	716	4,135	1.27	17.27

Peak discharge.- Oct. 20 (9:15 a.m.) 59,000 sec.-ft.; Oct. 28 (5:30 p.m.) 45,100 sec.-ft.

James River at Bent Creek, Va.

Location.- Water-stage recorder, lat. 37°32', long. 78°50', at highway bridge at Bent Creek post office, Appomattox County, 150 feet downstream from Bent Creek and 1 mile downstream from Gladstone. Zero of gage is 380.67 feet above mean sea level.

Drainage area.- 3,671 square miles.

Records available.- March 1925 to September 1938.

Average discharge.- 13 years, 4,220 second-feet.

Extremes.- Maximum discharge during year, 60,700 second-feet Oct. 20 (gage height, 16.76 feet), from rating curve extended above 30,000 second-feet; minimum, 530 second-feet Sept. 23 (gage height, 2.55 feet); minimum daily discharge, 865 second-feet Sept. 5. 1925-38: Maximum discharge, 103,000 second-feet Mar. 18, 1936 (gage height, 23.02 feet), from rating curve extended above 30,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 222 second-feet Oct. 13, 14, 1930 (gage height, 2.21 feet); minimum daily discharge, 222 second-feet Oct. 13, 1930.

Remarks.- Records good except those for periods of missing or faulty gage heights, Nov. 24, 25, Jan. 2 to Mar. 7, Mar. 9 to Apr. 2, which were computed on basis of records for stations at Holcombs Rock, Scottsville, and Cartersville and are fair. Flow regulated by operation of power plants above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,300	10,800	7,290	4,760	5,400	3,000	3,900	3,210	4,180	3,120	7,220	1,690
2	1,220	8,300	6,200	3,900	4,800	2,900	3,800	2,300	3,390	2,500	5,940	1,160
3	1,200	7,250	5,240	3,800	4,100	2,900	3,280	2,460	3,260	2,940	15,000	1,060
4	6,200	6,220	4,720	3,700	3,800	3,100	3,590	2,360	3,300	1,930	20,900	1,960
5	8,730	5,300	4,630	3,600	3,600	3,600	3,260	1,980	3,450	1,860	13,600	865
6	8,130	4,940	4,100	3,400	3,500	4,000	3,010	1,980	2,880	2,260	15,300	1,250
7	5,970	4,460	4,250	4,100	3,300	4,200	3,120	2,210	2,620	1,750	19,700	890
8	4,480	4,310	4,060	4,700	3,400	4,500	3,220	1,900	2,400	1,930	17,700	1,150
9	3,410	3,860	3,660	4,700	3,100	4,000	3,820	2,300	2,040	1,670	20,000	1,140
10	3,320	4,060	3,660	4,600	2,900	4,100	4,400	1,800	3,350	1,670	18,400	1,120
11	2,660	3,640	2,940	4,100	2,900	5,500	4,390	1,480	3,260	1,510	10,800	1,270
12	2,340	2,890	3,080	4,000	3,100	6,300	4,340	1,900	2,120	1,650	7,650	1,010
13	2,450	6,700	2,060	3,800	3,300	6,000	3,760	1,580	2,820	1,430	6,080	1,020
14	2,000	7,260	3,040	3,600	4,100	5,600	3,740	1,620	1,720	1,240	5,120	1,150
15	2,100	5,830	2,890	3,400	4,500	5,400	3,680	1,360	1,760	1,230	3,790	1,040
16	2,020	4,860	2,900	3,200	4,200	5,200	3,200	1,950	1,630	1,210	3,320	1,300
17	2,200	4,380	2,770	2,900	3,700	5,200	3,340	2,360	2,160	1,070	3,400	1,260
18	1,630	3,530	3,320	2,900	3,500	6,000	2,940	1,920	3,640	1,030	3,390	1,420
19	18,000	3,560	4,220	2,800	3,600	5,900	2,960	2,160	3,660	1,630	2,830	1,080
20	57,100	3,820	4,900	2,700	3,100	5,100	3,040	2,760	11,100	1,640	2,540	1,220
21	35,900	2,960	4,140	2,800	3,500	4,800	3,200	4,600	8,680	4,400	2,440	1,390
22	17,000	3,160	4,220	3,200	3,300	4,500	3,120	7,120	20,800	6,630	2,080	1,200
23	11,800	3,060	3,690	4,200	3,300	4,100	3,280	4,560	16,000	13,400	1,900	1,170
24	11,100	3,100	3,120	5,200	3,400	3,800	4,130	3,920	10,200	30,100	1,720	1,160
25	9,470	3,100	4,060	9,400	3,400	3,600	4,140	3,710	7,250	16,700	1,660	1,050
26	7,470	2,940	3,040	15,000	3,300	3,600	4,110	5,900	5,930	9,840	1,570	1,100
27	9,270	2,980	3,100	14,000	3,200	4,200	3,690	6,000	6,380	6,800	1,560	1,160
28	29,900	5,360	3,010	10,000	3,100	4,900	3,540	6,760	5,900	6,070	1,740	1,140
29	39,200	7,040	3,000	7,400	-	5,000	3,320	7,040	4,080	6,000	1,040	1,200
30	21,600	7,880	3,440	6,400	-	4,400	2,900	6,820	3,730	5,030	1,440	1,080
31	14,500	-	4,200	5,800	-	4,100	-	5,340	-	5,420	1,520	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	343,670	57,100	1,200	11,090	3.02	3.48
November	147,550	10,800	2,880	4,918	1.34	1.50
December	118,950	7,290	2,060	3,837	1.05	1.21
Calendar year 1937	2,114,592	57,100	756	5,793	1.58	21.43
January	158,060	15,000	2,700	5,099	1.39	1.60
February	100,400	5,400	2,900	3,586	.977	1.02
March	139,500	6,300	2,900	4,500	1.23	1.42
April	106,240	4,400	2,900	3,541	.965	1.08
May	103,360	7,120	1,360	3,334	.908	1.05
June	153,690	20,800	1,630	5,123	1.40	1.56
July	145,880	30,100	1,090	4,706	1.28	1.48
August	221,350	20,900	1,040	7,140	1.94	2.24
September	35,735	1,960	865	1,191	.324	.36
Water year 1937-38	1,774,385	57,100	865	4,861	1.32	18.00

Peak discharge.- Oct. 20 (12:15 a.m.) 60,700 sec.-ft.; Oct. 29 (2 a.m.) 44,700 sec.-ft.; June 22 (12:30 p.m.) 23,900 sec.-ft.; July 24 (8 a.m.) 37,400 sec.-ft.; Aug. 6 (11 p.m.) 23,900 sec.-ft.; Aug. 9 (6 p.m.) 25,700 sec.-ft.

James River at Scottsville, Va.

Location.- Water-stage recorder, lat. 37°48', long. 78°30', at highway bridge at Scottsville, Albemarle County, 6 miles (revised) upstream from Hardware River. Zero of gage is 253.39 feet above mean sea level.
Drainage area.- 4,571 square miles.
Records available.- February 1925 to September 1938.
Average discharge.- 13 years, 5,239 second-feet.
Extremes.- Maximum discharge during year, 87,400 second-feet Oct. 20 (gage height, 22.33 feet); minimum, 1,140 second-feet Sept. 24, 28 (gage height, 2.48 feet); minimum daily discharge, 1,440 second-feet Sept. 8.
1925-38: Maximum discharge, 112,000 second-feet Mar. 19, 1936 (gage height, 25.46 feet, from floodmarks), from rating curve extended above 77,000 second-feet; minimum, 302 second-feet Oct. 1, 1930 (gage height, 1.46 feet); minimum daily discharge, 307 second-feet Oct. 15, 1930.
Maximum stage during flood of March 1913, 25.16 feet, from floodmarks (discharge, about 110,000 second-feet).
Remarks.- Records excellent except those for periods of missing or faulty gage heights, Oct. 15-18, 22-26, Dec. 10-22, June 24-30, which were computed on basis of records for stations at Bent Creek and Cartersville and are fair. Flow regulated by operation of power plants above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.8	1,510	6.0	6,790	12.0	26,700
3.0	1,760	7.0	9,110	14.0	35,500
3.5	2,440	8.0	12,000	16.0	45,400
4.0	3,190	9.0	15,300	18.0	57,000
5.0	4,880	10.0	18,900	20.0	70,500

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,140	13,700	9,080	5,160	6,970	4,080	4,930	3,460	5,440	4,350	7,380	1,950
2	2,220	10,900	8,240	5,030	6,240	4,080	4,870	3,420	4,250	3,960	8,670	2,360
3	2,090	9,100	7,260	4,550	5,560	3,940	4,680	3,400	3,920	3,450	11,900	1,910
4	10,300	8,100	6,420	4,640	5,110	4,460	3,980	3,080	3,700	3,240	27,600	1,890
5	12,600	7,190	5,880	4,540	4,600	4,220	4,270	2,770	3,910	2,960	23,500	2,440
6	11,400	6,520	5,470	4,280	4,690	4,930	3,680	2,580	3,790	2,710	18,300	1,510
7	8,900	6,080	5,800	5,640	4,240	5,140	3,920	2,620	3,280	2,880	26,000	1,780
8	7,020	5,490	5,440	6,360	4,560	4,820	4,400	2,620	3,180	2,520	22,100	1,440
9	5,540	5,260	5,180	5,820	4,180	4,980	5,030	2,460	2,780	2,510	20,800	1,860
10	5,180	4,960	4,100	5,940	3,860	5,300	5,600	2,720	2,870	2,500	25,000	1,650
11	4,120	4,640	3,900	5,340	4,040	6,490	5,190	2,250	5,720	2,300	51,500	1,820
12	4,000	4,610	3,800	5,080	4,120	6,690	5,280	2,060	3,570	2,290	10,300	1,720
13	3,770	6,820	3,300	5,000	3,990	7,690	5,040	2,330	3,720	2,160	8,350	2,090
14	3,660	9,390	3,500	4,670	4,380	7,020	4,480	2,210	2,720	1,990	7,090	1,800
15	3,400	8,060	3,700	4,480	5,470	6,900	4,380	2,860	2,300	1,700	5,690	1,980
16	3,200	6,800	3,700	4,330	5,360	6,060	4,580	2,620	2,390	1,840	4,940	1,820
17	3,200	5,660	3,700	3,900	4,920	6,300	4,080	2,740	2,980	1,480	4,660	2,040
18	3,100	5,300	4,100	3,860	4,320	8,080	3,740	2,710	3,780	1,810	6,000	1,800
19	15,700	5,140	4,700	3,850	4,650	7,820	4,190	2,820	4,940	1,900	4,070	2,040
20	77,200	4,960	5,400	3,450	5,850	6,770	4,000	2,990	8,640	2,930	4,000	2,040
21	56,200	4,770	5,100	3,790	4,680	6,060	3,830	3,740	18,100	4,710	3,300	2,500
22	24,000	4,060	5,200	4,040	4,600	5,940	4,040	6,630	18,800	8,830	3,340	2,040
23	15,000	4,420	4,900	4,920	4,420	5,640	4,090	6,220	21,400	14,300	2,720	2,060
24	13,000	3,910	4,340	5,820	4,860	4,920	4,230	4,680	14,000	34,000	2,880	1,530
25	11,000	3,860	4,410	10,700	4,760	4,770	5,120	4,480	9,400	25,400	2,520	1,830
26	9,500	3,610	4,360	14,300	4,460	4,680	4,720	4,460	7,600	15,000	2,440	1,560
27	10,900	4,070	3,840	18,500	4,350	5,010	4,460	7,780	7,400	10,100	2,370	1,800
28	26,900	8,280	4,210	12,800	4,100	4,920	4,390	6,670	9,400	8,660	2,370	1,580
29	46,600	8,820	3,980	9,420	-	6,660	3,790	7,240	6,800	7,560	2,140	1,580
30	30,400	9,790	4,120	8,160	-	5,540	4,080	7,110	5,000	7,550	1,790	1,680
31	18,800	-	4,560	7,370	-	5,360	-	6,640	-	10,000	2,440	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	451,040	77,200	2,090	14,550	3.18	3.67
November	194,270	13,700	3,610	6,476	1.42	1.58
December	151,690	9,080	3,300	4,893	1.07	1.23
Calendar year 1937	2,841,400	77,200	1,340	7,785	1.70	23.12
January	195,750	18,500	3,450	6,315	1.38	1.59
February	133,240	6,970	3,860	4,759	1.04	1.08
March	175,270	8,080	3,940	5,654	1.24	1.43
April	133,070	5,600	3,680	4,436	.970	1.08
May	120,370	7,780	2,060	3,883	.849	.98
June	195,780	21,400	2,300	6,526	1.43	1.60
July	197,590	34,000	1,480	6,374	1.39	1.60
August	290,160	27,600	1,790	9,360	2.05	2.36
September	56,010	2,500	1,440	1,867	.408	.46
Water year 1937-38	2,294,240	77,200	1,440	6,286	1.38	18.66

Peak discharge.- Oct. 20 (8:15 a.m.) 87,400 sec.-ft.; June 21 (1:30 a.m.) 28,000 sec.-ft.; June 22 (11 p.m.) 27,100 sec.-ft.; July 24 (4:30 p.m.) 41,300 sec.-ft.; Aug. 4 (9:15 p.m.) 31,000 sec.-ft.; Aug. 10 (5 a.m.) 27,500 sec.-ft.

James River at Cartersville, Va.

Location.- Water-stage recorder, lat. 37°40', long. 78°05', at highway bridge between Pemberton and Cartersville, Cumberland County, 2 miles (revised) downstream from Willis River. Zero of gage is 161.57 feet above mean sea level.
Drainage area.- 6,242 square miles.
Records available.- January 1899 to September 1938.
Average discharge.- 38 years (1899-1904), (1905-38), 7,313 second-feet.
Extremes.- Maximum discharge during year, 98,400 second-feet Oct. 21 (gage height, 24.34 feet); minimum, 1,620 second-feet Sept. 9; minimum gage height, 0.96 foot July 18; minimum daily discharge, 1,860 second-feet July 18.
1899-1938: Maximum discharge, 149,000 second-feet Mar. 19, 1936 (gage height, 28.77 feet, from floodmarks), from rating curve extended above 78,000 second-feet on basis of velocity-area studies, determination of peak flow by slope-area method, and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 320 second-feet Sept. 22, 1932 (gage height, 0.11 foot); minimum daily discharge, 348 second-feet Oct. 5, 1930.
Remarks.- Records good. Flow regulated by operation of power plants above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 24

1.2	2,040	10.0	23,600
1.6	2,690	12.0	31,600
2.0	3,370	14.0	40,600
3.0	5,150	16.0	50,100
4.0	7,100	18.0	60,000
5.0	9,220	20.0	70,000
6.0	11,500	22.0	81,500
8.0	16,900		

July 25 to Sept. 30

1.2	1,910
1.6	2,540
2.0	3,220
3.0	4,980
4.0	6,920
5.0	9,040
6.0	11,400

Note.- Same as preceding table above 7.8 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,290	17,200	11,600	5,940	8,680	5,690	6,570	4,580	6,440	5,900	9,250	2,670
2	2,900	13,600	10,400	6,380	7,930	5,540	6,290	4,710	5,480	4,850	9,720	2,280
3	2,880	11,500	9,220	6,180	7,360	5,520	5,970	3,740	4,610	4,300	12,900	2,590
4	12,900	10,200	8,220	5,640	6,530	6,570	5,670	4,110	4,570	4,410	28,000	2,420
5	23,700	9,100	7,530	5,720	6,420	6,260	5,120	3,720	4,420	3,370	28,800	2,760
6	17,700	8,260	7,420	5,620	5,620	6,170	5,220	3,300	4,520	3,340	21,600	2,200
7	14,200	7,760	7,160	7,670	5,720	6,980	4,980	3,440	4,030	3,280	24,000	1,960
8	10,100	7,140	6,860	10,100	5,540	6,420	6,120	3,280	3,870	2,900	23,700	2,090
9	7,880	6,830	6,540	8,460	5,560	6,210	8,120	3,240	3,740	3,060	22,400	1,930
10	6,780	6,280	5,970	7,690	5,020	7,110	7,900	3,110	3,260	3,180	25,300	2,180
11	6,540	6,220	5,620	7,040	5,060	9,940	7,310	3,080	5,920	3,280	18,600	2,020
12	5,320	6,040	5,100	6,830	5,520	9,140	6,940	2,880	5,780	2,770	12,200	2,190
13	4,900	9,640	5,300	6,330	5,680	9,860	6,740	2,770	4,980	2,720	9,380	2,170
14	4,820	13,100	4,480	6,320	5,650	9,290	6,170	2,940	4,820	2,550	7,820	2,550
15	4,640	11,200	5,340	5,840	6,180	10,700	5,880	3,540	3,040	2,360	6,610	2,380
16	4,280	9,180	5,140	5,520	6,570	8,790	5,720	4,110	2,600	2,150	5,540	2,850
17	4,300	8,000	5,400	5,840	6,340	8,620	5,440	3,120	3,350	2,120	4,850	2,380
18	4,200	7,460	5,330	4,580	5,680	12,900	5,320	3,340	4,820	1,860	7,920	2,460
19	7,200	6,320	5,580	4,880	5,420	12,500	5,090	3,580	6,120	2,320	6,060	2,500
20	77,000	6,440	6,220	4,960	8,360	10,300	5,260	3,660	7,350	3,280	4,540	2,600
21	90,200	6,740	6,680	4,620	10,700	9,220	5,060	4,430	23,300	5,310	4,360	3,500
22	46,900	5,920	6,290	5,360	7,240	8,120	5,020	5,760	19,700	11,700	3,670	3,410
23	25,100	5,120	5,990	6,000	6,990	7,540	5,150	7,750	27,000	15,800	3,700	2,580
24	18,100	5,240	5,720	7,370	8,280	6,820	5,100	5,640	18,400	34,900	3,010	2,520
25	15,800	5,020	5,280	13,600	7,520	6,380	5,740	5,220	12,100	35,800	2,990	1,980
26	13,100	4,940	5,640	17,100	6,900	6,160	5,800	5,200	9,730	20,600	2,940	2,120
27	13,000	5,160	5,190	20,700	6,260	6,280	5,730	8,670	8,320	13,600	2,680	1,980
28	28,400	8,900	5,120	16,500	5,920	6,670	5,310	8,220	14,500	11,800	2,700	2,120
29	47,700	13,100	5,460	12,200	-	7,180	5,140	8,050	10,300	9,440	2,800	1,940
30	44,200	12,100	5,260	10,300	-	7,390	4,700	8,090	6,760	10,700	2,180	2,060
31	24,900	-	5,320	9,600	-	6,740	-	7,880	-	14,100	2,300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	592,930	90,200	2,880	19,130	3.06	3.53
November	253,710	17,200	4,940	8,457	1.35	1.51
December	196,380	11,600	4,480	6,335	1.01	1.16
Calendar year 1937	3,875,310	110,000	1,740	10,620	1.70	23.08
January	250,890	20,700	4,580	8,093	1.30	1.50
February	184,650	10,700	5,020	6,595	1.06	1.10
March	242,650	12,900	5,520	7,827	1.25	1.44
April	174,580	8,120	4,700	5,819	.932	1.04
May	145,160	8,670	2,770	4,683	.750	.86
June	243,830	27,000	2,600	8,128	1.30	1.45
July	247,770	35,800	1,860	7,993	1.28	1.48
August	322,520	28,800	2,180	10,400	1.67	1.92
September	71,390	3,500	1,930	2,380	.381	.43
Water year 1937-38	2,926,460	90,200	1,860	8,018	1.28	17.42

Peak discharge.- Oct. 21 (12:30 a.m.) 98,400 sec.-ft.; Oct. 29 (11 p.m.) 55,000 sec.-ft.; June 21 (10:15 a.m.) 29,500 sec.-ft.; June 23 (5 a.m.) 30,400 sec.-ft.; July 25 (12:30 a.m.) 45,300 sec.-ft.; Aug. 7 (8:15 p.m.) 28,700 sec.-ft.

James River near Richmond, Va.

Location.- Water-stage recorder, lat. 37°33'47", long. 77°32'50", at Westham highway bridge, 1¾ miles downstream from Bosher Dam and 3 miles west of city limits of Richmond, Henrico County. Zero of gage is 98.82 feet above mean sea level.
Drainage area.- 6,757 square miles.
Records available.- October 1934 to September 1938.
Extremes.- Maximum discharge during year, 92,500 second-feet Oct. 21 (gage height, 18.20 feet); minimum, 1,150 second-feet Sept. 10 (gage height, 3.49 feet); minimum daily discharge, 1,370 second-feet Sept. 10.
1934-38: Maximum discharge, 158,000 second-feet Mar. 19, 1936 (gage height, 23.42 feet), from rating curve extended above 90,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 208 second-feet Sept. 25, 1936 (gage height, 2.74 feet); minimum daily discharge, 274 second-feet Sept. 25, 1936.
Remarks.- Records excellent. Flow regulated by operation of power plants above station. Gage-height record collected in cooperation with U. S. Weather Bureau. James River & Kanawha Canal diverts above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.6	1,350	6.0	8,420	12.0	39,800
4.0	2,170	7.0	12,100	14.0	54,700
4.5	3,500	8.0	16,200	16.0	71,100
5.0	5,040	10.0	26,600	18.0	90,300

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,460	19,200	11,900	5,880	9,210	5,700	6,710	5,060	7,000	6,180	11,400	1,780
2	3,300	14,900	10,800	6,700	8,540	5,460	7,000	3,850	5,710	5,160	9,580	1,990
3	3,200	12,400	9,860	6,340	7,630	5,760	6,720	4,020	4,500	4,940	10,000	1,860
4	5,890	10,800	9,060	5,740	7,100	6,900	5,650	3,340	4,120	3,600	22,300	2,360
5	23,800	9,720	8,230	5,670	6,700	7,850	4,840	3,310	3,980	3,620	28,900	1,780
6	20,000	9,080	7,360	5,520	6,260	7,490	5,060	3,020	4,000	2,770	23,900	2,220
7	16,200	8,600	6,940	7,120	5,720	7,240	4,880	2,660	3,880	2,620	21,300	1,480
8	12,200	7,350	7,160	11,300	5,280	7,080	6,010	2,960	3,360	2,670	25,200	1,420
9	9,600	6,600	6,620	10,200	5,420	6,330	9,100	2,680	3,170	2,290	22,000	1,440
10	7,750	6,400	6,370	8,140	5,140	7,180	9,660	2,520	3,260	2,540	22,800	1,370
11	6,830	5,980	5,740	7,740	4,840	10,200	8,040	2,570	3,440	2,800	22,200	1,550
12	5,620	6,010	5,520	7,070	5,810	11,300	6,890	2,380	6,480	2,780	15,500	1,420
13	5,120	9,160	4,760	6,720	6,410	10,400	6,820	2,180	4,760	2,630	10,600	1,630
14	4,660	13,600	4,570	6,520	5,660	9,880	6,300	2,260	4,600	2,320	8,760	1,660
15	4,590	12,600	4,520	6,340	5,660	10,700	5,760	2,460	3,460	2,020	7,250	1,920
16	4,520	10,300	4,990	6,020	6,580	10,900	6,060	3,200	2,300	2,000	6,000	1,960
17	4,280	8,740	5,260	5,440	6,400	8,820	6,360	3,220	2,140	1,680	5,100	2,100
18	3,720	7,480	5,600	5,280	5,990	12,000	5,780	2,660	3,440	1,670	5,500	1,820
19	4,220	6,960	5,640	4,600	5,860	15,700	4,880	2,800	4,860	1,480	7,660	1,910
20	44,500	6,820	5,680	4,720	7,140	12,900	5,020	3,000	7,120	2,340	4,860	2,590
21	85,100	6,720	6,100	4,690	12,500	10,100	4,700	3,200	17,300	4,220	4,560	2,840
22	76,100	6,040	6,350	5,340	8,450	8,500	4,730	3,980	21,200	9,590	3,500	3,420
23	33,000	5,270	5,670	6,500	7,120	7,900	5,480	6,600	26,100	15,100	3,200	2,580
24	21,800	5,260	5,740	6,780	8,300	7,350	5,520	6,410	21,600	29,700	2,880	1,990
25	16,300	4,860	5,560	9,700	8,900	6,590	4,610	4,790	14,400	41,300	2,500	1,910
26	14,500	4,920	5,580	17,200	7,860	7,100	5,520	4,880	10,600	28,000	2,330	1,470
27	12,900	5,080	5,560	18,600	7,080	7,110	5,140	6,200	9,040	19,100	2,320	1,560
28	22,000	6,620	4,720	19,400	6,220	6,550	4,980	9,960	12,600	13,300	2,120	1,460
29	38,700	12,400	5,270	14,400	-	6,240	4,780	8,240	15,200	11,400	2,100	1,540
30	48,300	12,100	4,980	11,500	-	7,730	5,180	7,860	8,680	10,300	2,200	1,440
31	29,500	-	5,080	10,000	-	6,860	-	7,610	-	14,000	1,600	-

Month	Observed				Diversion by James River & Kanawha canal (mean)*	Adjusted for diversion		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Run-off in inches
October	591,660	85,100	3,200	19,090	809	19,890	2.94	3.39
November	261,970	19,200	4,860	8,732	696	9,428	1.40	1.56
December	197,190	11,900	4,520	6,361	722	7,083	1.05	1.21
Calendar year 1937	3,946,490	140,000	1,300	10,810	733	11,550	1.71	23.19
January	257,170	19,400	4,600	8,296	683	8,979	1.33	1.53
February	193,780	12,500	4,840	6,921	700	7,620	1.13	1.18
March	261,820	15,700	5,460	8,446	581	9,027	1.34	1.54
April	178,180	9,660	4,610	5,939	539	6,479	.959	1.07
May	129,880	9,960	2,150	4,190	737	4,927	.729	.84
June	242,300	26,100	2,140	8,077	796	8,873	1.31	1.46
July	254,120	41,300	1,480	8,197	738	8,936	1.32	1.52
August	320,120	28,900	1,600	10,330	702	11,030	1.63	1.88
September	56,470	3,420	1,370	1,882	696	2,579	.382	.43
Water year 1937-38	2,944,660	85,100	1,370	8,068	700	8,768	1.30	17.61

*James River & Kanawha Canal diverts above station (see records of James River & Kanawha Canal near Richmond, Va).

Warm Spring at Warm Springs, Va.

Location.- Water-stage recorder, lat. 38°03'11", long. 79°46'52", just above V-shaped weir about 200 feet downstream from Warm Spring, at town of Warm Springs, Bath County.

Records available.- June 1928 to September 1938.

Extremes.- Maximum daily discharge during year, 2.44 second-feet Apr. 11; minimum, 1.72 second-feet Jan. 21.
1928-38: Maximum daily discharge, 5.45 second-feet Nov. 18, 1929 (flow probably increased somewhat by local surface run-off); minimum, 1.35 second-feet Feb. 25, 26, 1931.

Remarks.- Records fair except those estimated, which were based on weather records and gage heights and are poor.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.2	1.79
1.3	2.35
1.4	3.00

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.12	2.16	†2.15	†2.20	†2.00	2.21	2.31	2.40	2.30	2.38	2.34	2.14
2	2.09	2.22	†2.15	2.20	†2.05	2.20	2.30	2.30	2.32	2.40	2.34	2.20
3	2.16	2.24	†2.20	2.07	†2.05	2.18	2.30	2.38	2.34	2.38	2.32	†2.20
4	2.22	2.16	†2.20	1.80	†2.10	2.18	2.20	2.32	2.34	2.34	2.16	†2.20
5	2.18	2.21	†2.20	1.88	†2.10	2.22	2.22	2.33	2.32	2.35	2.28	†2.20
6	2.08	2.20	†2.20	2.02	†2.15	2.38	2.27	2.38	2.32	2.34	2.28	†2.20
7	2.12	2.14	†2.25	2.00	†2.15	2.32	2.24	2.36	2.36	2.32	2.30	†2.20
8	2.14	2.13	†2.25	2.01	†2.20	2.27	2.26	2.43	2.35	2.34	2.36	†2.20
9	2.11	2.16	2.28	2.00	2.20	2.15	2.24	2.37	2.32	2.32	2.26	†2.20
10	2.02	2.22	2.22	2.00	2.20	2.22	2.30	2.35	2.32	2.36	2.24	†2.15
11	2.08	2.18	2.30	2.00	2.22	2.27	2.44	‡2.30	2.32	2.34	2.19	†2.15
12	2.10	2.15	2.30	2.00	2.29	2.30	2.42	‡2.30	2.36	2.34	2.26	†2.15
13	2.08	2.20	2.32	2.06	2.23	2.29	2.40	‡2.30	2.32	2.35	2.22	†2.15
14	2.08	2.18	2.30	1.96	2.20	2.20	2.40	‡2.30	2.30	2.30	2.22	†2.15
15	2.04	2.19	2.31	1.78	2.20	2.28	2.36	‡2.30	2.27	2.33	2.22	†2.15
16	2.08	2.21	2.28	1.81	2.24	2.27	2.26	‡2.30	2.23	2.30	2.23	†2.15
17	2.06	2.20	2.20	1.84	2.24	2.26	2.30	‡2.30	2.25	2.35	2.23	†2.15
18	2.04	2.20	2.20	1.86	2.26	2.28	2.38	‡2.30	2.23	2.26	2.24	†2.15
19	*2.06	2.20	2.23	1.91	2.30	2.23	2.29	‡2.30	2.26	2.26	2.21	†2.15
20	*2.10	2.20	2.24	1.85	2.35	2.22	2.28	‡2.30	2.28	2.22	2.23	†2.15
21	2.12	2.20	2.24	1.72	2.30	2.20	2.31	‡2.30	2.26	2.20	2.22	†2.15
22	2.05	2.18	2.25	1.81	2.26	2.18	2.33	‡2.30	2.24	2.29	2.24	†2.15
23	2.12	2.12	2.27	1.82	2.39	2.17	2.36	‡2.30	2.22	2.35	2.22	†2.10
24	2.14	†2.08	2.25	1.82	2.33	2.24	2.32	‡2.30	2.26	2.37	‡2.20	†2.10
25	2.09	2.04	2.22	1.86	2.34	2.28	2.32	2.30	2.28	2.34	‡2.20	†2.10
26	2.08	2.06	2.22	1.88	2.32	2.32	2.26	2.26	2.33	2.40	‡2.20	†2.10
27	*2.10	2.10	2.18	†1.90	2.34	2.19	2.29	2.26	2.26	2.35	‡2.20	†2.10
28	*2.13	†2.10	2.22	†1.90	2.20	2.19	2.28	2.25	2.17	2.24	‡2.20	†2.10
29	*2.16	†2.10	†2.20	†1.95	-	2.22	2.35	2.27	2.34	2.31	‡2.20	†2.10
30	2.18	†2.15	†2.20	†1.95	-	2.26	2.40	2.24	2.36	2.36	‡2.20	†2.10
31	2.14	-	†2.20	†2.00	-	2.34	-	2.24	-	2.36	2.22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	65.27	2.22	2.02	2.11		
November	64.88	2.24	2.04	2.16		
December	69.23	2.32	2.15	2.23		
Calendar year 1937	885.51	2.86	2.02	2.43		
January	59.86	2.20	1.72	1.93		
February	62.21	2.39	2.00	2.22		
March	69.52	2.38	2.15	2.24		
April	69.39	2.44	2.20	2.31		
May	71.64	2.43	2.24	2.31		
June	68.83	2.36	2.17	2.29		
July	72.15	2.40	2.20	2.33		
August	69.43	2.36	2.16	2.24		
September	64.49	2.20	2.10	2.15		
Water year 1937-38	806.90	2.44	1.72	2.21		

*Flow over weir augmented by surface inflow; discharge estimated.
†Gage height missing; discharge estimated.
‡Debris on weir; discharge estimated.

Dunlap Creek near Covington, Va.

Location.- Chain gage, lat. 37°48', long. 80°03', at highway bridge, 2 miles downstream from Ogle Creek and 3 miles west of Covington, Alleghany County. Zero of gage is 1,294.21 feet above mean sea level.
Drainage area.- 166 square miles.
Records available.- December 1928 to September 1938.
Extremes.- Maximum discharge observed during year, 4,280 second-feet Oct. 27 (gage height, 7.56 feet); minimum, 16 second-feet Sept. 7 (gage height, 1.05 feet).
1928-38: Maximum discharge observed, 8,370 second-feet Mar. 17, 1936 (gage height, 10.52 feet, from floodmarks), from rating curve extended above 4,500 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in the James River Basin; minimum, 8 second-feet Aug. 27, 28, 30, 1932 (gage height, 0.88 foot).
Remarks.- Records good except those for period of ice effect, Dec. 11-14, and period of missing gage heights, Feb. 19, 20, which were computed on basis of weather records, observer's notes, and records for Potts Creek near Covington, Jackson River at Falling Spring, Cowpasture River near Clifton Forge, and James River at Lick Run and are fair. Gage read twice daily.

Rating tables, water year 1937-38 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Aug. 9				Aug. 10 to Sept. 30	
1.2	34	2.6	338	1.2	29
1.4	57	3.0	486	1.4	52
1.6	87	3.5	715	1.6	81
1.8	123	4.0	990	1.8	117
2.0	167	5.0	1,680	2.0	161
2.3	246			2.3	240
				2.6	336

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	192	167	167	136	81	167	87	192	81	73	24
2	22	156	156	144	112	81	144	77	167	77	67	22
3	27	131	131	131	106	101	131	71	180	74	355	22
4	121	115	115	119	101	338	114	68	144	65	192	21
5	131	101	112	112	94	291	108	76	115	57	125	20
6	84	94	121	104	89	372	101	71	99	52	108	19
7	65	84	106	127	87	408	110	60	85	47	276	19
8	52	77	97	127	81	306	114	56	77	45	261	19
9	47	70	96	117	73	246	131	55	68	43	1,170	19
10	44	64	82	117	71	322	180	53	63	47	390	19
11	43	58	74	123	77	528	167	51	57	43	212	19
12	41	63	66	112	372	408	156	50	53	40	150	19
13	37	87	62	108	390	306	144	45	51	36	108	21
14	38	104	60	97	291	261	136	53	47	36	83	22
15	36	104	65	94	232	246	125	82	43	35	70	24
16	34	99	74	82	192	232	115	77	47	32	62	27
17	32	96	218	84	167	232	108	71	52	33	55	36
18	31	85	276	84	144	232	104	70	63	36	55	31
19	486	77	232	76	130	205	115	87	97	41	48	25
20	528	74	192	73	130	192	102	715	427	45	44	24
21	246	70	167	104	119	167	99	466	1,310	92	38	23
22	167	65	144	446	101	156	110	246	875	180	34	23
23	820	57	131	466	101	142	156	167	446	232	32	22
24	390	52	115	372	97	136	156	261	291	291	30	20
25	246	55	104	528	97	121	144	408	205	180	28	19
26	180	53	96	528	97	306	129	466	167	114	27	19
27	1,760	82	85	355	101	486	114	930	144	104	26	20
28	1,920	218	101	261	94	338	104	446	125	156	24	19
29	715	346	167	205	-	261	99	930	102	94	24	20
30	355	205	180	180	-	218	94	427	87	84	23	24
31	261	-	180	167	-	192	-	276	-	90	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,981	1,920	22	290	1.75	2.02
November	3,034	246	52	101	.608	.68
December	3,972	276	60	128	.771	.89
Calendar year 1937	70,285	3,470	16	193	1.16	15.76
January	5,810	528	73	187	1.13	1.30
February	3,682	390	71	139	.837	.87
March	7,911	528	81	255	1.54	1.78
April	3,777	180	94	126	.759	.85
May	6,998	930	45	226	1.36	1.57
June	5,679	1,310	43	196	1.18	1.32
July	2,582	291	32	83.3	.502	.58
August	4,214	1,170	23	136	.819	.94
September	661	36	19	22.0	.133	.15
Water year 1937-38	57,701	1,920	19	158	.952	12.95

Potts Creek near Covington, Va.

Location.- Chain gage, lat. 37°44', long. 80°02', at highway bridge, a quarter of a mile upstream from Hays Creek and 3 miles southwest of Covington, Alleghany County. Zero of gage is 1,257.61 feet above mean sea level.
Drainage area.- 158 square miles.
Records available.- December 1928 to September 1938.
Extremes.- Maximum discharge observed during year, 2,320 second-feet Oct. 28, June 21 (gage height, 5.02 feet); minimum, 30 second-feet Oct. 3 (gage height, 1.50 feet).
1928-38: Maximum discharge observed, about 9,710 second-feet Jan. 23, 1935 (gage height, 10.10 feet), from rating curve extended above 4,000 second-feet on basis of velocity-area studies; minimum, 13 second-feet Nov. 29, 1930 (gage height, 1.30 feet).
Remarks.- Records fair. Gage read twice daily. Discharge for period of ice effect, Dec. 11-14, and for days of missing or faulty gage heights, Apr. 1, July 1, computed on basis of observer's notes, weather records, and records for Dunlap Creek near Covington, Jackson River at Falling Spring, Cowpasture River near Clifton Forge, and James River at Lick Run.

Rating tables, water year 1937-38 except period of ice effect (gage height, in feet, and discharge in second-feet)

Oct. 1 to Jan. 25				Jan. 26 to Sept. 30			
1.6	43	2.6	412	1.6	39	2.6	384
1.8	77	3.0	695	1.8	72	3.0	670
2.0	126	3.5	1,070	2.0	118	3.5	1,070
2.2	196	4.0	1,470	2.2	185	4.0	1,470
2.4	294	4.5	1,870	2.4	274	4.5	1,870

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	460	169	129	198	98	160	100	134	200	416	46
2	33	393	173	121	149	93	146	91	153	214	290	45
3	33	242	166	118	146	210	137	85	202	193	1,030	45
4	142	210	158	112	143	430	121	78	163	149	520	44
5	148	169	158	110	137	310	118	76	134	116	343	42
6	118	155	155	112	124	349	110	72	121	106	484	42
7	97	142	139	152	118	343	113	68	106	93	416	39
8	73	126	123	136	106	260	153	65	96	85	338	38
9	66	121	97	126	100	223	160	61	82	85	423	39
10	62	115	84	123	98	343	167	59	76	80	338	39
11	60	107	80	121	106	378	153	56	91	74	265	38
12	55	104	75	121	193	367	149	52	76	70	181	37
13	54	118	70	115	174	326	140	56	67	63	160	37
14	52	136	70	107	171	295	134	63	58	56	137	37
15	49	132	92	99	167	255	127	82	51	51	116	44
16	49	132	132	95	156	236	121	70	50	51	108	51
17	49	129	169	97	149	206	113	65	46	51	96	50
18	46	123	169	97	140	189	113	72	121	54	91	48
19	620	118	158	95	130	181	113	98	121	140	85	45
20	1,230	107	155	95	130	178	106	210	1,030	156	78	44
21	920	104	145	142	124	160	100	246	2,050	143	74	42
22	480	99	132	258	118	146	124	189	1,390	1,310	67	42
23	920	97	126	289	127	137	167	156	910	1,390	59	42
24	550	92	121	273	124	130	163	174	595	870	56	39
25	400	90	112	1,230	118	118	156	193	423	449	54	39
26	339	88	107	670	113	265	146	236	349	390	54	38
27	1,310	107	102	436	108	338	140	670	338	284	54	34
28	2,140	252	136	343	103	284	127	367	332	349	51	32
29	1,870	242	142	284	-	246	110	372	274	246	50	33
30	732	196	145	246	-	219	103	305	181	830	48	39
31	550	-	142	227	-	193	-	193	-	595	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	13,281	2,140	33	428	2.71	3.12
November	4,706	460	88	157	.994	1.11
December	4,002	173	70	129	.816	.94
Calendar year 1937	82,443	2,500	24	226	1.43	19.42
January	6,679	1,230	95	215	1.36	1.57
February	3,770	198	98	135	.854	.89
March	7,506	430	93	242	1.53	1.76
April	3,990	167	100	133	.842	.94
May	4,680	670	52	151	.956	1.10
June	9,820	2,050	46	327	2.07	2.31
July	8,943	1,390	51	288	1.82	2.10
August	6,527	1,030	45	211	1.34	1.54
September	1,230	51	32	41.0	.259	.29
Water year 1937-38	75,134	2,140	32	206	1.30	17.67

Cowpasture River near Clifton Forge, Va.

Location.- Water-stage recorder, lat. 37°48', long. 79°46', at iron highway bridge, 1½ miles upstream from confluence with Jackson River and 4 miles southeast of Clifton Forge, Alleghany County. Zero of gage is 1,006.93 feet above mean sea level.

Drainage area.- 456 square miles.

Records available.- May 1907 to August 1908, March 1925 to September 1938.

Average discharge.- 13 years (1925-38), 496 second-feet.

Extremes.- Maximum discharge during water year 1935-36, about 22,400 second-feet Mar. 18 (gage height, 18.62 feet), from rating curve extended above 4,000 second-feet; minimum, 63 second-feet Sept. 19 (gage height, 1.81 feet).

Maximum discharge during water year 1936-37, 10,100 second-feet Jan. 21 (gage height, 11.57 feet), from rating curve extended above 4,000 second-feet; minimum, 70 second-feet Aug. 6, 7 (gage height, 1.85 feet).

Maximum discharge during water year 1937-38, 10,100 second-feet Oct. 20 (gage height, 11.56 feet), from rating curve extended above 4,000 second-feet; minimum, 85 second-feet Sept. 12 (gage height, 1.93 feet).

1907-8, 1925-38: Maximum discharge, about 22,400 second-feet Mar. 18, 1936 (gage height, 18.62 feet), from rating curve extended above 4,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in the James River Basin; minimum, 38 second-feet Sept. 2, 1932 (gage height, 1.70 feet).

Maximum stage known, 20.8 feet, from floodmarks, sometime in March 1913 (discharge, about 26,600 second-feet).

Remarks.- Records good except those above 6,000 second-feet, those for period of ice effect, Jan. 24-27, 30, 1936 (computed on basis of gage heights, weather records and records for Potts Creek near Covington, Dunlap Creek near Covington, Jackson River at Falling Spring, and James River at Lick Run), and those for periods of missing or faulty gage heights, Sept. 19-30, 1936, Aug. 4, 1938 (computed on basis of records for stations just cited, all of which are fair.

Revisions.- Records for water years 1935-36 and 1936-37, published herewith, supersede those published in previous water-supply papers.

Rating table, Mar. 19, 1936 to Sept. 30, 1936 (gage height, in feet, and discharge, in second-feet)

2.0	100	3.5	770	7.0	3,820
2.2	150	4.0	1,100	8.0	4,980
2.4	214	4.5	1,470	10.0	7,670
2.7	332	5.0	1,870		
3.0	480	6.0	2,780		

Discharge, in second-feet, 1935-38

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	112	669	290	290	1,290	929	278	137	110	98	87
2	92	97	514	500	278	1,090	1,100	266	134	117	87	85
3	90	92	404	2,970	262	960	1,590	266	132	117	87	89
4	88	90	336	3,500	315	830	1,060	298	134	112	87	87
5	86	90	294	1,700	400	800	896	311	150	110	82	85
6	88	88	251	1,320	395	800	3,420	266	142	165	85	85
7	92	123	236	1,400	251	746	3,930	250	132	207	87	75
8	92	164	258	1,580	255	658	2,000	239	142	145	89	73
9	90	152	589	2,280	274	583	1,630	232	150	127	87	76
10	88	137	646	3,030	298	551	2,680	221	168	117	76	75
11	e6	128	540	1,910	255	551	2,040	221	156	153	85	73
12	86	249	463	1,400	232	710	1,630	232	207	234	80	71
13	e6	1,540	668	1,190	255	800	1,430	270	378	337	85	70
14	86	1,460	2,040	1,120	1,820	746	1,170	294	403	180	93	75
15	86	669	1,500	1,090	3,850	658	996	262	250	142	85	75
16	86	448	1,320	1,580	3,100	606	896	232	197	119	87	73
17	81	376	1,160	1,360	1,960	7,370	764	225	168	107	102	76
18	77	395	895	1,120	2,980	15,600	672	211	171	100	91	71
19	79	395	710	2,910	2,370	4,560	602	218	177	105	82	68
20	83	344	583	2,920	1,500	3,280	545	228	159	114	78	68
21	77	306	488	1,580	1,090	3,820	502	228	147	117	89	66
22	83	274	381	1,160	862	2,680	459	204	134	100	96	68
23	81	278	424	928	698	2,000	428	183	127	93	85	68
24	86	270	390	640	629	1,790	398	174	124	105	110	68
25	83	240	327	580	734	1,670	369	165	129	110	129	68
26	79	229	266	540	2,410	1,390	350	162	127	119	102	68
27	77	218	240	460	3,620	1,510	332	156	117	102	100	66
28	77	349	310	376	2,760	2,130	319	153	112	119	122	66
29	137	1,190	327	353	1,660	1,750	303	147	107	129	107	66
30	149	960	319	400	-	1,390	290	142	107	114	98	82
31	146	-	255	310	-	1,140	-	140	-	114	91	-

Discharge, in second-feet, of Cowpasture River near Clifton Forge, Va., 1935-38--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	254	107	93	2,240	1,280	562	274	929	183	110	96	1,700
2	194	112	100	3,530	1,140	496	262	776	183	100	96	896
3	140	110	112	5,080	929	459	250	672	183	100	93	579
4	105	110	129	2,820	770	413	239	573	180	100	80	428
5	89	124	140	1,670	696	395	250	523	171	107	87	388
6	89	122	166	1,140	619	378	303	507	454	119	76	408
7	87	137	2,840	996	556	355	337	475	258	114	82	896
8	80	129	1,840	1,430	648	364	328	418	200	122	174	864
9	87	127	896	1,170	870	378	341	388	174	134	112	619
10	100	124	613	962	2,490	355	388	350	156	110	176	459
11	114	122	523	820	1,670	341	369	324	156	119	165	369
12	117	112	1,000	720	1,170	332	337	298	162	164	194	324
13	107	112	1,240	690	962	324	315	298	140	129	200	282
14	91	105	832	708	832	393	311	449	132	186	265	236
15	87	107	619	864	758	590	341	475	124	214	153	204
16	184	110	518	1,280	708	551	346	428	122	177	122	183
17	3,470	107	625	1,560	832	502	324	378	129	137	107	165
18	1,620	107	770	2,580	739	568	303	346	134	137	102	150
19	625	100	678	2,310	708	619	282	341	162	117	96	142
20	378	100	929	4,900	660	602	266	470	150	132	119	137
21	270	100	996	7,640	748	602	254	444	147	225	147	132
22	218	98	764	3,490	2,820	568	258	403	174	258	122	124
23	187	98	613	2,180	2,180	512	250	369	190	171	353	119
24	168	98	512	1,710	1,430	485	239	346	165	137	418	114
25	153	96	470	1,750	1,100	470	1,200	303	137	119	700	110
26	142	100	470	2,040	896	438	5,880	270	124	107	2,940	110
27	137	100	512	1,470	720	378	3,820	262	122	105	2,360	107
28	124	105	864	1,140	636	346	2,310	258	124	96	1,030	114
29	122	96	1,140	1,100	-	328	1,710	239	117	91	619	114
30	117	89	962	1,030	-	307	1,240	221	110	88	480	112
31	112	-	1,260	996	-	290	-	204	-	89	1,060	-

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	896	672	433	523	266	413	290	350	211	470	119
2	107	720	562	433	413	243	378	274	328	197	369	117
3	127	625	485	403	383	266	350	250	398	187	2,790	110
4	957	540	423	369	369	278	324	236	418	177	2,000	107
5	1,140	464	398	346	350	282	298	221	303	165	1,700	102
6	782	418	428	332	332	286	282	211	250	147	4,500	100
7	545	378	408	480	319	294	290	197	225	142	2,310	96
8	393	346	341	607	307	298	315	187	218	134	2,310	96
9	311	315	319	507	278	290	369	180	190	184	4,220	96
10	278	294	290	418	262	402	393	180	174	137	1,590	96
11	258	274	250	428	278	654	373	168	171	134	962	93
12	232	270	243	413	464	584	350	165	168	124	684	93
13	207	388	282	378	556	502	332	159	177	117	507	100
14	204	423	286	332	573	464	319	180	159	117	398	107
15	214	369	254	303	534	507	303	254	147	114	328	132
16	197	332	262	282	475	596	290	328	142	107	290	134
17	180	315	355	270	433	619	278	250	192	102	274	134
18	171	290	551	274	398	714	274	225	602	112	250	127
19	4,110	270	579	266	388	648	303	232	485	142	218	129
20	7,390	258	502	243	378	579	403	526	475	184	187	127
21	2,580	243	444	282	360	523	378	590	1,410	308	171	129
22	1,470	225	408	496	319	464	428	491	1,280	666	162	129
23	1,060	211	378	590	307	418	590	418	864	2,880	150	124
24	813	194	350	619	311	388	534	549	625	2,290	145	112
25	631	183	319	2,630	311	360	480	1,350	518	996	137	105
26	518	190	298	2,880	303	417	444	807	491	596	129	100
27	2,630	329	282	1,470	298	714	398	996	383	413	124	102
28	6,690	996	303	996	294	568	360	896	332	388	119	114
29	3,600	962	383	758	-	480	328	666	282	307	114	100
30	1,910	820	413	678	-	444	307	523	236	262	112	100
31	1,240	-	413	607	-	433	-	428	-	580	112	-

Peak discharge.- Oct. 20 (3 a.m.) 10,100 sec.-ft.; Oct. 28 (11:30 a.m.) 7,970 sec.-ft.; Jan. 25 (11 p.m.) 4,500 sec.-ft.; July 23 (10 p.m.) 4,260 sec.-ft.; Aug. 6 (1:45 a.m.) 6,830 sec.-ft.; Aug. 9 (5:45 a.m.) 7,890 sec.-ft.

Discharge, in second-feet, of Cowpasture River near Clifton Forge, Va., 1935-38--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1935	2,811	149	77	90.7	0.199	0.23
November	11,463	1,540	88	382	.838	.94
December	17,803	2,040	236	574	1.26	1.45
Calendar year 1935	227,926	12,100	77	624	1.37	18.60
January 1936	42,497	3,500	290	1,371	3.01	3.47
February	35,803	3,850	232	1,235	2.71	2.92
March	64,459	15,600	551	2,079	4.56	5.26
April	33,730	3,930	290	1,124	2.46	2.74
May	6,874	311	140	222	.487	.56
June	4,918	403	107	164	.360	.40
July	4,140	337	93	134	.294	.34
August	2,862	129	76	92.3	.202	.23
September	2,225	89	66	74.2	.163	.18
Water year 1935-36	229,585	15,600	66	627	1.38	18.72
October 1936	9,768	3,470	80	315	.691	.80
November	3,264	137	89	109	.239	.27
December	23,226	2,840	93	749	1.64	1.89
Calendar year 1936	233,766	15,600	66	639	1.40	19.06
January 1937	62,016	7,640	690	2,001	4.39	5.06
February	29,567	2,820	556	1,056	2.32	2.42
March	13,699	602	290	442	.969	1.12
April	23,327	5,880	239	778	1.71	1.91
May	12,737	929	204	411	.901	1.04
June	4,963	454	110	165	.362	.40
July	4,074	258	89	131	.287	.33
August	12,824	2,940	76	414	.908	1.05
September	10,585	1,700	107	353	.774	.86
Water year 1936-37	210,050	7,640	76	575	1.26	17.15
October 1937	41,055	7,390	107	1,324	2.90	3.34
November	12,538	996	183	418	.917	1.02
December	11,881	672	243	383	.840	.97
Calendar year 1937	239,266	7,640	76	656	1.44	19.52
January 1938	19,523	2,880	243	630	1.38	1.59
February	10,516	573	262	376	.825	.86
March	13,981	714	243	451	.989	1.14
April	10,884	590	274	363	.796	.89
May	12,427	1,350	159	401	.879	1.01
June	11,993	1,410	142	400	.877	.98
July	12,590	2,890	102	406	.890	1.03
August	27,832	4,500	112	898	1.97	2.27
September	3,330	134	93	111	.243	.27
Water year 1937-38	188,550	7,390	93	517	1.13	15.37

Craig Creek at Parr, Va.

Location.- Water-stage recorder, lat. 37°39'55", long. 79°54'40", at Chesapeake & Ohio Railway bridge, 700 feet downstream from Stony Run, 0.4 mile (revised) northwest of Parr, Botetourt County, and 12 miles upstream from mouth. Prior to June 7, 1937, chain gage on bridge at same site and datum. Zero of gage is 992.50 feet above mean sea level.

Drainage area.- 331 square miles.

Records available.- April 1925 to September 1938.

Average discharge.- 13 years, 398 second-feet.

Extremes.- Maximum discharge observed during water year 1936-37, 7,400 second-feet Jan. 20 (gage height, 10.32 feet); minimum, 51 second-feet (revised) Aug. 5 (gage height, 3.52 feet).

Maximum discharge during water year 1937-38, 9,950 second-feet Oct. 20 (gage height, 11.48 feet); minimum, 65 second-feet Sept. 27 (gage height, 3.66 feet).

1925-38: Maximum discharge observed, 21,500 second-feet Jan. 23, 1935 (gage height, 15.85 feet), from rating curve extended above 5,000 second-feet on basis of velocity-area studies; minimum, 29 second-feet Oct. 1, 5, 1930 (gage height, 3.42 feet).

Remarks.- Records good except those for period of ice effect, Dec. 9-14, 1937, which were computed on basis of gage heights, weather records, and records for Johns Creek at Newcastle and are fair. Chain gage read twice daily prior to June 7, 1937. Records for water year 1936-37, published herewith, supersede those published in Water-Supply paper 822.

Rating table, Jan. 21, 1937 to Sept. 30, 1938 except period of ice effect (gage height, in feet, and discharge, in second-feet)

3.6	58	4.3	195	5.5	764	7.0	2,180
3.8	84	4.6	302	6.0	1,140	8.0	3,470
4.0	119	5.0	482	6.5	1,620	9.0	4,990

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,100	86	67	1,650	1,420	388	195	579	132	84	68	1,570
2	346	94	66	2,430	1,060	362	189	512	121	77	60	784
3	192	96	79	5,860	818	348	183	448	134	71	55	532
4	138	94	86	2,800	670	344	180	406	141	69	54	402
5	110	100	82	1,450	584	344	201	375	128	76	52	323
6	94	104	68	956	507	362	302	379	117	126	53	852
7	88	104	1,140	748	463	362	310	340	104	95	54	812
8	81	104	980	631	553	370	271	302	98	80	54	553
9	76	112	551	540	542	370	271	271	95	71	54	425
10	82	116	416	480	846	336	259	249	102	66	58	344
11	76	110	364	435	832	323	241	227	111	64	205	266
12	76	108	500	402	676	310	227	211	108	69	439	245
13	68	104	619	515	574	294	214	214	92	76	275	205
14	54	100	500	714	532	294	214	904	86	71	189	178
15	62	100	421	681	487	319	241	1,060	94	81	141	156
16	76	94	387	858	439	310	249	676	115	89	113	141
17	4,830	89	460	988	416	294	231	527	208	77	95	128
18	1,100	88	530	3,260	362	290	221	439	169	68	89	119
19	535	84	470	2,250	344	310	214	379	130	63	80	113
20	364	79	755	6,230	327	302	208	336	117	70	90	104
21	262	79	762	5,330	370	298	201	294	110	80	77	98
22	205	79	607	2,420	980	279	201	259	104	90	181	94
23	178	76	515	1,570	1,010	256	195	234	94	86	173	90
24	158	76	465	1,230	778	249	183	245	92	74	282	86
25	143	73	440	1,060	629	263	327	271	83	94	453	83
26	127	73	455	1,010	532	271	4,510	221	78	68	1,280	80
27	112	70	510	846	453	234	1,570	208	77	66	957	78
28	104	70	805	713	416	224	996	189	76	62	574	84
29	100	68	727	980	-	221	758	169	146	58	357	89
30	94	70	694	980	-	214	670	156	100	57	468	84
31	89	-	805	897	-	208	-	141	-	63	3,190	-

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Discharge, in second-feet, of Craig Creek at Parr, Va., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	784	463	448	406	245	331	271	537	294	996	89
2	76	629	406	411	344	211	306	249	448	267	700	87
3	81	527	366	370	315	234	286	211	453	271	4,380	86
4	323	439	327	331	302	691	259	205	416	286	2,060	84
5	950	388	306	315	286	664	241	192	357	238	1,060	84
6	623	353	323	294	259	584	227	183	310	211	2,380	81
7	420	319	306	357	256	532	234	169	267	176	1,520	77
8	315	290	256	532	245	468	319	156	234	166	1,100	77
9	241	267	230	439	221	434	537	151	205	190	1,680	76
10	208	245	200	379	214	482	574	141	180	175	1,010	74
11	192	224	170	366	217	942	487	132	227	171	700	73
12	169	227	160	340	256	784	420	130	217	137	532	74
13	154	638	170	319	275	646	384	126	178	121	402	78
14	141	623	180	294	282	563	353	132	161	111	336	94
15	137	472	198	263	279	527	323	189	139	178	290	95
16	130	393	208	245	267	444	294	208	130	176	298	87
17	119	348	267	231	256	416	275	166	132	98	259	84
18	115	310	279	231	245	397	263	154	158	179	256	89
19	2,530	275	294	217	245	357	271	175	180	261	231	92
20	6,460	259	279	201	249	327	267	1,620	323	331	189	84
21	1,840	238	263	211	238	310	241	1,010	4,050	563	172	84
22	1,060	217	252	323	214	286	323	548	3,750	3,420	154	81
23	1,520	195	241	482	211	271	700	406	2,060	4,510	141	74
24	1,320	178	234	542	252	256	652	357	1,100	5,550	130	70
25	868	172	227	1,570	275	241	548	348	919	2,060	121	69
26	676	175	214	1,900	282	310	463	319	732	1,120	115	66
27	1,820	201	201	1,060	286	590	397	1,030	612	854	110	66
28	6,040	503	224	758	271	453	353	832	512	732	104	77
29	2,740	658	487	629	-	402	319	868	416	563	98	73
30	1,520	558	612	553	-	379	290	758	348	579	95	71
31	1,030	-	537	463	-	357	-	640	-	2,130	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1936	11,130	4,830	62	359	1.08	1.24
November	2,698	116	68	89.9	.272	.30
December	15,348	1,140	67	495	1.50	1.73
Calendar year 1936	190,200	11,800	41	520	1.57	21.35
January 1937	50,914	6,230	402	1,642	4.96	5.72
February	17,620	1,420	327	629	1.90	1.98
March	9,349	388	208	302	.912	1.05
April	14,232	4,510	180	474	1.43	1.60
May	11,221	1,060	141	362	1.09	1.26
June	3,362	208	76	112	.338	.38
July	2,341	126	57	75.5	.228	.26
August	10,270	3,190	52	331	1.00	1.15
September	9,138	1,570	78	305	.921	1.03
Water year 1936-37	157,623	6,230	52	432	1.31	17.70
October 1937	33,896	6,460	76	1,093	3.30	3.80
November	11,105	784	172	370	1.12	1.25
December	8,880	612	160	286	.864	1.00
Calendar year 1937	182,328	6,460	52	500	1.51	20.48
January 1938	15,074	1,900	201	486	1.47	1.70
February	7,448	406	211	266	.804	.84
March	13,803	942	211	445	1.34	1.54
April	10,937	700	227	365	1.10	1.23
May	12,076	1,620	126	390	1.18	1.36
June	19,751	4,050	130	658	1.99	2.22
July	25,998	5,550	98	839	2.53	2.92
August	21,711	4,380	92	700	2.11	2.43
September	2,396	95	66	79.9	.241	.27
Water year 1937-38	183,075	6,460	66	502	1.52	20.56

Peak discharge.- Water year 1937-38: Oct. 20 (3:45 a.m.) 9,950 sec.-ft.; Oct. 28 (7:30 a.m.) 7,800 sec.-ft.; June 21 (4:30 p.m.) 4,990 sec.-ft.; July 22 (11:45 p.m.) 4,510 sec.-ft.; July 24 (2 a.m.) 7,600 sec.-ft.; Aug. 3 (5 a.m.) 7,400 sec.-ft.

Meadow Creek at Newcastle, Va.

Location.- Water-stage recorder and sharp-crested weir, lat. 37°29'35", long. 80°06'35", at south town limits of Newcastle, Craig County, 800 feet (revised) upstream from Newcastle-Salem highway bridge and half a mile upstream from mouth. Prior to March 1937 water-stage recorder at site 400 feet downstream at different datum. Present site and datum used after Oct. 29, 1937.

Drainage area.- 13.8 square miles.

Records available.- September 1929 to September 1938.

Extremes.-Maximum discharge recorded during year, 138 second-feet Aug. 10 (gage height, 3.35 feet); minimum recorded, 5.1 second-feet Sept. 19 (gage height, 1.91 feet).
1929-38: Maximum discharge, 242 second-feet Oct. 2, 1929 (gage height, 3.64 feet, former site and datum), from rating curve extended above 170 second-feet; minimum, 0.8 second-foot Sept. 4, 1930 (gage height, 0.91 foot, former site and datum).

Remarks.- Records fair. None for periods Oct. 1-28, Mar. 23 to Apr. 1, Apr. 24 to May 21, June 5 to Aug. 9.

Rating table, Oct. 29, 1937 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

2.0	6.4	2.6	23	3.0	55
2.2	10	2.8	33	3.1	73
2.4	15	2.9	42	3.2	95

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		32	18	18	21	9.2	-	-	29		-	9.4
2	-	28	17	17	19	9.4	12	-	26		-	9.2
3	-	26	16	16	17	14	11	-	24		-	8.9
4	-	22	14	16	16	16	11	-	21		-	8.9
5	-	19	14	14	14	17	10	-	-		-	8.3
6	-	18	14	14	13	18	9.8	-	-		-	8.1
7	-	16	12	21	12	16	11	-	-		-	8.1
8	-	14	11	19	12	17	12	-	-		-	7.4
9	-	14	11	18	11	17	13	-	-		-	7.2
10	-	13	10	17	11	24	13	-	-		117	7.4
11	-	12	9.6	17	11	29	12	-	-		59	7.6
12	-	18	9.4	17	12	27	12	-	-		39	8.1
13	-	26	9.4	15	11	24	12	-	-		31	8.3
14	-	23	9.4	14	11	22	12	-	-		26	7.4
15	-	21	10	12	11	20	11	-	-		24	7.1
16	-	19	12	11	11	19	11	-	-		23	6.7
17	-	18	12	12	10	18	11	-	-		21	8.5
18	-	16	12	11	10	16	11	-	-		19	7.8
19	-	15	11	11	10	14	11	-	-		17	7.4
20	-	14	11	11	10	14	11	-	-		15	8.1
21	-	12	11	12	9.4	13	11	-	-		14	7.9
22	-	12	11	14	9.2	12	15	28	-		13	7.4
23	-	11	11	15	11	-	15	23	-		12	7.4
24	-	11	11	18	11	-	-	22	-		12	7.1
25	-	11	11	96	10	-	-	18	-		11	7.2
26	-	11	10	75	10	-	-	30	-		11	7.4
27	-	16	10	43	10	-	-	42	-		10	7.6
28	-	19	15	31	10	-	-	42	-		10	7.1
29	82	19	20	28	-	-	-	75	-		10	6.9
30	55	19	19	26	-	-	-	45	-		9.6	7.8
31	41	-	18	25	-	-	-	33	-		9.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	-	-	-	-	-	-
November	525	32	11	17.5	1.27	1.42
December	388.8	20	9.4	12.5	.906	1.04
Calendar year						
January	682	96	11	22.0	1.59	1.83
February	332.6	21	9.2	11.9	.862	.90
March 1-22	385.6	29	9.2	17.5	1.27	1.04
April 2-23	257.8	15	9.8	11.7	.848	.69
May 22-31	356	75	18	35.6	2.58	.96
June	-	-	-	-	-	-
July	-	-	-	-	-	-
August 10-31	513.0	117	9.4	23.3	1.69	1.38
September	253.7	9.4	8.7	7.79	.564	.63
Water year						

Johns Creek at Newcastle, Va.

Location.- Water-stage recorder, lat. 37°30', long. 80°06', at highway bridge 800 feet northeast (revised) of town limits of Newcastle, Craig County, and 1,700 feet (revised) upstream from mouth.

Drainage area.- 106 square miles.

Records available.- April 1926 to September 1938.

Average discharge.- 12 years, 130 second-feet.

Extremes.- Maximum discharge during year, 3,180 second-feet Oct. 27 (gage height, 8.85 feet); minimum, 16 second-feet Sept. 25, 26 (gage height, 2.67 feet).
1926-38: Maximum discharge observed, 6,000 second-feet Jan. 23, 1935 (gage height, 10.80 feet), from rating curve extended above 3,200 second-feet on basis of velocity-area studies; minimum, 7 second-feet Aug. 11, Sept. 3, 6, 7, 1930 (gage height, 2.26 feet).

Remarks.- Records excellent except those above 1,000 second-feet, which are good, and those for periods of ice effect, Nov. 23-26, Dec. 8-14, which were computed on basis of weather records, gage heights, and records for Craig Creek at Parr and are fair.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.8	22	4.0	143	6.0	708
3.0	33	4.5	224	6.5	950
3.3	57	5.0	340	7.0	1,240
3.6	89	5.5	500	7.5	1,650

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	278	162	161	131	80	122	100	220	97	262	21
2	18	220	144	148	114	81	113	88	184	95	222	22
3	24	187	128	128	110	254	104	80	196	146	490	22
4	186	156	115	117	106	408	93	74	161	118	278	22
5	232	136	113	109	96	295	86	69	132	101	266	20
6	146	124	124	102	90	268	81	65	111	91	416	18
7	108	106	96	161	90	230	102	57	91	78	264	18
8	81	96	85	150	81	203	164	53	81	75	243	18
9	65	86	75	127	76	181	215	52	67	70	442	17
10	62	77	65	114	75	266	201	46	81	62	220	17
11	55	71	55	117	78	348	173	45	94	50	166	18
12	48	116	50	110	97	276	160	47	69	43	131	19
13	43	172	55	106	101	230	144	41	64	38	101	22
14	42	136	60	93	102	204	130	58	52	37	84	20
15	42	120	67	87	100	191	118	95	45	36	83	24
16	38	106	101	78	97	161	109	65	42	30	96	21
17	36	100	113	82	91	158	100	54	57	30	73	28
18	35	89	118	79	90	146	99	61	71	48	87	32
19	1,280	82	110	72	91	128	109	91	66	68	62	24
20	1,230	80	99	68	94	118	95	427	723	85	50	23
21	447	72	93	85	84	110	91	203	1,740	174	44	22
22	359	66	89	154	76	101	272	134	1,140	1,070	39	20
23	708	60	86	173	86	97	348	109	578	1,140	35	18
24	374	55	86	161	99	93	248	125	330	860	32	17
25	266	52	82	682	96	87	206	115	302	435	30	16
26	213	55	77	411	97	187	175	280	242	290	28	17
27	1,500	120	75	278	97	234	150	464	210	246	26	18
28	1,790	264	121	210	93	173	132	292	176	198	24	18
29	850	224	228	183	-	152	118	395	148	187	23	17
30	482	187	194	167	-	144	108	297	118	381	22	18
31	354	-	175	156	-	132	-	276	-	497	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,133	1,790	18	359	3.39	3.91
November	3,693	278	52	123	1.16	1.29
December	3,841	228	50	105	.991	1.14
Calendar year 1937	58,314	1,890	11	160	1.51	20.44
January	4,889	682	68	158	1.49	1.72
February	2,638	131	75	94.2	.889	.93
March	5,736	408	80	185	1.75	2.02
April	4,366	348	81	146	1.38	1.54
May	4,358	464	41	141	1.33	1.53
June	7,591	1,740	42	253	2.39	2.67
July	6,874	1,140	30	222	2.09	2.41
August	4,360	490	21	141	1.33	1.53
September	607	32	16	20.2	.191	.21
Water year 1937-38	59,486	1,790	16	163	1.54	20.90

Peak discharge.- Oct. 19 (11 p.m.) 2,920 sec.-ft.; Oct. 27 (3:30 p.m.) 3,180 sec.-ft.; June 21 (1 a.m.) 2,370 sec.-ft.; June 22 (8:30 a.m.) 1,470 sec.-ft.; July 22 (2:30 p.m.) 1,470 sec.-ft.; July 23 (1 p.m.) 1,990 sec.-ft.

Calfpasture River at Goshen, Va.

Location.- Chain gage, lat. 37°59'10", long. 79°29'38", at highway bridge at Goshen, Rockbridge County, 500 feet downstream from Mill Creek. Zero of gage is 1,381.69 feet above mean sea level.

Drainage area.- 190 square miles.

Records available.- March 1925 to December 1938 (discontinued).

Average discharge.- 13 years, 212 second-feet.

Extremes.- Maximum discharge observed during period October 1937 to December 1938, about 6,850 second-feet Oct. 19, 1937 (gage height, 8.85 feet), from rating curve extended above 1,500 second-feet; minimum, 15 second-feet Oct. 17, 18, 1938 (gage height, 1.84 feet).

1925-38: Maximum discharge observed, about 12,200 second-feet Mar. 17, 1936 (gage height, 11.71 feet, from floodmarks), from rating curve extended above 1,500 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 8 second-feet July 22, 1926, and many days in September and October 1930, September and October 1932, and July 1934.

Remarks.- Records fair. Gage read twice daily. Discharge for period of ice effect, Dec. 10-13, 1937, computed on basis of gage heights, weather records, ard records for North River at Rockbridge Baths and near Lexington.

Rating table, Oct. 1, 1937, to Dec. 20, 1938, except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.9	19	2.8	130	4.5	1,070
2.0	26	3.0	182	5.0	1,540
2.2	43	3.3	290	6.0	2,660
2.4	64	3.6	430		
2.6	92	4.0	664		

Discharge, in second-feet, 1937-38

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	357	334	135	174	92	147	108	122	64	195	26
2	19	270	270	135	147	90	137	99	114	58	228	26
3	128	216	211	126	132	90	126	88	122	54	1,070	25
4	430	188	182	120	128	92	116	82	130	49	1,160	24
5	334	154	171	116	116	88	108	76	101	42	568	22
6	250	135	179	110	110	86	101	70	84	38	1,540	21
7	198	122	144	182	105	86	106	64	72	35	1,640	20
8	140	110	128	192	97	83	116	60	74	32	1,540	20
9	112	101	110	171	90	83	126	58	65	29	2,660	20
10	103	92	130	171	78	118	132	54	54	30	937	20
11	86	84	100	168	86	162	130	51	52	34	482	20
12	74	88	80	157	105	157	128	48	48	28	334	19
13	69	120	80	140	112	152	124	44	50	25	218	21
14	88	108	92	122	126	154	116	55	40	22	162	25
15	86	103	84	116	137	195	112	88	35	21	135	44
16	76	99	96	108	132	225	105	78	36	20	116	28
17	70	97	126	103	126	246	97	67	179	18	96	30
18	69	90	174	101	122	236	96	67	270	18	77	28
19	3,290	86	185	90	118	204	147	77	198	38	67	25
20	3,160	80	168	86	120	192	168	482	225	32	58	28
21	1,250	73	157	94	110	176	160	534	598	380	53	32
22	631	70	147	137	97	154	218	225	482	380	48	28
23	380	69	137	176	99	142	236	171	290	1,340	43	26
24	270	63	124	204	101	130	225	236	195	894	38	25
25	208	60	116	1,160	97	120	208	188	182	380	35	23
26	171	57	106	1,120	97	176	182	201	162	225	33	22
27	774	105	97	538	103	204	160	354	112	171	30	28
28	3,550	538	106	334	97	174	140	334	101	290	28	22
29	1,850	664	124	290	-	162	126	250	64	168	27	20
30	894	482	124	246	-	154	116	188	68	188	27	20
31	510	-	130	221	-	160	-	149	-	290	28	-

Discharge, in second-feet, of Calfpasture River at Goshen, Va., 1937-38--Continued

1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	17	38									
2	19	17	36									
3	18	17	35									
4	17	18	38									
5	17	27	44									
6	18	43	89									
7	18	33	94									
8	18	28	78									
9	18	26	67									
10	17	24	380									
11	17	23	236									
12	17	22	160									
13	17	22	130									
14	18	20	114									
15	17	20	99									
16	17	20	86									
17	15	20	76									
18	15	21	69									
19	17	27	62									
20	17	31	55									
21	18	27	-									
22	18	25	-									
23	18	23	-									
24	22	28	-									
25	20	33	-									
26	19	32	-									
27	19	28	-									
28	18	30	-									
29	18	31	-									
30	18	28	-									
31	17	-	-									

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1937	19,289	3,550	19	622	3.27	3.77
November	4,883	664	57	163	.858	.96
December	4,412	334	80	142	.747	.86
Calendar year 1937	94,519	4,110	14	259	1.36	18.51
January 1938	7,169	1,160	86	231	1.22	1.41
February	3,162	174	78	113	.595	.62
March	4,585	246	83	148	.779	.90
April	4,209	236	96	140	.737	.82
May	4,426	482	44	143	.753	.87
June	4,345	598	35	145	.763	.85
July	5,393	1,340	18	174	.916	1.06
August	13,673	2,660	27	441	2.32	2.68
September	738	44	19	24.6	.129	.14
Water year 1937-38	76,284	3,550	18	209	1.10	14.94
October 1938	552	22	15	17.8	.094	.11
November	761	43	17	25.4	.134	.15
December 1-20	1,986	380	35	99.3	.523	.39

North River at Rockbridge Baths, Va.

Location.- Water-stage recorder, lat. 37°54'26", long. 79°25'20", at Rockbridge Baths, Rockbridge County, 700 feet upstream from highway bridge and 1 mile upstream from Hays Creek. Zero of gage is 1,100.33 feet above mean sea level.

Drainage area.- 329 square miles.

Records available.- October 1928 to September 1938.

Extremes.- Maximum discharge during year, 9,900 second-feet Oct. 19 (gage height, 9.44 feet), from rating curve extended above 4,000 second-feet; minimum, 35 second-feet July 18 (gage height, 1.19 feet).
1928-38: Maximum discharge, about 20,800 second-feet Mar. 17, 1936 (gage height, 13.07 feet), from rating curve extended above 4,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 11 second-feet Nov. 28, 1930 (gage height, 0.76 foot).

Remarks.- Records excellent except those above 5,000 second-feet, which are good, and those for periods of missing gage heights Oct. 8-13, Dec. 7, 8, Aug. 26-31 (computed on basis of records for North River near Lexington) and Calfpasture River at Goshen, which are fair.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.2	36	2.0	228	4.0	1,400
1.3	50	2.3	342	4.5	1,850
1.4	68	2.6	486	5.0	2,380
1.6	112	3.0	700	6.0	3,640
1.8	166	3.5	1,030	7.0	5,160

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	628	569	242	338	158	266	193	199	107	342	54
2	39	512	451	245	266	155	246	172	161	98	356	52
3	58	426	379	225	252	160	228	156	209	91	2,030	50
4	718	351	329	212	242	175	212	144	248	81	1,480	50
5	612	300	308	202	222	160	196	133	172	72	995	46
6	512	273	334	196	212	163	184	122	141	66	1,400	43
7	360	238	280	313	202	160	190	110	120	61	2,320	43
8	270	218	240	360	184	152	215	105	128	55	2,440	44
9	210	199	222	321	175	152	273	103	105	52	3,980	43
10	190	181	178	296	169	218	273	94	89	57	1,520	43
11	160	166	160	304	172	342	262	87	96	55	858	43
12	140	169	155	285	206	325	248	85	94	47	590	42
13	130	255	169	262	212	300	238	78	98	43	407	43
14	163	235	160	225	216	296	222	91	76	42	304	46
15	158	212	158	209	231	342	212	160	66	40	245	74
16	141	199	175	190	225	360	199	135	68	37	228	63
17	128	193	231	187	215	398	187	110	278	36	187	57
18	120	176	292	181	212	393	187	107	466	35	175	57
19	4,650	169	308	166	212	347	245	130	329	82	144	52
20	5,660	163	285	158	212	325	266	870	410	117	122	54
21	2,100	149	270	166	199	300	252	601	925	566	110	63
22	1,100	138	252	262	178	266	321	393	818	736	98	55
23	742	122	238	329	178	242	456	292	548	3,020	89	50
24	538	117	216	383	190	225	393	300	365	2,040	85	47
25	407	115	202	1,640	181	209	356	289	289	858	76	44
26	334	117	190	1,750	178	335	313	289	296	522	70	43
27	1,740	221	175	960	181	402	273	533	222	504	64	46
28	5,840	816	187	655	175	338	245	522	187	726	60	43
29	3,100	995	231	522	-	300	222	398	152	379	56	40
30	1,440	748	228	466	-	292	206	304	125	321	54	40
31	890	-	235	412	-	289	-	248	-	422	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32,690	5,840	39	1,055	3.21	3.70
November	8,805	995	115	294	.894	1.00
December	7,809	569	155	252	.766	.88
Calendar year 1937	170,553	6,020	29	467	1.42	19.29
January	12,324	1,750	158	398	1.21	1.40
February	5,837	338	169	208	.632	.66
March	8,279	402	152	267	.812	.94
April	7,568	436	184	252	.766	.85
May	7,356	870	78	237	.720	.83
June	7,522	925	66	251	.763	.85
July	11,368	3,020	35	367	1.12	1.29
August	20,939	3,980	54	675	2.05	2.36
September	1,470	74	40	49.0	.149	.17
Water year 1937-38	131,967	5,840	35	362	1.10	14.93

Peak discharge.- Oct. 19 (10 p.m.) 9,900 sec.-ft.; Oct. 28 (4:30 a.m.) 7,730 sec.-ft.; July 23 (5:30 p.m.) 5,000 sec.-ft.; Aug. 9 (2:30 a.m.) 5,840 sec.-ft.

North River near Lexington, Va.

Location.- Water-stage recorder, lat. 37°48'49", long. 79°26'42", 300 yards upstream from Lime Kiln highway bridge, a quarter of a mile downstream from Kerrs Creek, and 2½ miles upstream from Lexington, Rockbridge County. Zero of gage is 906.56 feet above mean sea level.
Drainage area.- 487 square miles.
Records available.- August 1925 to September 1938.
Average discharge.- 10 years (1928-38), 511 second-feet.
Extremes.- Maximum discharge during year, 13,400 second-feet Oct. 19 and Aug. 7; maximum gage height, 14.03 feet Oct. 19; minimum discharge, 72 second-feet July 17 (gage height, 2.19 feet).
1925-38: Maximum discharge, 30,100 second-feet Mar. 18, 1936 (gage height 23.56 feet, from floodmarks), from rating curve extended above 9,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 34 second-feet Sept. 6, 1930, and Sept. 18, 1932.
Remarks.- Records good except those for periods of missing gage heights, which were computed on basis of records for station at Rockbridge Baths and are fair.

Rating tables, water year 1937-38 (gage heights, in feet, and discharge, in second-feet)

Oct. 1 to Aug. 7				Aug. 8 to Sept. 30			
2.2	74	4.5	1,020	2.4	106	4.5	1,020
2.4	112	5.0	1,360	2.6	153	5.0	1,360
2.6	160	5.5	1,750	2.8	209	5.5	1,750
2.8	218	6.0	2,210	3.0	274	6.0	2,210
3.0	285	7.0	3,290	3.5	474	7.0	3,290
3.5	486	8.0	4,510	4.0	724	8.0	4,510
4.0	735	10.0	7,200				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117	1,050	818	380	532	244	384	282	274	*170	630	146
2	112	872	713	384	451	247	360	257	247	*160	640	143
3	152	735	580	360	417	250	356	240	285	150	3,470	*140
4	1,240	635	514	333	400	271	311	224	322	140	2,260	136
5	1,050	566	482	322	372	254	292	212	257	128	1,670	*130
6	818	514	509	311	352	257	278	200	212	119	1,880	*120
7	595	464	434	477	337	250	285	188	185	112	5,000	*120
8	442	425	376	532	311	237	322	174	191	103	3,650	*120
9	360	392	364	477	292	237	413	174	168	102	5,160	*120
10	337	360	300	442	285	322	408	166	150	119	2,360	*120
11	*310	341	282	455	282	495	388	155	155	106	1,400	117
12	*270	349	274	434	326	413	372	152	155	94	990	*110
13	*250	482	296	404	341	451	356	142	166	87	724	*110
14	*310	438	278	360	341	442	337	155	140	87	583	*120
15	*300	392	274	333	349	500	318	237	124	83	479	*170
16	*270	368	282	307	341	500	304	218	121	79	*430	*150
17	*250	360	364	300	330	551	289	185	300	76	*380	*140
18	228	337	429	292	322	556	285	160	605	81	*340	130
19	6,370	318	460	274	326	500	333	200	464	137	310	*120
20	8,590	315	434	260	326	464	372	958	421	337	278	*120
21	3,290	285	413	268	307	434	360	818	1,080	912	250	*140
22	1,800	271	392	400	278	396	400	537	1,050	1,360	234	*130
23	1,260	244	376	491	282	364	570	408	735	4,620	215	*120
24	930	237	352	561	292	337	514	384	523	3,170	203	*110
25	762	234	330	*2,500	278	315	477	400	404	1,320	189	104
26	635	240	311	*2,900	271	413	429	368	421	872	180	104
27	2,320	330	292	*1,500	271	570	384	600	*330	680	172	102
28	7,340	1,060	315	*1,000	268	477	349	640	*270	1,150	164	106
29	4,130	1,320	372	*800	-	429	318	509	*230	665	158	100
30	2,160	1,050	368	*700	-	413	296	404	*190	585	153	98
31	1,400	-	368	630	-	413	-	337	-	718	143	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	48,398	8,590	112	1,561	3.21	3.70
November	14,984	1,320	234	499	1.02	1.14
December	12,352	818	274	398	.817	.94
Calendar year 1937	259,861	8,590	88	712	1.46	19.85
January	19,187	2,900	260	619	1.27	1.46
February	9,280	532	268	331	.680	.71
March	12,002	556	237	387	.795	.92
April	10,860	570	278	362	.743	.83
May	10,104	958	142	326	.669	.77
June	10,175	1,080	121	339	.696	.78
July	18,522	4,620	76	597	1.23	1.42
August	34,695	5,160	143	1,119	2.30	2.65
September	3,696	170	98	123	.253	.28
Water year 1937-38	204,255	8,590	76	560	1.15	15.60

Peak discharge.- Oct. 19 (11:30 p.m.) 13,400 sec.-ft.; Oct. 28 (6:30 a.m.) 9,400 sec.-ft.; July 23 (4 p.m.) 8,500 sec.-ft.; Aug. 3 (9 a.m.) 4,770 sec.-ft.; Aug. 7 (1:30 p.m.) 13,400 sec.-ft.; Aug. 9 (5 a.m.) 7,060 sec.-ft.
*Gage height missing.

Kerrs Creek near Lexington, Va.

Location.- Chain gage, lat. 37°49'33", long. 79°26'28", at highway bridge 2½ miles north of Lexington, Rockbridge County, and 1¼ miles upstream from mouth. Zero of gage is 972.04 feet above mean sea level.

Drainage area.- 34 square miles.

Records available.- January 1927 to September 1938 (fragmentary prior to August 1930).

Extremes.- Maximum discharge observed during year, about 1,800 second-feet Oct. 19 (gage height, 8.95 feet), from rating curve extended above 330 second-feet; minimum, 4 second-feet July 17 (gage height, 3.70 feet).

1927-38: Maximum discharge observed, about 4,090 second-feet Mar. 17, 1936 (gage height, 12.82 feet, from floodmarks), from rating curve extended above 330 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those at other stations in James River Basin; minimum, 4 second-feet many days in August and September 1932, Sept. 12, 1934, and July 17, 1938.

Remarks.- Records fair. Discharge for period of missing gage heights, Dec. 9-16, computed on basis of records for North River at Rockbridge Baths. Gage read twice daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 25				Jan. 26 to Aug. 7				Aug. 8 to Sept. 30			
3.8	13	5.5	290	3.9	10	4.8	122	4.6	19	5.2	132
4.0	27	6.0	470	4.0	24	5.0	160	4.8	48	5.5	215
4.3	54	6.5	670	4.2	41	5.5	290	5.0	86	6.0	378
4.6	90	7.0	880	4.4	62	6.0	470				
5.0	160	8.0	1,330	4.6	88						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	61	49	35	36	13	26	18	14	9	33	18
2	15	50	45	32	34	18	26	17	15	12	52	17
3	25	46	40	31	32	21	22	16	15	10	395	14
4	171	46	30	30	30	20	23	16	12	10	140	14
5	107	45	37	29	31	19	21	15	11	9	81	14
6	56	39	42	26	28	21	22	15	11	9	98	14
7	42	42	37	66	27	21	24	15	11	8	590	14
8	35	36	32	55	25	20	32	14	12	7	665	14
9	29	33	25	42	25	21	43	14	10	8	292	13
10	32	30	20	35	24	21	34	12	10	9	145	12
11	28	32	19	36	26	53	29	13	10	7	108	11
12	26	37	18	35	37	42	31	12	10	7	70	9
13	26	54	20	31	36	41	26	11	10	6	57	10
14	33	40	19	27	34	41	25	20	9	6	48	9
15	29	37	19	26	31	60	25	17	9	7	40	9
16	28	36	25	27	26	51	24	13	11	6	35	9
17	26	35	31	26	28	49	23	12	10	5	32	13
18	25	30	32	26	28	42	24	15	11	8	32	9
19	1,330	33	34	24	29	40	26	13	15	11	27	9
20	325	29	33	22	26	38	24	67	21	34	26	11
21	140	24	31	27	24	34	24	21	27	36	24	10
22	93	26	30	37	22	31	29	17	36	308	22	9
23	75	24	30	39	26	33	23	16	23	470	20	8
24	58	24	29	50	25	30	24	17	21	140	20	8
25	52	25	27	308	22	27	23	15	18	88	19	8
26	49	20	24	101	22	36	23	28	18	58	19	7
27	590	42	22	67	21	31	22	18	15	46	17	8
28	260	114	35	55	15	28	22	16	15	38	17	8
29	150	80	39	43	-	26	22	15	13	38	17	9
30	98	61	35	43	-	29	21	16	12	37	17	9
31	78	-	33	43	-	27	-	16	-	38	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,046	1,330	15	131	3.85	4.44
November	1,231	114	20	41.0	1.21	1.35
December	942	49	18	30.4	.894	1.03
Calendar year 1937	21,352	1,330	6	58.5	1.72	23.40
January	1,474	308	22	47.5	1.40	1.61
February	770	37	15	27.5	.809	.84
March	994	60	13	31.7	.932	1.07
April	763	43	21	25.4	.747	.83
May	540	67	11	17.4	.512	.59
June	435	36	9	14.5	.426	.48
July	1,488	470	5	48.0	1.41	1.63
August	3,175	665	17	102	3.00	3.46
September	327	18	7	10.9	.321	.36
Water year 1937-38	16,175	1,330	5	44.3	1.30	17.69

Tye River at Roseland, Va.

Location.- Chain gage, lat. 37°45', long. 78°59', at highway bridge, three-quarters of a mile southwest of Roseland, Nelson County, and three-quarters of a mile upstream from Hat Creek. Zero of gage is 655.78 feet above mean sea level.

Drainage area.- 68 square miles.

Records available.- January 1927 to April 1938 (discontinued).

Average discharge.- 10 years 1927-37, 131 second-feet.

Extremes.- Maximum discharge observed during period, 4,660 second-feet Oct. 19 (gage height, 9.60 feet); minimum, 17 second-feet Oct. 2, 3 (gage height, 3.48 feet).
1927-38: Maximum discharge observed, about 6,000 second-feet Sept. 16, 1934 (gage height, 10.02 feet, from floodmarks), from rating curve extended above 700 second-feet on basis of velocity-area studies; minimum, 2 second-feet Sept. 20, Oct. 1, 1930.

Remarks.- Records fair. Gage read twice daily.

Rating tables, Oct. 1, to April 22, 1938 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-19)

Oct. 1-19				Oct. 20 to Apr. 22			
3.4	36	5.0	502	3.0	16	4.3	250
3.6	62	5.5	756	3.2	31	4.6	356
3.8	96	6.0	1,040	3.4	52	5.0	520
4.0	138	7.0	1,680	3.6	80	5.5	760
4.3	222	8.0	2,640	3.8	118	6.0	1,040
4.6	330			4.0	164	7.0	1,680

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	436	337	80	152	80	94					
2	19	396	283	80	136	80	77					
3	42	337	234	80	129	94	77					
4	412	283	219	77	129	89	68					
5	330	250	204	72	116	80	72					
6	292	219	190	72	108	72	68					
7	163	190	159	164	108	72	80					
8	120	164	136	108	94	65	118					
9	106	159	129	98	84	65	118					
10	92	140	122	98	89	152	118					
11	75	122	118	98	94	94	118					
12	59	283	116	98	89	89	108					
13	65	478	118	94	84	94	98					
14	65	318	108	84	80	94	98					
15	48	266	108	80	80	122	94					
16	48	219	108	72	72	94	84					
17	42	219	108	72	72	98	80					
18	36	164	129	77	72	136	89					
19	2,770	164	108	77	72	129	89					
20	1,840	164	102	72	89	122	80					
21	982	145	98	80	77	122	84					
22	708	122	98	108	68	118	94					
23	564	102	98	80	122	114	-					
24	436	98	98	140	94	98	-					
25	356	84	98	542	89	98	-					
26	283	84	89	396	84	145	-					
27	760	318	84	300	80	108	-					
28	1,280	708	108	266	80	94	-					
29	982	564	94	219	-	94	-					
30	760	436	89	190	-	98	-					
31	564	-	84	190	-	89	-					

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,319	2,770	19	462	6.79	7.83
November	7,632	708	84	254	3.74	4.17
December	4,176	337	84	135	1.99	2.29
Calendar year 1937	81,794	2,770	17	224	3.29	44.74
January	4,264	542	72	138	2.03	2.34
February	2,645	152	68	94.5	1.39	1.45
March	3,099	152	65	100	1.47	1.70
April 1-22	2,006	118	68	91.2	1.34	1.10
May						
June						
July						
August						
September						
Water year						

Tye River near Lovingston, Va.

Location.- Water-stage recorder, lat. 37°43', long. 78°58', at highway bridge, 2 miles downstream from Hat Creek, 4 miles upstream from Piney River, and 6 miles southwest of Lovingston, Nelson County.

Drainage area.- 92 square miles.

Records available.- August and September 1938.

Extremes.- Maximum discharge during period, 429 second-feet Aug. 9 (gage height, 2.75 feet); minimum, 34 second-feet Sept. 29 (gage height, 1.32 feet).

Remarks.- Records good except those for period missing gage heights, Sept. 19-25, which were computed on basis of records for South River at Waynesboro and are fair.

Rating table, Aug. 9 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet).

1.4	49	2.0	190
1.6	92	2.3	274
1.8	139	2.6	371

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1											-	60
2											-	62
3											-	60
4											-	62
5											-	53
6											-	49
7											-	51
8											-	49
9											371	51
10											304	51
11											260	53
12											217	55
13											198	77
14											182	62
15											167	77
16											154	57
17											144	57
18											137	62
19											113	58
20											106	58
21											106	60
22											99	60
23											90	55
24											88	50
25											83	45
26											74	40
27											81	40
28											70	36
29											66	38
30											66	45
31											62	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January						
February						
March						
April						
May						
June						
July						
August, 9-31	3,238	371	62	141	1.53	1.31
September	1,633	77	36	54.4	.591	.66
Water year						

Hardware River near Scottsville, Va.

Location.- Chain gage, lat. 37°50', long. 78°29', at bridge on Woodridge-Scottsville highway, 2 miles upstream from Briery Run, 3 miles north of Scottsville, Albemarle County, and 11½ miles upstream from mouth. Zero of gage is 308.50 feet above mean sea level.

Drainage area.- 104 square miles.

Records available.- May 1925 to December 1938 (discontinued).

Average discharge.- 11 years (1926-28, 1929-38), 117 second-feet.

Extremes.- Maximum discharge observed during October 1937 to December 1938, 3,450 second-feet Oct. 19, 1937 (gage height, 14.20 feet); minimum, 27 second-feet Oct. 20, 23 (gage height, 1.72 feet).
1925-38: Maximum discharge observed, 6,440 second-feet Apr. 25, 1937 (gage height, 20.1 feet, from floodmarks); minimum, 1.5 second-feet Sept. 2, 22, 1932 (gage height, 1.20 feet).

Remarks.- Records poor. Gage read twice daily. Low flow regulated by dam and gristmill above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-19, 1937		Oct. 20 to Feb. 20, July 24 to Dec. 10				Feb. 21 to July 23	
2.7	71	1.8	31	5.0	422	2.0	59
3.0	100	2.0	43	6.0	604	2.3	7[illegible]
3.5	155	2.3	67	7.0	806	2.6	103
4.0	218	2.6	95	8.0	1,030	3.0	145
5.0	374	3.0	138	9.0	1,320	3.5	206
6.0	562	3.5	199	10.0	1,660	4.0	274
7.0	774	4.0	266			5.0	423
8.0	1,020					6.0	608

Discharge, in second-feet, 1937-38

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	212	162	105	122	112	107	78	65	65	110	48
2	67	186	150	105	105	107	107	78	61	65	85	58
3	95	186	138	100	110	134	102	74	65	61	225	48
4	822	174	132	95	105	140	97	74	65	61	199	50
5	428	162	132	95	110	123	97	74	65	54	162	46
6	246	162	127	95	105	112	97	70	61	54	174	44
7	179	150	132	325	100	107	118	65	57	49	174	42
8	155	144	127	144	95	102	145	65	65	49	138	45
9	143	138	122	132	95	102	157	65	61	54	110	48
10	121	132	116	127	95	181	128	65	74	61	100	46
11	105	132	110	127	100	140	118	65	140	50	90	44
12	95	132	110	122	116	128	112	65	78	50	80	42
13	95	238	105	110	110	128	107	65	70	54	80	50
14	90	199	110	105	105	128	102	88	65	47	76	46
15	85	174	110	100	100	246	102	88	57	45	76	80
16	85	162	116	95	100	181	102	74	65	46	72	72
17	80	150	110	100	100	169	97	65	88	44	67	62
18	80	150	105	95	95	260	97	70	83	41	238	58
19	1,380	150	105	100	100	219	107	74	78	44	127	50
20	2,020	138	105	95	340	157	97	74	157	134	110	76
21	547	132	110	100	206	140	97	74	157	181	72	95
22	325	127	105	110	140	134	92	70	145	232	62	67
23	295	122	105	110	157	128	92	65	102	766	62	58
24	252	122	105	132	157	118	92	83	83	298	58	54
25	238	116	105	388	140	118	88	70	88	150	54	50
26	225	122	105	225	128	123	88	97	102	122	54	49
27	585	174	100	160	123	118	83	128	83	127	54	49
28	510	325	100	144	123	112	83	88	157	116	54	47
29	388	238	100	127	-	107	78	74	88	110	48	44
30	238	185	105	122	-	112	78	74	78	127	44	48
31	225	-	100	122	-	107	-	70	-	122	46	-

Discharge, in second-feet, of Hardware River near Scottsville, Va., 1937-38--Continued.

1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	44	58									
2	47	41	54									
3	42	38	67									
4	39	38	80									
5	38	39	162									
6	42	72	372									
7	40	67	212									
8	44	54	127									
9	42	58	186									
10	38	50	785									
11	38	49	-									
12	39	48	-									
13	38	48	-									
14	38	43	-									
15	35	38	-									
16	34	39	-									
17	33	38	-									
18	34	38	-									
19	30	58	-									
20	28	150	-									
21	28	122	-									
22	28	72	-									
23	28	58	-									
24	32	62	-									
25	38	67	-									
26	40	62	-									
27	40	58	-									
28	39	54	-									
29	58	58	-									
30	50	58	-									
31	46	-	-									

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1937	10,266	2,020	67	331	3.18	3.67
November	4,935	325	116	164	1.58	1.76
December	3,564	162	100	115	1.11	1.28
Calendar year 1937	72,690	3,250	47	199	1.91	26.00
January 1938	4,102	388	95	132	1.27	1.46
February	3,482	340	95	124	1.19	1.24
March	4,293	260	102	138	1.33	1.53
April	3,067	157	78	102	.981	1.09
May	2,329	128	65	75.1	.722	.83
June	2,603	157	57	86.8	.835	.93
July	3,475	765	41	112	1.08	1.24
August	3,101	238	44	100	.962	1.11
September	1,616	95	42	53.9	.518	.58
Water year 1937-38	46,833	2,020	41	128	1.23	16.72
October 1938	1,196	58	28	38.6	.371	.43
November	1,721	150	38	57.4	.552	.62
December 1-10	2,103	785	54	210	2.02	.75

Slate River near Arvonia, Va.

Location.- Water-stage recorder, lat. 37°42', long. 78°21', at Bumpers highway bridge, 1 mile upstream from Hunt Creek, 2 miles north of Arvonia, Buckingham County, and 2 miles upstream from mouth. Zero of gage is 238.78 feet above mean sea level.

Drainage area.- 235 square miles.

Records available.- April 1926 to September 1938.

Average discharge.- 10 years (1926-34, 1936-38), 210 second-feet.

Extremes.- Maximum discharge during year, 4,650 second-feet Oct. 19 (gage height, 12.05 feet); minimum, 63 second-feet Sept. 10 (gage height, 2.59 feet).
1926-38: Maximum discharge, about 13,600 second-feet Sept. 6, 1935 (gage height, 22.18 feet, from floodmarks), from rating curve extended above 5,500 second-feet on basis of velocity-area studies; minimum, 2 second-feet Sept. 28 to Oct. 2, 1930.

Remarks.- Records good except those for periods of missing gage heights, Feb. 1-4, Aug. 17-21, which were computed on basis of records for Willis River at Flanagan Mills and are fair. Operation of gristmill 7½ miles upstream affects low-water flow.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 21				June 22 to Sept. 30			
3.0	94	6.0	958	2.8	85	4.5	456
3.3	134	7.0	1,440	3.0	110	5.0	610
3.6	185	8.0	1,980	3.3	160	6.0	986
4.0	269	9.0	2,580	3.6	222	7.0	1,450
4.5	394	10.0	3,220	4.0	320		
5.0	554	11.0	3,910				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	212	194	172	190	187	178	116	102	231	297	87
2	106	200	181	185	180	189	172	114	94	202	211	95
3	204	193	172	172	180	247	169	107	95	183	1,130	91
4	2,900	180	167	158	170	354	158	104	107	158	986	98
5	1,790	174	167	155	165	251	153	100	96	146	678	97
6	501	176	200	152	162	236	153	98	85	135	501	85
7	297	164	191	648	165	223	189	91	83	127	317	81
8	210	164	162	458	150	198	342	87	124	120	299	81
9	172	162	158	274	145	189	554	91	94	118	722	82
10	208	158	155	223	150	413	328	87	273	144	315	82
11	194	155	137	212	150	609	236	85	668	130	229	81
12	160	217	126	208	194	328	204	87	250	114	200	97
13	148	726	169	198	193	262	191	85	984	105	170	173
14	153	354	153	181	172	336	178	98	236	98	153	146
15	155	251	157	172	160	390	171	189	145	100	147	106
16	140	212	174	165	148	269	162	125	128	95	139	96
17	132	200	185	165	142	334	155	98	360	87	130	93
18	134	189	174	164	145	1,140	158	94	309	97	190	100
19	1,690	176	164	155	152	613	178	110	287	97	180	106
20	4,200	187	152	153	1,030	354	162	134	1,230	284	160	216
21	1,180	176	145	169	481	292	148	167	3,160	660	140	371
22	367	160	144	251	276	249	144	109	2,230	1,920	134	142
23	437	150	155	328	299	229	142	92	653	1,140	125	110
24	354	147	162	385	452	214	132	98	359	1,300	119	101
25	260	150	158	958	297	194	130	110	250	471	110	93
26	229	153	152	501	245	221	128	201	198	610	105	93
27	702	238	142	299	221	249	124	316	724	372	104	93
28	797	394	221	221	198	198	119	164	2,360	346	101	90
29	380	292	208	194	-	183	115	122	549	308	100	92
30	290	223	181	225	-	181	111	116	310	1,280	96	160
31	243	-	169	208	-	185	-	118	-	792	91	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,849	4,200	106	608	2.59	2.99
November	6,533	726	147	218	.928	1.04
December	5,177	221	128	167	.711	.82
Calendar year 1937	137,921	11,200	65	378	1.61	21.84
January	8,109	958	152	262	1.11	1.28
February	6,612	1,030	142	236	1.00	1.04
March	9,517	1,140	181	307	1.31	1.51
April	5,484	554	111	183	.779	.87
May	3,713	316	85	120	.511	.59
June	16,543	3,160	83	551	2.34	2.61
July	11,970	1,920	87	386	1.64	1.89
August	8,379	1,130	91	270	1.15	1.33
September	3,438	371	81	115	.489	.55
Water year 1937-38	104,324	4,200	81	286	1.22	16.52

Peak discharge.- Oct. 4 (10:30 a.m.) 3,490 sec.-ft.; Oct. 19 (10:45 p.m.) 4,650 sec.-ft.; June 21 (9 p.m.) 4,120 sec.-ft.; June 28 (3 a.m.) 3,350 sec.-ft.; July 22 (9:30 a.m.) 2,400 sec.-ft.

Rivanna River at Palmyra, Va.

Location.- Water-stage recorder, lat. 37°51', long. 78°16', 200 feet below highway bridge at Palmyra, Fluvanna County, half a mile upstream from Cunningham Creek, and 15 miles upstream from mouth.

Drainage area.- 675 square miles.

Records available.- May 1934 to September 1938.

Extremes.- Maximum discharge during water year 1936-37, 56,700 second-feet Apr. 26 (gage height, 33.35 feet, from floodmarks); minimum, 156 second-feet Dec. 2 (gage height, 2.14 feet).

Maximum discharge during water year 1937-38, 20,000 second-feet Oct. 20 (gage height, 23.45 feet); minimum, 144 second-feet Sept. 8, 10 (gage height, 2.03 feet).

1934-38: Maximum discharge, that of Apr. 26, 1937; minimum, 70 second-feet Aug. 28, 1936 (gage height, 1.85 feet).

Remarks.- Records good except those for periods of missing gage heights, Nov. 15-23, Dec. 18-27, 1937 (computed on basis of records for Rapidan River near Culpeper and Hardware River near Scottsville), and those for Apr. 28-30, 1937 (computed from graph based on occasional gage readings, floodmark, and graphs for nearby stations), which are fair.

Revisions.- Revised figures of discharge for the water year 1936-37, superseding those published in Water-Supply Paper 822, are given herein.

Rating tables, water year 1936-37 and 1937-38 (gage height, in feet, and discharge, in second-feet)

Apr. 27 to Oct. 20, 1937, Mar. 19 to Sept. 30, 1938 (Shifting-control method used May 1-15, 1937)				Oct. 21, 1937, to Mar. 18, 1938	
2.2	200	8.0	3,380	2.7	590
2.4	290	10.0	4,480	3.0	750
2.7	470	12.0	5,640	3.5	1,020
3.0	635	14.0	6,930	4.0	1,300
3.5	910	16.0	8,420	5.0	1,850
4.0	1,180	18.0	10,400	6.0	2,400
5.0	1,740	20.0	13,100	8.0	3,500
6.0	2,280	22.0	16,700	10.0	4,600

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,790	225	177	550	2,170	1,120	540	1,840	525	514	470	1,350
2	550	228	196	1,860	1,700	1,050	540	1,570	536	630	380	882
3	305	232	361	6,630	1,400	960	520	1,350	780	536	332	662
4	238	228	312	2,810	1,240	892	520	1,180	1,080	398	280	564
5	206	254	264	1,630	1,120	848	941	1,080	745	985	260	596
6	193	260	241	1,180	1,030	802	4,520	1,050	718	678	245	2,160
7	187	241	1,360	1,180	960	760	2,440	938	569	569	236	3,140
8	184	228	1,200	1,430	1,050	760	1,640	855	1,490	446	232	2,120
9	362	241	650	1,060	1,000	802	1,840	745	745	398	228	1,400
10	260	244	1,420	882	1,640	720	2,060	652	580	398	232	1,050
11	222	222	1,510	860	1,440	680	1,400	580	888	362	270	828
12	193	216	1,900	792	1,170	660	1,170	530	690	338	543	718
13	180	219	1,770	1,060	1,050	640	1,000	520	525	530	398	591
14	165	219	1,080	1,110	1,000	720	938	1,440	492	1,190	683	520
15	165	216	792	1,450	938	960	938	2,400	492	564	422	476
16	192	206	650	1,510	915	892	870	1,460	492	434	255	440
17	7,260	200	1,260	1,530	1,200	892	760	1,160	690	440	232	416
18	4,150	200	1,020	2,460	1,070	938	720	992	1,020	440	220	410
19	1,170	196	792	2,800	982	892	680	1,050	1,300	320	422	386
20	750	196	2,280	7,790	938	802	660	936	772	1,060	265	374
21	570	200	1,940	10,700	1,470	780	640	800	574	2,340	220	356
22	438	203	1,260	3,800	8,100	720	660	772	596	1,200	220	338
23	368	193	905	2,610	4,110	680	640	1,020	569	679	1,570	326
24	330	193	710	2,660	2,500	660	600	855	470	514	828	320
25	302	193	610	2,220	2,060	660	7,520	718	434	440	1,670	314
26	288	193	550	1,900	1,700	640	49,000	635	410	398	4,020	308
27	270	190	490	1,600	1,440	600	15,000	608	428	564	2,710	350
28	257	184	462	1,400	1,300	580	5,200	657	1,280	380	1,520	1,240
29	251	181	422	3,360	-	560	3,400	965	492	332	992	1,110
30	248	164	403	2,340	-	560	2,500	635	428	314	1,430	591
31	235	-	414	2,000	-	540	-	564	-	320	1,580	-

Discharge, in second-feet, of Rivanna River at Palmyra, Va., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	481	1,580	1,460	646	915	832	608	398	344	308	745	156
2	446	1,410	1,220	678	778	805	580	386	308	290	552	168
3	428	1,300	1,080	640	750	832	564	368	308	275	508	255
4	3,860	1,160	998	618	750	860	536	350	338	250	718	186
5	3,940	1,080	942	618	722	805	514	338	308	228	938	172
6	2,890	1,020	998	612	695	778	503	338	275	220	772	162
7	1,960	942	942	1,290	695	722	542	314	265	208	602	156
8	1,380	888	832	1,190	662	690	745	296	265	193	564	150
9	1,050	860	805	888	651	673	1,080	302	255	200	1,100	153
10	965	805	778	778	651	998	882	302	245	398	569	150
11	828	778	640	750	646	1,330	745	290	296	302	446	153
12	718	805	668	750	832	1,020	668	320	338	232	398	153
13	652	2,560	722	722	805	888	635	302	285	204	344	193
14	624	1,960	695	684	750	888	602	320	240	193	302	255
15	602	1,500	722	668	722	1,410	580	486	204	179	280	608
16	552	1,300	750	640	684	942	552	428	200	172	265	428
17	530	1,200	750	640	662	915	530	338	320	162	270	245
18	520	1,100	800	640	668	1,740	530	308	938	156	812	216
19	4,160	1,000	740	618	695	1,210	558	374	1,020	200	503	216
20	17,400	980	700	607	2,480	1,020	552	380	828	386	320	296
21	5,360	900	680	624	2,020	910	508	392	1,020	1,420	270	514
22	2,520	820	660	750	1,380	800	514	326	828	1,350	240	308
23	2,520	760	640	805	1,360	745	525	285	635	3,800	232	232
24	2,240	722	620	1,030	1,740	690	470	290	514	4,130	216	212
25	1,740	722	620	3,120	1,330	646	458	308	428	1,570	204	193
26	1,460	722	600	2,290	1,140	674	458	452	542	1,570	186	176
27	2,660	860	600	1,520	1,050	718	440	635	422	1,020	186	179
28	4,930	2,520	695	1,160	942	618	428	476	657	1,460	179	176
29	3,120	2,460	678	998	-	586	416	374	481	800	168	172
30	2,400	1,740	651	1,020	-	586	392	344	368	938	168	182
31	1,900	-	640	942	-	630	-	362	-	800	165	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square m'le	Run-off in inches
October 1936..	22,279	7,260	165	719	1.07	1.23
November	6,385	260	181	213	.316	.35
December	27,401	2,280	177	884	1.31	1.51
Calendar year 1936	368,655	33,800	96	1,007	1.49	20.31
January 1937..	75,164	10,700	550	2,425	3.59	4.14
February	46,693	8,100	915	1,668	2.47	2.57
March	23,770	1,120	540	767	1.14	1.31
April	109,857	49,000	520	3,662	5.43	6.06
May	30,559	2,400	520	986	1.46	1.68
June	20,810	1,490	410	694	1.03	1.15
July	18,711	2,340	314	604	.895	1.03
August	23,365	4,020	220	754	1.12	1.29
September	24,336	3,140	308	811	1.20	1.34
Water year 1936-37	429,330	49,000	165	1,176	1.74	23.66
October 1937..	74,836	17,400	428	2,414	3.58	4.13
November	36,454	2,560	722	1,215	1.80	2.01
December	24,326	1,460	600	785	1.16	1.34
Calendar year 1937	508,881	49,000	220	1,394	2.07	28.05
January 1938.	28,936	3,120	607	933	1.38	1.59
February	27,175	2,480	646	971	1.44	1.50
March	26,961	1,740	586	870	1.29	1.49
April	17,115	1,060	392	570	.844	.94
May	11,182	486	285	361	.535	.62
June	13,475	1,020	200	449	.665	.74
July	23,614	4,130	156	762	1.13	1.30
August	13,222	1,100	165	427	.633	.73
September	6,815	608	150	227	.336	.37
Water year 1937-38	304,111	17,400	150	833	1.23	16.76

Peak discharge.- Oct. 20 (12 m.) 20,000 sec.-ft.

James River & Kanawha canal near Richmond, Va.

Location.- Water-stage recorder, lat. 37°33'52", long. 77°34'28", at canal bridge 400 feet downstream from head gates, 1,200 feet north of north end of Bosher Dam on James River, 1½ miles upstream from Westham Bridge, and 4½ miles west of city limits of Richmond, Henrico County.

Records available.- September 1936 to September 1938.

Extremes.- Maximum discharge during year, 2,200 second-feet Oct. 21 (gage height, 9.62 feet, from rating curve extended above 950 second-feet; minimum, probably no flow many times during year when head gates are closed (stage below intake pipes).

Remarks.- Records good except those for periods of missing gage heights (computed on basis of fragmentary gage-height graphs and records for James River at Cartersville and near Richmond) and those below 300 second-feet, which are poor. Canal diverts from James River 1,200 feet above Bosher Dam.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.9	360	3.0	666
1.2	396	4.0	862
1.5	436	5.0	1,090
2.0	506	6.0	1,330
2.5	582	7.0	1.570

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	630	820	840	396	*830	820	*560	287	820	760	760	684
2	0	820	820	442	820	862	*0	840	780	679	740	702
3	34	840	679	820	780	862	*70	840	760	295	760	656
4	840	820	436	820	684	552	*830	820	760	740	780	216
5	862	683	470	820	396	0	*830	820	740	740	780	720
6	820	352	862	800	396	67	*820	820	760	720	678	760
7	*820	0	862	726	840	820	*820	783	780	760	323	720
8	*820	820	862	396	840	820	*560	540	760	780	780	720
9	*820	820	862	428	840	800	*0	800	780	780	760	720
10	*820	820	710	800	840	800	*70	800	800	780	800	702
11	*820	800	396	800	679	552	*830	800	820	800	800	720
12	*820	698	435	820	396	0	*830	780	862	780	820	702
13	*820	436	862	820	435	72	*820	780	780	800	684	720
14	*820	465	862	683	862	862	*820	780	820	780	666	720
15	*820	800	840	408	840	862	653	800	780	780	720	740
16	*820	800	862	435	840	780	204	820	760	*680	740	740
17	*820	840	707	884	884	800	0	820	780	*300	720	740
18	840	840	396	884	707	575	69	800	820	740	720	740
19	862	696	460	862	396	0	820	800	840	740	780	740
20	972	408	928	862	460	62	820	820	820	780	660	740
21	1,640	468	928	726	928	780	800	820	820	840	222	702
22	1,690	862	928	396	862	800	533	840	840	840	740	720
23	972	840	906	435	862	820	0	906	884	840	720	702
24	862	884	736	862	862	820	72	862	862	840	720	684
25	840	884	396	820	656	533	862	820	760	840	702	684
26	862	742	396	862	408	0	906	820	760	760	702	684
27	906	396	460	*840	431	65	884	665	820	780	702	702
28	906	465	906	*700	820	800	884	0	820	760	*700	702
29	683	906	928	*390	-	800	810	195	760	720	*700	702
30	408	840	906	*410	-	820	0	780	740	702	702	702
31	433	-	736	*840	-	800	-	800	-	760	684	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	25,082	1,690	0	809		
November	20,865	906	0	696		
December	22,377	928	396	722		
Calendar year 1937	267,693	1,690	0	733		
January	21,187	884	390	683		
February	19,594	928	396	700		
March	18,006	862	0	581		
April	16,177	906	0	539		
May	22,858	906	0	737		
June	23,888	884	740	796		
July	22,886	840	285	738		
August	21,765	820	222	702		
September	20,886	760	216	696		
Water year 1937-38	255,571	1,690	0	700		

Peak discharge.- Oct. 21 (11 p.m.) 2,200 sec.-ft.
*Gage height missing.

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Appomattox River at Farmville, Va.

Location.- Water-stage recorder, lat. 37°18', long. 78°23', at highway bridge 1,000 feet north of town limits of Farmville, Prince Edward County, and 1¼ miles (revised) downstream from Buffalo Creek.

Drainage area.- 306 square miles.

Records available.- March 1926 to September 1938.

Average discharge.- 12 years, 281 second-feet.

Extremes.- Maximum discharge during year, 6,250 second-feet June 21 (gage height, 17.64 feet); minimum, 43 second-feet Sept. 17 (gage height, 3.14 feet); minimum daily discharge, 102 second-feet Aug. 31, Sept. 7, 8, 10.
1926-38: Maximum discharge observed, about 9,860 second-feet Aug. 12, 1928 (gage height, 21.10 feet), from rating curve extended above 4,000 second-feet; minimum, 5 second-feet Oct. 4, 1933; minimum daily discharge, 9 second-feet Sept. 20, 1932.

Remarks.- Records fair. Low-water flow regulated by operation of mills at dam above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Oct. 20, June 22 to Sept. 30

4.0	115	10.0	1,140	16.0	4,720
4.5	166	12.0	1,700	18.0	6,650
5.0	224	12.5	1,900	20.3	8,980
6.0	359	13.0	2,190		
8.0	696	14.0	2,960		

Oct. 21 to June 21

4.2	146	6.0	369
4.6	189	8.0	704
5.0	236		

Note.- Same as preceding table above 9.6 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	182	289	234	219	296	226	317	176	153	283	401	110
2	174	275	226	296	254	220	294	168	151	250	261	112
3	182	268	219	288	248	354	263	162	162	232	258	110
4	1,280	252	216	244	251	716	239	159	184	212	309	123
5	2,500	245	222	230	240	441	228	154	160	196	334	118
6	756	244	242	222	234	473	224	152	146	186	608	106
7	384	237	238	721	236	476	269	144	142	178	313	102
8	292	233	215	763	225	336	448	149	176	170	224	102
9	252	231	216	441	218	292	758	170	154	168	240	104
10	364	228	207	307	221	643	520	154	538	190	204	102
11	383	224	177	288	221	1,030	337	144	1,120	204	184	104
12	284	275	190	289	241	602	291	146	468	189	164	118
13	260	682	220	271	244	385	271	148	452	160	156	154
14	250	470	212	246	233	330	250	172	240	151	150	134
15	247	324	220	236	223	319	242	266	181	154	142	124
16	224	280	236	226	214	303	232	195	238	157	141	115
17	222	266	246	228	209	399	223	157	1,090	139	134	105
18	220	256	234	226	208	1,480	226	154	984	156	249	131
19	599	246	223	214	217	1,040	236	168	1,030	204	244	130
20	3,950	252	207	214	318	528	219	246	2,980	471	154	233
21	2,750	244	202	232	303	393	210	259	5,580	717	141	387
22	666	226	198	397	238	332	204	174	3,270	954	136	208
23	485	220	200	778	266	306	200	154	1,730	732	128	136
24	417	201	204	646	453	287	192	177	648	827	126	124
25	332	218	206	1,200	339	263	187	206	402	657	121	121
26	303	224	201	930	280	300	184	252	320	1,160	117	116
27	587	256	196	492	261	368	180	368	318	1,500	112	116
28	896	322	245	314	244	283	174	272	1,050	944	112	114
29	507	291	258	274	-	257	170	202	1,000	511	113	113
30	371	249	224	304	-	252	166	180	427	478	108	140
31	320	-	216	302	-	261	-	174	-	687	102	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,639	3,950	174	666	2.18	2.51
November	8,228	682	201	274	.895	1.00
December	6,750	258	177	218	.712	.82
Calendar year 1937	175,453	8,050	124	481	1.57	21.32
January	12,038	1,200	214	388	1.27	1.46
February	7,135	453	208	255	.833	.87
March	13,895	1,480	220	448	1.46	1.68
April	7,954	758	166	265	.866	.97
May	5,802	368	144	187	.611	.70
June	25,494	5,580	142	850	2.78	3.10
July	13,217	1,500	139	426	1.39	1.60
August	6,186	608	102	200	.654	.75
September	4,012	387	102	134	.438	.49
Water year 1937-38	131,350	5,580	102	360	1.18	15.95

Peak discharge.- Oct. 5 (9 a.m.) 3,040 sec.-ft.; Oct. 20 (8:30 p.m.) 4,990 sec.-ft.; June 20 (4:30 p.m.) 4,540 sec.-ft.; June 21 (10 a.m.) 6,250 sec.-ft.

Appomattox River at Mattoax, Va.

Location.- Water-stage recorder, lat. 37°25', long. 77°52', at Southern Railway bridge at Mattoax, Amelia County, half a mile (revised) upstream from Skinquarter Creek.

Drainage area.- 729 square miles.

Records available.- August 1900 to December 1905, March 1926 to September 1938.

Average discharge.- 12 years (1926-38), 663 second-feet.

Extremes.- Maximum discharge during year, 7,420 second-feet June 24 (gage height, 24.21 feet); minimum, 152 second-feet Sept. 8 (gage height, 5.35 feet).
1900-1905, 1926-38: Maximum discharge, 20,100 second-feet Apr. 28, 1937 (gage height, 29.97 feet); minimum, 11 second-feet Oct. 2, 1930 (gage height, 3.52 feet).

Remarks.- Records good except those for periods of missing gage heights, Oct. 7, 8, Aug. 26, 27, which were computed on basis of records for stations at Farmville and near Petersburg and are fair. Some regulation from low dam and gristmill about 3 miles above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

5.6	196	8.0	816	16.0	3,160
6.0	244	9.0	852	18.0	3,930
6.5	324	10.0	1,120	20.0	4,730
7.0	412	12.0	1,740	22.0	5,710
7.5	510	14.0	2,420		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	367	734	544	479	732	575	621	357	346	2,970	1,530	200
2	316	666	509	576	670	532	705	364	316	838	1,000	198
3	312	627	485	717	602	660	698	362	307	630	916	206
4	1,210	595	470	660	567	1,410	624	334	330	544	744	216
5	2,390	557	464	552	575	1,680	557	326	362	432	726	222
6	2,640	540	500	514	554	1,230	528	316	352	435	878	228
7	1,500	528	522	1,330	540	1,260	594	298	298	406	1,220	204
8	900	514	493	2,250	527	1,050	940	298	296	332	712	189
9	583	500	458	2,180	503	792	1,770	359	319	358	564	184
10	664	491	444	1,120	493	1,190	1,990	358	554	336	544	186
11	886	480	408	786	492	2,330	1,470	314	779	478	472	180
12	774	523	336	741	582	2,470	863	284	1,590	472	430	166
13	576	1,420	546	724	606	1,760	727	272	944	374	387	198
14	522	1,800	454	667	580	988	658	304	784	336	350	262
15	534	1,180	467	608	542	840	610	454	512	300	334	288
16	510	763	522	568	503	790	574	564	360	328	317	232
17	468	660	524	556	476	833	542	430	472	301	317	216
18	442	622	530	552	457	2,040	524	335	1,520	279	314	215
19	655	583	496	529	476	2,600	539	322	2,110	374	352	277
20	3,580	566	466	505	798	2,710	537	350	3,060	336	468	487
21	3,810	566	436	512	1,020	1,470	501	434	3,730	1,270	336	1,070
22	3,890	535	420	616	748	978	476	515	4,090	2,110	288	960
23	4,930	495	416	1,100	646	838	462	368	5,740	2,830	274	512
24	5,130	477	422	1,670	984	774	440	318	7,220	3,830	256	336
25	2,220	465	432	1,780	1,150	697	420	318	5,830	4,210	244	282
26	956	473	432	2,210	894	684	408	444	2,840	5,330	240	258
27	1,250	510	420	2,050	718	786	398	667	813	6,160	230	246
28	2,110	618	454	1,040	639	826	390	695	2,290	6,030	222	236
29	1,970	706	532	712	-	670	374	597	2,510	6,670	216	236
30	1,160	632	546	668	-	623	360	442	2,820	5,330	209	242
31	874	-	489	727	-	602	-	385	-	2,590	207	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	48,151	5,130	312	1,553	2.13	2.46
November	19,626	1,800	465	661	.907	1.01
December	14,437	546	336	466	.639	.74
Calendar year 1937	440,024	18,800	199	1,206	1.65	22.47
January	29,679	2,250	479	957	1.31	1.51
February	18,106	1,150	467	647	.888	.92
March	36,688	2,710	532	1,183	1.62	1.87
April	20,300	1,990	360	677	.929	1.04
May	12,374	885	272	399	.547	.63
June	53,514	7,220	296	1,784	2.45	2.73
July	57,429	6,690	279	1,853	2.54	2.93
August	15,297	1,530	207	493	.676	.78
September	8,952	1,070	180	298	.409	.46
Water year 1937-38	334,753	7,220	180	917	1.26	17.08

Appomattox River near Petersburg, Va.

Location.- Water-stage recorder, lat. 37°14', long. 77°33', 1⅛ miles upstream from Wallace Creek, 2⅛ miles upstream from dam of Virginia Electric & Power Co., and 7 miles west of Petersburg, Dinwiddie County.

Drainage area.- 1,335 square miles.

Records available.- September 1931 to September 1938. May 1927 to September 1931 at site 1 mile downstream.

Average discharge.- 10 years (1927-30, 1931-38), 1,262 second-feet.

Extremes.- Maximum discharge during year, 18,200 second-feet July 26 (gage height, 14.58 feet); minimum, 262 second-feet Sept. 9, 10 (gage height, 2.73 feet).
1927-38: Maximum discharge, 18,800 second-feet Apr. 30, 1937 (gage height, 14.85 feet, from floodmarks); minimum, 19 second-feet Sept. 21-27, 1932.

Remarks.- Records good except those for periods of missing gage heights, Oct. 28, 29, Nov. 13-15, which were computed on basis of records for station at Mattoax and are fair.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.8	290	4.5	1,500	9.0	6,500
3.0	380	5.0	2,000	11.0	9,440
3.3	545	6.0	3,030	13.0	13,800
3.6	745	7.0	4,130		
4.0	1,060	8.0	5,300		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	703	1,320	988	820	1,280	1,100	1,050	662	610	7,420	5,900	312
2	521	1,140	884	1,060	1,160	996	1,140	668	552	3,030	1,800	299
3	485	1,060	844	1,320	1,060	1,180	1,280	662	656	1,140	1,410	303
4	1,170	1,010	805	1,280	1,040	2,450	1,140	649	884	932	1,410	316
5	3,140	972	790	1,100	1,010	2,760	1,040	604	812	805	1,280	330
6	3,580	940	876	956	972	2,450	956	584	738	717	1,320	325
7	3,360	916	964	2,220	964	2,100	1,020	552	610	656	1,600	325
8	2,450	892	908	3,690	940	1,850	1,600	521	521	604	1,320	303
9	1,060	868	844	3,800	900	1,500	3,690	584	515	578	916	278
10	1,020	844	798	2,700	868	1,800	4,130	656	758	820	805	270
11	1,230	828	724	1,550	860	3,910	3,360	597	1,600	852	768	274
12	1,320	892	623	1,360	1,020	4,130	1,950	533	1,800	1,010	760	270
13	1,040	2,500	616	1,320	1,140	3,470	1,410	491	2,050	876	656	278
14	884	3,000	675	1,230	1,100	2,050	1,230	503	1,280	668	578	303
15	860	2,400	798	1,100	1,020	1,550	1,140	675	964	545	527	430
16	860	1,750	868	1,030	940	1,410	1,060	924	662	491	497	410
17	790	1,320	948	980	868	1,410	1,010	844	571	497	689	334
18	738	1,180	940	996	836	2,550	980	656	1,140	458	1,100	321
19	724	1,100	892	948	844	3,470	996	584	2,250	441	900	390
20	2,180	1,060	812	900	956	3,470	1,010	604	3,250	558	682	965
21	4,460	1,060	768	892	1,550	2,920	956	675	5,780	1,180	649	1,500
22	5,060	1,020	731	1,060	1,360	1,750	908	738	7,990	2,500	515	1,700
23	6,140	924	717	1,650	1,100	1,410	900	731	8,140	3,360	452	1,230
24	6,500	868	731	2,250	1,700	1,280	844	662	7,840	6,760	425	668
25	6,500	836	752	2,810	2,100	1,180	798	675	7,280	7,700	400	485
26	4,130	836	752	2,920	1,850	1,140	760	790	7,420	13,500	380	415
27	1,350	884	731	2,920	1,410	1,320	738	1,500	5,580	15,900	366	390
28	3,500	1,010	768	2,100	1,230	1,360	724	1,460	6,590	17,100	352	375
29	3,500	1,140	876	1,280	-	1,230	696	1,280	10,200	14,000	339	366
30	2,400	1,100	916	1,230	-	1,060	675	860	11,400	10,200	330	375
31	1,600	-	868	1,280		1,050	-	696	-	8,440	321	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	73,755	6,500	485	2,379	1.78	2.05
November	35,670	3,000	828	1,189	.891	.99
December	25,207	988	616	813	.609	.70
Calendar year 1937	728,175	18,600	312	1,995	1.49	20.29
January	50,742	3,800	820	1,637	1.23	1.42
February	32,098	2,100	836	1,146	.858	.89
March	61,306	4,130	996	1,978	1.48	1.71
April	39,191	4,130	675	1,306	.978	1.09
May	22,620	1,500	491	730	.547	.63
June	100,443	11,400	515	3,348	2.51	2.80
July	123,738	17,100	441	3,992	2.99	3.45
August	29,447	5,900	321	950	.712	.82
September	14,540	1,700	270	485	.363	.40
Water year 1937-38	608,757	17,100	270	1,668	1.25	16.95

Peak discharge.- July 26 (4 p.m.) 18,200 sec.-ft.

Lake Drummond in Dismal Swamp, Va.

Location.- Staff gage, lat. 36°36'00", long. 76°26'40", near outlet, in Norfolk County, 2 miles east of Nansemond County line, 3 miles north of North Carolina State line, and 20 miles southwest of Norfolk.

Records available.- May 1926 to September 1938.

Extremes.- Maximum gage height during year, 5.49 feet July 28; minimum, 3.03 feet Oct. 8. 1926-38: Maximum gage height, 6.09 feet Oct. 7, 1929; minimum, 0.10 foot Dec. 9, 1926.

Remarks.- Records good. Gage read twice daily.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.28	3.29	4.64	5.24	5.19	5.19	5.26	5.24	5.22	5.32	5.26	4.34
2	3.31	3.26	4.82	5.24	5.19	5.19	5.24	5.24	5.24	5.34	5.22	4.24
3	3.28	3.24	4.94	5.24	5.22	5.19	5.19	5.22	5.26	5.32	5.24	4.29
4	3.28	3.24	4.99	5.24	5.22	5.19	5.19	5.19	5.29	5.34	5.26	4.34
5	3.25	3.24	5.09	5.24	5.24	5.19	5.14	5.22	5.26	5.32	5.22	4.29
6	3.21	3.19	5.24	5.24	5.24	5.19	5.14	5.22	5.26	5.32	5.24	4.24
7	3.13	3.24	5.29	5.29	5.29	5.19	5.19	5.19	5.22	5.32	5.24	4.22
8	3.08	3.14	5.24	5.24	5.26	5.22	5.24	5.22	5.24	5.34	5.22	4.19
9	3.25	3.14	5.32	5.19	5.24	5.19	5.24	5.24	5.24	5.34	5.24	4.14
10	3.23	3.14	5.29	5.19	5.24	5.29	5.22	5.24	5.24	5.34	5.22	4.09
11	3.28	3.12	5.22	5.24	5.24	5.19	5.26	5.24	5.24	5.34	5.19	4.04
12	3.23	3.14	5.19	5.29	5.22	5.19	5.39	5.24	5.24	5.34	5.14	3.99
13	3.23	3.49	5.14	5.29	5.22	5.19	5.36	5.22	5.24	5.36	5.14	3.96
14	3.28	3.52	5.09	5.29	5.19	5.24	5.29	5.24	5.22	5.34	5.12	3.94
15	3.33	3.54	5.09	5.29	5.14	5.19	5.29	5.29	5.16	5.34	5.06	3.89
16	3.28	3.59	5.04	5.29	5.14	5.19	5.19	5.22	5.14	5.32	5.06	3.94
17	3.28	3.64	5.19	5.26	5.19	5.24	5.22	5.19	5.14	5.32	4.96	3.94
18	3.23	3.72	5.19	5.24	5.19	5.24	5.24	5.22	5.14	5.26	4.96	3.94
19	3.15	3.76	5.19	5.24	5.22	5.19	5.22	5.19	5.19	5.24	4.94	4.04
20	3.25	3.82	5.19	5.24	5.36	5.26	5.14	5.24	5.26	5.24	4.92	4.14
21	3.25	3.84	5.26	5.22	5.22	5.24	5.16	5.22	5.32	5.24	4.94	4.39
22	3.31	3.94	5.29	5.22	5.24	5.24	5.14	5.22	5.34	5.26	4.86	4.29
23	3.25	3.99	5.29	5.24	5.19	5.24	5.19	5.19	5.36	5.34	4.79	4.26
24	3.28	4.04	5.29	5.19	5.24	5.24	5.16	5.24	5.29	5.32	4.74	4.29
25	3.25	4.09	5.19	5.26	5.24	5.22	5.19	5.22	5.32	5.24	4.72	4.26
26	3.23	4.14	5.19	5.19	5.24	5.24	5.19	5.19	5.32	5.26	4.66	4.29
27	3.25	4.19	5.19	5.16	5.24	5.24	5.19	5.24	5.29	5.32	4.62	4.26
28	3.28	4.26	5.19	5.16	5.24	5.24	5.24	5.26	5.26	5.39	4.56	4.26
29	3.23	4.52	5.22	5.14	-	5.24	5.24	5.19	5.19	5.24	4.52	4.29
30	3.23	4.59	5.24	5.14	-	5.24	5.24	5.19	5.16	5.24	4.42	4.36
31	3.25	-	5.24	5.14	-	5.24	-	5.19	-	5.22	4.38	-

Nottoway River near Stony Creek, Va.

Location.- Water-stage recorder, lat. 36°54'00", long. 77°24'00", at bridge on Petersburg-Emporia highway, 2 miles upstream from Island Swamp Creek and 3½ miles south of town of Stony Creek, Sussex County.

Drainage area.- 586 square miles.

Records available.- March 1930 to September 1938.

Extremes.- Maximum discharge during year, 11,400 second-feet July 28 (gage height, 19.93 feet); minimum, 125 second-feet Sept. 12 (gage height, 2.53 feet).
1930-38: Maximum discharge, 11,500 second-feet Apr. 28, 1937 (gage height, 20.00 feet); minimum, 5 second-feet Sept. 2, 5, 1932 (gage height, 0.62 foot).

Remarks.- Records good except those for periods of missing gage heights, Dec. 29 to Jan. 7, Jan. 9-14, Feb. 2, 3, 19, 20, which were computed on basis of records for Meherrin River near Lawrenceville and are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 28

2.6	151	6.0	904	13.0	3,150
3.0	211	7.0	1,190	14.0	3,610
3.5	305	8.0	1,480	15.0	4,740
4.0	412	10.0	2,070	16.0	5,880
5.0	640	12.0	2,730	18.0	8,530

July 29 to Sept. 30

2.6	134	5.0	602
3.0	192	6.0	855
3.5	276	7.0	1,140
4.0	374	8.0	1,440

Note.- Same as preceding table above 10.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	523	434	400	604	423	456	237	256	4,680	1,250	165
2	188	478	412	450	560	390	742	228	225	1,040	855	188
3	189	467	412	800	500	500	796	225	246	640	650	183
4	445	445	401	700	478	1,390	592	214	1,040	534	650	177
5	1,220	423	390	550	456	1,220	500	203	742	445	675	180
6	1,070	423	467	500	434	623	445	189	412	390	650	170
7	690	423	580	1,500	434	665	489	177	285	347	566	154
8	478	412	489	2,630	423	580	960	162	237	316	485	142
9	368	390	434	2,200	390	512	1,770	168	214	285	451	135
10	569	390	434	1,200	390	885	2,040	246	237	402	407	136
11	650	379	401	800	390	1,860	1,740	198	265	592	364	133
12	616	401	316	740	467	1,740	877	172	742	456	333	128
13	456	1,480	347	700	558	1,040	690	165	546	546	333	135
14	401	1,650	390	620	500	742	592	164	616	368	294	144
15	401	1,160	390	558	445	640	534	465	580	295	267	141
16	379	690	390	523	412	616	489	512	256	295	258	145
17	336	580	423	500	379	823	456	316	295	275	241	138
18	326	534	434	500	368	1,130	434	225	823	333	456	141
19	316	500	423	467	400	1,220	434	221	1,450	1,130	675	242
20	401	569	379	456	430	932	434	246	1,800	500	364	675
21	932	640	358	445	423	716	412	256	4,150	857	267	936
22	1,070	546	336	478	379	604	467	265	4,850	1,860	241	750
23	1,240	478	347	690	358	558	478	228	6,370	1,920	224	385
24	2,230	445	423	742	546	523	412	197	5,880	4,200	208	258
25	1,480	423	456	850	877	489	347	358	2,090	7,550	198	208
26	769	423	423	1,100	716	469	326	478	623	7,550	184	189
27	640	434	390	850	534	742	305	1,160	580	9,700	172	178
28	1,190	467	412	616	478	665	295	877	1,710	11,000	172	172
29	1,190	512	500	512	-	512	265	523	4,640	10,200	164	170
30	769	489	450	489	-	467	246	379	6,000	5,020	156	188
31	592	-	420	546	-	467	-	305	-	1,380	152	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	21,996	2,230	186	710	1.21	1.40
November	17,174	1,650	379	572	.976	1.09
December	12,861	580	316	415	.708	.82
Calendar year 1937	316,355	11,200	127	868	1.48	20.12
January	24,112	2,630	400	778	1.33	1.53
February	13,329	877	358	476	.812	.85
March	24,363	1,860	390	786	1.34	1.54
April	19,023	2,040	246	634	1.08	1.20
May	9,779	1,160	162	315	.538	.62
June	48,360	6,370	214	1,612	2.75	3.07
July	75,106	11,000	275	2,423	4.13	4.76
August	12,362	1,250	152	399	.681	.79
September	7,068	936	128	236	.403	.45
Water year 1937-38	235,553	11,000	128	782	1.33	18.12

Meherrin River near Lawrenceville, Va.

Location.- Water-stage recorder, lat. 36°43'00", long. 77°50'00", at Gholson Bridge, 1 mile upstream from Allen Creek and 3 miles southeast of Lawrenceville, Brunswick County.

Drainage area.- 553 square miles.

Records available.- December 1928 to September 1938.

Extremes.- Maximum discharge during year, 14,500 second-feet July 27 (gage height, 28.7 feet, from floodmarks), from rating curve extended above 8,000 second-feet; minimum, 73 second-feet Sept. 13 (gage height, 1.89 feet); minimum daily discharge, 97 second-feet Sept. 14.

1928-38: Maximum discharge, 17,300 second-feet Apr. 27, 1937 (gage height, 30.92 feet, from floodmarks), from rating curve extended above 8,000 second-feet on basis of velocity-area studies and comparison of peak discharge and total run-off of flood at this station with those for Nottoway River near Stony Creek; minimum, 5 second-feet Sept. 23, 24, 1932 (gage height, 0.72 foot); minimum daily discharge, 5 second-feet Sept. 24, 1932.

Remarks.- Records excellent except those for period of missing gage heights, July 27 to Aug. 2 (computed on basis of floodmarks and records for Nottoway River near Stony Creek), and those above 2,000 second-feet, which are fair. Low-water flow regulated by small dam and mill just above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.0	84	5.0	657	16.0	4,110
2.3	120	6.0	912	18.0	4,810
2.6	165	8.0	1,490	20.0	5,780
3.0	235	10.0	2,110	22.0	7,300
4.0	432	13.0	3,090	25.0	10,300

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	361	326	322	492	342	374	219	222	590	850	128
2	142	354	311	462	454	320	454	204	190	458	600	146
3	146	342	303	870	400	400	467	206	352	408	550	150
4	796	326	292	539	391	1,250	411	190	955	364	792	146
5	1,950	310	291	426	376	815	362	187	438	324	526	126
6	1,000	312	350	384	362	581	338	174	280	291	1,200	138
7	619	304	370	2,300	360	544	400	171	228	266	596	130
8	405	293	330	3,900	348	468	609	160	200	249	442	123
9	304	286	312	1,260	328	402	2,250	334	312	249	398	127
10	765	281	316	742	326	938	2,230	226	232	409	350	119
11	927	281	274	612	326	2,840	843	189	2,590	328	331	120
12	466	385	217	595	355	1,180	598	168	1,160	266	306	112
13	360	1,740	312	566	391	721	504	162	1,300	370	273	105
14	325	1,270	296	492	378	579	456	224	633	248	256	97
15	324	629	288	446	350	510	414	557	343	236	242	116
16	300	474	296	413	329	522	386	487	280	230	231	120
17	276	412	312	402	309	570	362	260	2,110	193	245	108
18	261	384	310	393	304	774	350	200	2,690	238	272	126
19	266	362	302	370	314	1,140	349	212	1,900	262	219	160
20	1,530	411	280	356	336	695	378	212	3,020	380	215	468
21	1,770	426	266	357	325	548	363	236	5,140	2,530	201	1,250
22	603	375	258	430	306	482	426	224	6,620	3,020	174	512
23	2,350	333	275	1,010	294	440	389	186	3,140	1,920	171	234
24	1,520	314	346	838	448	416	238	182	1,560	4,900	164	174
25	687	307	365	1,240	882	388	290	583	779	8,810	206	152
26	497	313	338	1,260	533	416	280	437	528	8,850	166	140
27	609	326	307	715	421	623	270	701	432	12,600	152	144
28	1,240	355	336	517	382	526	250	718	2,520	7,000	147	135
29	750	444	436	403	-	406	230	383	4,680	3,000	122	136
30	510	398	386	457	-	379	224	284	1,820	1,300	130	161
31	431	-	336	466	-	372	-	252	-	1,100	136	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	22,276	2,350	142	719	1.30	1.50
November	13,128	1,740	281	438	.792	.88
December	9,737	436	217	314	.568	.65
Calendar year 1937	278,577	16,000	84	763	1.38	18.72
January	23,543	3,900	322	759	1.37	1.58
February	10,820	882	294	386	.698	.73
March	20,587	2,840	320	664	1.20	1.38
April	15,495	2,250	224	516	.933	1.04
May	8,928	718	160	288	.521	.60
June	46,654	6,620	190	1,555	2.81	3.14
July	61,394	12,600	196	1,980	3.58	4.13
August	10,663	1,200	122	344	.622	.72
September	5,903	1,250	97	197	.356	.40
Water year 1937-38	249,128	12,600	97	683	1.24	16.75

Peak discharge.- June 21 (8:30 p.m.) 7,660 sec.-ft.; July 27 (about 8 p.m.) 14,500 sec.-ft.

Roanoke River at Roanoke, Va.

Location.- Water-stage recorder, lat. 37°15'30", long. 79°56'20", at Walnut Street bridge in Roanoke, Roanoke County, 3 miles upstream from Tinker Creek. Zero of gage is 906.84 feet above mean sea level.

Drainage area.- 388 square miles.

Records available.- July 1896 to September 1937.

Average discharge.- 38 years (1896-97, 1898-1902, 1903-5, 1907-38), 404 second-feet.

Extremes.- Maximum discharge during year, 9,710 second-feet Oct. 19, (gage height, 10.84 feet), from rating curve extended above 5,500 second-feet; minimum 75 second-feet Sept. 26 (gage height, 0.67 foot).
1896-1938: Maximum discharge observed, 16,900 second-feet Aug. 6, 1901 (gage height, 14.34 feet); practically no flow Dec. 23, 1909, when flow was retarded by freezing (gage height, 0.0 foot).

Remarks.- Records good. Some regulation of water flow by operation of power plant above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.0	152	2.0	562	4.0	2,000
1.2	218	2.5	815	5.0	3,000
1.4	292	3.0	1,120	6.0	4,100
1.7	422	3.5	1,510		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	171	635	400	413	450	296	300	250	269	254	418	146
2	162	562	382	418	396	292	296	229	262	250	352	149
3	215	519	356	374	378	461	288	211	505	305	436	146
4	1,300	477	343	356	369	788	269	201	450	269	387	146
5	1,190	450	347	343	352	650	262	204	338	225	343	141
6	870	427	382	334	338	605	258	194	281	201	586	130
7	610	391	330	543	330	543	292	174	240	187	788	124
8	477	374	300	572	309	500	365	171	225	181	591	124
9	404	356	309	500	296	463	482	165	198	343	960	119
10	400	338	284	459	292	548	454	158	181	222	610	119
11	338	326	254	445	296	710	400	155	181	191	468	119
12	305	778	247	418	326	645	365	162	168	171	391	122
13	284	1,750	281	396	321	576	343	158	158	155	326	146
14	330	930	269	360	309	528	321	187	144	155	288	135
15	313	685	258	343	309	509	305	258	135	158	262	146
16	284	586	292	317	309	463	292	198	135	144	326	144
17	269	528	321	317	305	445	281	165	158	138	262	146
18	262	473	321	309	300	427	292	162	184	146	382	158
19	4,710	440	313	292	300	387	334	184	165	375	281	138
20	4,370	431	292	281	309	365	296	222	1,030	1,110	232	132
21	1,600	391	284	300	292	347	284	215	3,440	710	211	130
22	960	365	281	409	281	330	309	198	2,800	2,100	198	122
23	1,220	334	281	450	305	321	382	184	1,050	1,850	187	119
24	930	326	288	473	400	309	369	174	660	2,600	178	117
25	735	321	281	1,130	369	296	347	191	586	990	171	114
26	625	317	273	1,080	356	334	321	211	635	710	165	112
27	2,380	391	269	735	356	374	300	445	463	581	162	138
28	3,040	514	378	605	334	321	277	343	396	473	152	138
29	1,340	473	468	524	-	309	262	296	330	400	149	124
30	930	431	459	505	-	309	247	281	281	409	146	127
31	735	-	431	496	-	300	-	296	-	505	146	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	31,759	4,710	162	1,020	2.63	3.03
November	15,319	1,750	317	511	1.32	1.47
December	9,974	468	247	322	.830	.96
Calendar year 1937	192,592	5,870	106	528	1.36	18.48
January	14,497	1,130	281	468	1.21	1.40
February	9,287	450	281	332	.856	.89
March	13,751	788	292	444	1.14	1.31
April	9,593	482	247	320	.825	.92
May	6,642	445	155	214	.552	.64
June	16,048	3,440	135	535	1.38	1.54
July	16,506	2,600	138	533	1.37	1.58
August	10,544	960	146	340	.876	1.01
September	3,971	158	112	132	.340	.38
Water year 1937-38	157,893	4,710	112	433	1.12	15.13

Peak discharge.- Oct. 4 (5:30 p.m.) 2,400 sec.-ft.; Oct. 19 (7 p.m.) 9,710 sec.-ft.; Oct. 28 (12:15 a.m.) 4,760 sec.-ft.; June 21 (3:15 p.m.) 4,320 sec.-ft.; July 22 (2 p.m.) 2,500 sec.-ft.; July 24 (12:30 a.m.) 4,650 sec.-ft.

Roanoke River at Niagara, Va.

Location.- Water-stage recorder, lat. 37°15'18", long. 79°52'18", 200 feet downstream from power plant of Appalachian Electric Power Co. at Niagara, Roanoke County, and 2 miles downstream from Tinker Creek. Zero of gage is 820.15 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 511 square miles.

Records available.- July 1926 to September 1938.

Average discharge.- 12 years, 531 second-feet.

Extremes.- Maximum discharge during year, 11,000 second-feet Oct. 19 (gage height, 13.58 feet); minimum, 30 second-feet Sept. 25, 26; minimum gage height, 0.72 foot Sept. 26; minimum daily discharge, 118 second-feet Sept. 25.
1926-38: Maximum discharge, 16,300 second-feet Aug. 16, 1928 (gage height, 17.36 feet), from rating curve extended above 5,000 second-feet; minimum, 15 second-feet June 4, 1937 (gage height, 0.42 foot); minimum daily discharge, 40 second-feet (estimated) Nov. 6, 1931.

Remarks.- Records good except those for period of faulty gage heights, Sept. 27-30, which were computed on basis of records for stations at Roanoke and near Toshes. Flow regulated at dam and water-power plant 200 feet above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-19, May 27 to June 3)

1.6	139	3.5	698	6.0	2,230
2.0	221	4.0	912	7.0	3,130
2.5	348	4.5	1,160	8.0	4,150
3.0	510	5.0	1,470	9.0	5,270

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	295	976	586	556	590	396	392	325	424	421	645	234
2	299	865	620	532	498	368	380	270	410	369	508	233
3	447	794	568	524	506	532	373	286	671	434	762	233
4	2,490	708	534	458	498	1,010	361	260	539	400	607	235
5	2,190	672	576	450	454	826	328	268	410	383	512	232
6	1,540	640	624	489	450	737	324	276	366	282	900	202
7	1,040	610	498	764	448	656	390	227	328	304	1,480	222
8	823	562	483	780	424	604	484	252	277	274	950	199
9	759	579	482	678	408	564	591	232	276	478	1,410	178
10	684	531	451	628	413	670	572	226	276	328	914	203
11	605	528	415	597	419	952	480	230	272	270	710	197
12	568	1,840	395	562	424	844	444	228	220	270	566	201
13	526	2,840	450	544	447	743	442	228	236	230	472	226
14	637	1,550	410	489	422	678	422	271	204	250	433	226
15	591	1,110	416	454	426	694	392	330	198	260	400	218
16	501	898	438	449	416	610	380	274	272	224	474	236
17	508	812	480	439	405	586	339	224	328	224	400	211
18	494	706	463	408	403	548	390	250	232	278	512	249
19	5,980	652	446	428	396	530	412	247	252	782	424	276
20	6,430	632	444	398	392	490	389	356	1,650	1,070	338	210
21	2,780	562	398	425	395	454	361	278	4,630	1,090	313	205
22	1,800	516	416	570	350	444	358	236	4,060	3,010	309	196
23	2,030	522	414	578	402	428	444	266	1,680	3,040	299	193
24	1,490	492	424	616	498	400	434	274	1,020	3,500	282	184
25	1,120	451	402	1,580	446	388	409	274	892	1,570	274	118
26	930	491	412	1,540	434	446	393	332	908	1,070	275	230
27	3,860	581	382	1,010	446	574	372	629	778	1,080	272	220
28	4,320	783	510	809	394	406	320	488	624	864	251	200
29	2,300	716	616	674	-	412	312	476	485	676	238	200
30	1,580	642	584	654	-	392	302	406	430	654	216	210
31	1,180	-	562	654	-	392	-	457	-	754	234	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	50,797	6,430	295	1,639	3.21	3.70
November	24,261	2,840	451	809	1.58	1.76
December	14,899	624	382	481	.941	1.08
Calendar year 1937	286,558	7,650	132	785	1.54	20.84
January	19,737	1,580	398	637	1.25	1.44
February	12,204	590	350	436	.853	.89
March	17,774	1,010	368	573	1.12	1.29
April	11,990	591	302	400	.783	.87
May	9,406	629	224	303	.593	.68
June	23,348	4,630	198	778	1.52	1.70
July	24,839	3,500	224	801	1.57	1.81
August	16,380	1,480	216	528	1.03	1.19
September	6,377	276	118	213	.417	.47
Water year 1937-38	232,012	6,430	118	636	1.24	16.88

Peak discharge.- Oct. 4 (6 p.m.) 3,430 sec.-ft.; Oct. 19 (6 p.m.) 11,000 sec.-ft.; Oct. 28 (1 a.m.) 5,990 sec.-ft.; June 21 (8 p.m.) 6,110 sec.-ft.; July 22 (6:30 a.m.) 3,730 sec.-ft.; July 24 (12:30 a.m.) 5,390 sec.-ft.

Roanoke River near Toshes, Va.

Location.- Water-stage recorder, lat. 37°02'03", long. 79°31'18", seven-eighths of a mile downstream from Witchers Creek, 3 miles upstream from Pigg River, and 5 miles northwest of Toshes, Pittsylvania County. Zero of gage is 588.99 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 1,020 square miles.

Records available.- September 1925 to September 1938.

Average discharge.- 13 years, 994 second-feet.

Extremes.- Maximum discharge during year, 28,100 second-feet Oct. 19 (gage height, 20.45 feet), from rating curve extended above 17,000 second-feet; minimum, 261 second-feet Sept. 27 (gage height, 1.38 feet).
1925-38: Maximum discharge, that of Oct. 19, 1937; minimum, 93 second-feet Sept. 19, 20, 1932 (gage height, 0.96 foot).

Remarks.- Records good except those for periods of missing or faulty gage heights, Oct. 6, 7, 9-14, 16-18, 24-28, Oct. 30 to Nov. 25, Nov. 27 to Jan. 6, Jan. 8-20, which were computed on basis of records for stations at Niagara and Altavista and are fair.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.6	372	4.0	2,400	10.0	9,900
2.0	645	5.0	3,400	12.0	13,000
2.5	1,060	6.0	4,500	14.0	16,400
3.0	1,500	8.0	7,000		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	585	1,700	1,200	1,100	1,320	821	869	585	741	845	1,820	500
2	570	1,600	1,200	1,050	1,180	821	845	622	669	821	1,460	535
3	773	1,500	1,100	1,050	1,120	1,010	813	563	773	837	3,840	528
4	5,440	1,400	1,000	1,000	1,130	1,680	789	542	1,110	928	1,950	542
5	6,350	1,300	1,000	900	1,070	1,680	757	528	861	773	1,770	549
6	4,000	1,200	1,100	900	987	1,590	725	535	741	693	3,650	521
7	3,000	1,150	1,100	1,540	996	1,410	789	528	653	592	4,740	480
8	1,860	1,100	950	1,550	978	1,230	1,050	507	677	585	2,600	480
9	1,500	1,050	950	1,400	928	1,140	1,410	528	585	585	2,500	474
10	1,800	1,000	900	1,250	928	1,500	1,280	480	608	1,360	2,180	415
11	1,400	1,000	800	1,200	910	1,900	1,060	474	709	709	1,640	441
12	1,200	2,500	750	1,150	902	1,720	944	542	685	615	1,410	434
13	1,100	5,000	850	1,100	910	1,540	861	514	549	563	1,140	480
14	1,000	3,000	850	1,000	919	1,360	861	592	507	500	1,040	500
15	1,230	2,300	800	950	885	1,360	821	845	454	549	928	514
16	1,000	1,800	850	950	902	1,280	781	685	434	521	902	514
17	900	1,500	900	900	861	1,230	749	585	677	454	953	514
18	900	1,400	900	870	845	1,230	709	521	996	500	970	528
19	14,300	1,300	900	850	853	1,110	789	570	837	1,060	1,010	521
20	17,800	1,200	850	850	894	1,040	781	701	2,800	5,220	837	549
21	5,580	1,100	820	936	853	970	725	757	5,830	3,730	733	480
22	3,840	1,000	820	1,030	829	944	725	645	8,120	6,350	669	447
23	3,400	1,000	830	1,180	789	910	725	578	3,840	5,960	653	428
24	2,900	1,000	850	1,280	894	885	789	600	2,220	8,700	638	415
25	2,200	900	850	2,650	953	837	741	645	1,720	3,730	622	391
26	1,800	1,060	850	3,400	910	877	717	685	1,900	2,900	608	361
27	6,000	1,200	800	2,260	910	1,010	693	970	2,040	2,600	592	433
28	7,000	1,500	1,000	1,720	894	936	669	987	2,400	2,400	585	409
29	4,060	2,000	1,150	1,500	-	829	638	781	1,280	2,080	556	434
30	2,500	1,500	1,150	1,410	-	853	608	757	996	2,800	514	434
31	2,000	-	1,150	1,410	-	845	-	741	-	3,000	500	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	107,988	17,800	570	3,483	3.41	3.93
November	46,260	5,000	900	1,542	1.51	1.68
December	29,220	1,200	750	943	.925	1.07
Calendar year 1937	578,807	17,800	318	1,586	1.55	21.10
January	40,336	3,400	850	1,301	1.28	1.48
February	26,550	1,320	789	948	.929	.97
March	36,548	1,900	821	1,179	1.16	1.34
April	24,713	1,410	608	824	.808	.90
May	19,593	987	474	632	.620	.71
June	46,412	8,120	434	1,547	1.52	1.70
July	62,960	8,700	454	2,031	1.99	2.29
August	44,010	4,740	500	1,420	1.39	1.60
September	14,251	549	361	475	.466	.52
Water year 1937-38	498,841	17,800	361	1,367	1.34	18.19

Peak discharge.- Oct. 4 (10 a.m.) 7,280 sec.-ft.; Oct. 19 (7 p.m.) 28,100 sec.-ft.; June 22 (11 a.m.) 10,400 sec.-ft.; July 20 (6:30 a.m.) 7,000 sec.-ft.; July 22 (5 p.m.) 7,420 sec.-ft.; July 24 (1 p.m.) 12,400 sec.-ft.

Roanoke River at Altavista, Va.

Location.- Water-stage recorder, lat. 37°06'21", long. 79°17'38", at highway bridge a quarter of a mile south of Altavista, Campbell County. Zero of gage is 503.25 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 1,802 square miles.

Records available.- August 1930 to September 1938.

Extremes.- Maximum discharge during year, 51,900 second-feet Oct. 20 (gage height, 31.27 feet); minimum, 655 second-feet Sept. 27 (gage height, 3.06 feet).
1930-38: Maximum discharge, that of Oct. 20, 1937; minimum, 94 second-feet Jan. 31, 1934 (gage height, 1.66 feet).

Remarks.- Records good except those for periods of missing gage heights, Feb. 13-16, 18-23, Feb. 25 to Mar. 2, which were computed on basis of records for stations at Brookneal near Toshes, and Clover and are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 22				June 23 to July 24		July 25 to Sept. 30	
3.5	835	14.0	10,800	3.6	1,100	3.2	730
4.0	1,145	16.0	14,000	4.0	1,380	3.5	900
5.0	1,850	18.0	17,800	5.0	2,140	4.0	1,230
6.0	2,680	21.0	24,700	6.0	2,940	5.0	1,990
8.0	4,430	24.0	32,400	8.0	4,650	6.0	2,790
10.0	6,400	27.0	40,300	10.0	6,450	8.0	4,560
12.0	8,400	30.0	48,400	12.0	8,400	10.0	6,400
				14.0	10,800		
				16.0	14,000		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,050	3,080	2,440	1,880	2,360	1,600	1,720	1,210	1,240	1,860	3,030	930
2	985	2,760	2,200	1,760	2,120	1,600	1,680	1,140	1,140	1,740	2,390	1,020
3	1,210	2,600	2,120	1,880	2,000	2,000	1,610	1,110	1,180	1,740	5,140	1,020
4	10,100	2,440	2,000	1,800	2,000	2,680	1,530	1,110	1,530	2,060	4,110	1,020
5	14,700	2,280	1,960	1,680	1,960	2,680	1,460	1,050	1,530	1,740	3,120	1,060
6	8,860	2,200	2,200	1,640	1,760	2,760	1,420	1,050	1,240	1,560	7,600	990
7	4,520	2,120	2,200	2,680	1,800	2,520	1,500	1,020	1,140	1,380	8,200	930
8	3,170	2,040	1,880	3,080	1,720	2,200	1,880	1,020	1,020	1,310	4,920	900
9	2,600	1,920	1,840	2,520	1,680	2,000	2,760	1,080	1,080	1,280	3,480	870
10	3,170	1,920	1,800	2,280	1,640	2,680	2,520	1,020	985	2,140	3,570	840
11	2,600	1,840	1,680	2,120	1,680	3,620	2,120	955	1,380	1,590	2,710	840
12	2,200	4,250	1,530	2,120	1,610	3,000	1,880	1,020	1,320	1,420	2,470	840
13	2,000	8,860	1,680	2,040	1,650	2,600	1,760	955	1,210	1,310	2,070	900
14	1,960	5,900	1,720	1,840	1,650	2,360	1,680	1,020	985	1,170	1,830	960
15	2,120	3,980	1,640	1,800	1,600	2,280	1,610	1,530	865	1,170	1,710	960
16	1,080	3,170	1,640	1,720	1,600	2,280	1,570	1,420	808	1,200	1,590	1,060
17	1,680	2,840	1,720	1,680	1,610	2,200	1,500	1,110	895	1,070	1,630	1,020
18	1,640	2,600	1,760	1,680	1,600	2,680	1,420	1,020	1,500	1,040	1,710	1,020
19	12,100	2,360	1,760	1,610	1,600	2,200	1,530	1,020	1,760	1,480	1,670	1,020
20	49,200	2,280	1,640	1,610	1,800	2,040	1,570	1,240	3,770	6,270	1,510	1,090
21	18,400	2,120	1,640	1,640	1,700	1,920	1,530	1,680	8,730	8,300	1,340	960
22	6,500	1,920	1,570	2,040	1,600	1,800	1,460	1,210	11,800	11,500	1,260	900
23	4,610	1,960	1,610	2,360	1,600	1,760	1,500	1,110	7,690	11,700	1,230	840
24	4,250	1,920	1,680	2,360	1,880	1,720	1,460	1,050	3,930	15,200	1,200	840
25	3,440	1,800	1,680	4,520	2,000	1,640	1,460	1,350	3,180	6,700	1,120	812
26	3,000	1,800	1,640	5,700	1,700	1,680	1,380	1,280	2,780	4,650	1,060	785
27	9,200	2,120	1,610	3,890	1,700	1,920	1,350	1,760	3,750	3,480	1,060	730
28	12,600	3,890	1,680	2,920	1,650	1,800	1,320	1,680	5,010	3,030	1,060	840
29	6,500	3,800	1,920	2,520	-	1,640	1,240	1,350	2,940	3,030	1,020	785
30	4,520	2,840	2,000	2,440	-	1,570	1,180	1,240	2,140	3,660	960	840
31	3,710	-	1,920	2,360	-	1,610	-	1,210	-	4,290	990	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	203,675	49,200	985	6,570	3.65	4.21
November	85,610	8,860	1,800	2,854	1.58	1.76
December	56,360	2,440	1,530	1,818	1.01	1.16
Calendar year 1937	1,095,665	49,200	824	3,002	1.67	22.62
January	72,170	5,700	1,610	2,328	1.29	1.49
February	49,270	2,360	1,600	1,760	.977	1.02
March	67,040	3,620	1,570	2,163	1.20	1.38
April	48,600	2,760	1,180	1,620	.899	1.00
May	37,020	1,760	955	1,194	.663	.76
June	78,528	11,800	808	2,618	1.45	1.62
July	110,070	15,200	1,040	3,551	1.97	2.27
August	76,760	8,200	960	2,476	1.37	1.58
September	27,622	1,090	730	921	.511	.57
Water year 1937-38	912,725	49,200	730	2,501	1.39	18.82

Peak discharge.- Oct. 5 (2 a.m.) 19,500 sec.-ft.; Oct. 20 (7:30 a.m.) 51,900 sec.-ft.; June 22 (6 p.m.) 14,300 sec.-ft.; July 22 (10 p.m.) 15,000 sec.-ft.; July 24 (8 a.m.) 19,500 sec.-ft.

Roanoke River at Brookneal, Va.

Location.- Water-stage recorder, lat. 37°02'22", long. 78°56'41", at highway bridge at Virginian Railway station at Brookneal, Campbell County, 2¾ miles upstream from Falling River. Zero of gage is 351.14 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).
Drainage area.- 2,420 square miles.
Records available.- April 1923 to September 1938.
Average discharge.- 15 years, 2,391 second-feet.
Extremes.- Maximum discharge during year, 60,400 second-feet Oct. 20 (gage height, 34.47 feet); minimum discharge, 948 second-feet Sept. 28; minimum gage height, 4.38 feet June 16.
1923-38: Maximum discharge, 68,300 second-feet Aug. 12, 1928 (gage height, 37.15 feet), from rating curve extended above 26,000 second-feet; minimum, 191 second-feet (estimated) Sept. 2, 1932.
Remarks.- Records fair. Discharge for periods of missing or faulty gage heights, Oct. 24-26, Dec. 13, 15, 16, Jan. 18-31, Feb. 2-7, 9-14, 16, 23-28, Mar. 2-8, computed on basis of records for stations at Altavista and near Clover.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 4 to Jan. 26)

Oct. 1 to Jan. 26				Jan. 27 to Aug. 7				Aug. 8 to Sept. 30	
6.2	1,660	17.0	13,900	4.6	1,220	12.0	7,920	5.0	1,160
7.0	2,190	20.0	18,500	5.0	1,430	14.0	10,200	6.0	1,730
8.0	2,980	24.0	26,000	6.0	2,080	17.0	14,000	7.0	2,400
10.0	4,930	28.0	36,600	7.0	2,850	20.0	18,500	8.0	3,190
12.0	7,260	32.0	49,800	8.0	3,690	24.0	26,000	10.0	5,130
14.0	9,850			10.0	5,720			12.0	7,400

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,780	4,300	3,430	2,330	3,170	2,080	2,230	1,380	1,490	2,160	4,160	1,210
2	1,660	3,800	3,070	2,490	3,000	2,100	2,160	1,400	1,400	1,940	3,090	1,240
3	1,840	3,520	2,890	2,410	2,700	2,500	2,080	1,460	1,400	1,940	5,040	1,320
4	9,440	3,250	2,810	2,330	2,500	3,500	1,940	1,400	1,580	2,020	6,490	1,290
5	19,500	3,070	2,650	2,190	2,400	3,600	1,880	1,350	1,800	2,160	5,060	1,320
6	12,800	2,980	2,810	2,190	2,300	3,600	1,880	1,320	1,550	1,740	7,940	1,260
7	6,780	2,810	2,980	3,340	2,300	3,600	2,610	1,290	1,380	1,640	10,200	1,180
8	4,400	2,730	2,650	4,400	2,300	3,000	2,380	1,320	1,290	1,490	7,040	1,180
9	3,520	2,650	2,490	3,430	2,200	2,530	3,330	1,400	1,350	1,520	4,400	1,140
10	4,100	2,570	2,490	2,890	2,200	3,250	3,330	1,320	1,580	1,680	4,200	1,180
11	3,900	2,490	2,330	2,730	2,100	5,280	2,690	1,240	2,080	2,530	3,190	1,210
12	3,070	2,650	2,120	2,650	2,100	4,060	2,380	1,260	1,740	1,610	2,710	1,180
13	2,650	7,600	2,200	2,570	2,150	3,330	2,230	1,290	1,740	1,520	2,470	1,180
14	2,650	8,940	2,300	2,410	2,200	3,010	2,080	1,320	1,430	1,490	2,120	1,320
15	2,810	5,260	2,250	2,330	2,230	2,850	2,020	1,740	1,220	1,400	1,990	1,290
16	2,650	4,100	2,250	2,190	2,100	2,850	1,940	1,800	1,120	1,400	1,860	1,260
17	2,410	3,610	2,410	2,120	2,160	2,770	1,880	1,460	1,220	1,320	1,800	1,290
18	2,260	3,340	2,410	2,100	2,080	4,160	1,880	1,320	1,520	1,240	1,800	1,260
19	5,740	3,070	2,410	2,100	2,080	3,250	1,880	1,320	2,460	2,240	1,920	1,290
20	51,400	2,930	2,260	2,050	2,530	2,770	1,940	1,490	7,820	6,700	1,800	1,380
21	39,500	2,810	2,190	2,100	2,300	2,530	1,880	2,160	13,000	11,900	1,610	1,380
22	10,100	2,650	2,190	3,000	2,160	2,380	1,800	1,680	24,300	15,400	1,550	1,240
23	6,300	2,490	2,120	3,500	2,200	2,300	1,880	1,430	12,500	16,600	1,460	1,160
24	5,600	2,410	2,190	3,500	2,800	2,230	1,800	1,430	5,390	17,200	1,460	1,110
25	4,700	2,410	2,260	5,000	2,800	2,160	1,800	1,550	4,060	10,200	1,400	1,080
26	4,200	2,410	2,190	7,000	2,500	2,160	1,680	1,800	3,170	6,600	1,350	1,060
27	10,100	2,570	2,120	6,000	2,300	2,610	1,680	2,230	3,690	4,260	1,320	1,040
28	18,000	4,600	2,260	4,500	2,200	2,380	1,610	2,160	5,940	3,510	1,320	1,060
29	9,850	5,700	2,410	3,500	-	2,230	1,550	1,800	3,960	3,780	1,260	1,290
30	6,540	4,100	2,410	3,000	-	2,080	1,490	1,550	2,610	3,600	1,240	1,210
31	5,150	-	2,410	3,000	-	2,080	-	1,520	-	4,860	1,210	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	265,400	51,400	1,660	856	3.54	4.08
November	107,870	8,940	2,410	3,596	1.49	1.66
December	75,960	3,430	2,120	2,450	1.01	1.16
Calendar year 1937	1,409,375	51,400	975	3,861	1.60	21.66
January	95,350	7,000	2,050	3,076	1.27	1.46
February	66,060	3,170	2,080	2,359	.975	1.02
March	89,230	5,280	2,080	2,878	1.19	1.37
April	61,910	3,330	1,490	2,064	.853	.95
May	47,190	2,230	1,240	1,522	.629	.73
June	115,790	24,300	1,120	3,860	1.60	1.78
July	137,650	17,200	1,240	4,440	1.83	2.11
August	94,460	10,200	1,210	3,047	1.26	1.45
September	36,610	1,380	1,040	1,220	.504	.56
Water year 1937-38	1,193,480	51,400	1,040	3,270	1.35	18.33

Peak discharge.- Oct. 20 (3 p.m.) 60,400 sec.-ft.; Oct. 28 (6 p.m.) 21,100 sec.-ft.; June 22 (6 a.m.) 28,000 sec.-ft.; July 23 (6 a.m.) 18,700 sec.-ft.; July 24 (3 p.m.) 21,800 sec.-ft.

Roanoke River near Clover, Va.

Location.- Water-stage recorder, lat. 36°50'17", long. 78°40'02", at highway bridge 3½ miles downstream from mouth of Roanoke Creek, and 6 miles east of Clover, Halifax County.

Drainage area.- 3,230 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum discharge during year, not determined; maximum daily discharge, 50,000 second-feet Oct. 21; minimum discharge, 1,240 second-feet Sept. 28, 29 (gage height, 2.22 feet).

1929-38: Maximum discharge, 56,400 second-feet Mar. 19, 1936 (gage height, 23.49 feet). Crest discharge of flood of Oct. 20 or 21, 1937, may have equalled that of Mar. 19, 1936. Minimum discharge, 204 second-feet Sept. 3, 1932 (gage height, 0.50 foot).

Remarks.- Records excellent except those for periods of missing gage heights, Oct. 8, 9, 11-16, 18-26, Nov. 1-8, Sept. 15-21, which were computed on basis of records for Brookneal and Clarksville and are fair.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.4	1,410	6.0	5,230	16.0	21,000
2.8	1,770	8.0	7,630	18.0	26,900
3.3	2,270	10.0	10,200	20.0	35,100
4.0	2,990	12.0	13,000	22.0	46,500
5.0	4,090	14.0	16,500		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,220	5,500	4,310	2,990	3,870	2,770	2,880	2,020	2,070	3,430	6,790	1,540
2	1,970	4,800	3,760	3,320	3,650	2,570	3,100	2,070	2,070	2,580	7,150	1,540
3	1,870	4,500	3,430	3,430	3,320	2,770	2,990	1,970	2,020	2,570	3,870	1,640
4	7,430	4,200	3,320	3,100	3,210	4,420	2,770	1,920	2,120	2,580	7,990	1,770
5	16,700	4,000	3,210	2,990	3,100	4,750	2,570	1,870	2,320	2,670	5,950	1,680
6	19,800	3,800	3,320	2,770	2,990	4,530	2,520	1,820	2,420	2,470	7,510	1,680
7	11,700	3,600	3,540	4,990	2,990	4,870	2,570	1,770	2,020	2,220	11,700	1,540
8	6,000	3,500	3,430	6,550	2,880	3,980	3,100	1,770	2,020	2,070	11,400	1,500
9	4,500	3,430	3,100	5,350	2,770	3,430	4,870	1,920	1,870	1,920	6,550	1,460
10	5,350	3,430	2,990	4,090	2,770	4,530	5,110	1,920	2,670	2,670	5,350	1,460
11	5,200	3,320	2,880	3,650	2,670	7,390	4,090	1,770	4,870	2,670	4,750	1,410
12	4,000	3,320	2,670	3,650	2,670	6,550	3,430	1,720	4,310	2,370	3,870	1,410
13	3,500	5,110	2,670	3,540	2,770	4,750	3,100	1,770	3,870	2,020	3,540	1,500
14	3,500	11,300	2,770	3,320	2,770	4,090	2,880	1,870	2,770	1,920	3,100	1,540
15	3,500	7,150	2,770	3,100	2,670	3,760	2,770	2,520	2,020	2,220	2,770	1,550
16	3,200	5,230	2,880	2,990	2,670	3,650	2,670	2,670	1,770	1,880	2,570	1,550
17	2,990	4,530	2,880	2,880	2,670	3,650	2,570	2,320	1,970	1,720	2,420	1,600
18	2,800	4,090	2,990	2,880	2,570	4,530	2,570	1,920	3,430	1,880	2,470	1,600
19	5,000	3,760	2,990	2,770	2,570	5,350	2,670	1,870	3,540	2,120	2,570	1,600
20	40,000	3,650	2,880	2,670	3,210	4,090	2,670	1,920	5,470	5,980	2,520	1,700
21	50,000	3,540	2,770	2,770	3,320	3,540	2,570	2,670	17,400	13,200	2,270	2,500
22	25,000	3,320	2,670	3,650	2,880	3,320	2,520	2,770	23,400	17,600	2,070	1,920
23	15,000	3,100	2,670	5,110	2,770	3,100	2,470	2,170	30,600	20,800	1,970	1,680
24	9,000	2,990	2,770	5,110	3,650	2,990	2,470	2,020	19,500	25,600	1,870	1,500
25	6,000	2,990	2,770	7,030	3,760	2,880	2,370	2,220	6,670	25,000	1,820	1,460
26	5,200	2,880	2,770	9,290	3,320	2,880	2,370	2,670	4,870	21,000	1,720	1,410
27	6,670	2,990	2,670	7,750	2,990	3,430	2,270	3,430	4,200	16,900	1,680	1,360
28	15,200	3,980	2,880	5,230	2,880	3,430	2,220	3,430	8,120	7,750	1,680	1,320
29	16,700	6,430	3,100	4,090	-	2,990	2,170	2,880	9,290	5,350	1,640	1,360
30	9,160	5,470	3,100	3,870	-	2,880	2,070	2,370	4,990	6,190	1,590	1,410
31	6,790	-	3,100	3,870	-	2,770	-	2,170	-	8,250	1,590	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	315,950	50,000	1,870	10,190	3.15	3.63
November	129,910	11,300	2,880	4,330	1.34	1.50
December	94,060	4,310	2,670	3,034	.939	1.08
Calendar year 1937	1,894,900	50,000	1,320	5,192	1.61	21.84
January	128,800	9,290	2,670	4,155	1.29	1.49
February	84,360	3,870	2,570	3,013	.933	.97
March	120,640	7,390	2,570	3,892	1.20	1.38
April	85,400	5,110	2,070	2,847	.881	.98
May	68,200	3,430	1,720	2,200	.681	.79
June	184,660	30,600	1,770	6,155	1.91	2.13
July	217,690	25,600	1,720	7,022	2.17	2.50
August	124,740	11,700	1,590	4,024	1.25	1.44
September	47,190	2,500	1,320	1,573	.487	.54
Water year 1937-38	1,601,600	50,000	1,320	4,388	1.36	18.43

Peak discharge.- Oct. 29 (5 a.m.) 19,100 sec.-ft.

Roanoke River at Clarksville, Va.

Location.- Water-stage recorder, lat. 36°37'40", long. 78°33'04", at highway bridge in Clarksville, Mecklenburg County, 500 feet upstream from Dan River.

Drainage area.- 7,320 square miles (below mouth of Dan River).

Records available.- December 1934 to September 1938, including flow of Dan River.

Extremes.- Maximum discharge during water year 1935-36, 114,000 second-feet Jan. 21 (gage height, 16.88 feet); minimum, 1,360 second-feet (revised) Sept. 27 (gage height, 1.27 feet); minimum daily discharge, 1,540 second-feet Sept. 23, 27.

Maximum discharge during water year 1936-37, 87,900 second-feet Jan. 5 (gage height, 14.74 feet); minimum, 1,930 second-feet (revised) Oct. 15 (gage height, 1.61 feet); minimum daily discharge, 2,260 second-feet Oct. 15.

Maximum discharge during water year 1937-38, 108,000 second-feet Oct. 22 (gage height, 16.37 feet); minimum not determined; minimum daily discharge, 2,600 second-feet (estimated), Sept. 27.

1934-38: Maximum discharge, that of Jan. 21, 1936; minimum, that of Sept. 27, 1936; minimum daily discharge, that of Sept. 23, 27, 1936.

Remarks.- Records excellent except those for period of ice effect and periods of missing or faulty gage heights, which are fair. Some regulation of low-water flow by operation of cotton mills at Danville and by power plant on Banister River. Gage-height record collected in cooperation with the U. S. Weather Bureau.

Revisions.- Records for water years 1935-36 and 1936-37, as here given, supersede those published in Water-Supply Papers 802 and 822.

Rating table, Mar. 21, 1936 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

1.4	1,560	3.0	5,290	6.0	17,100	10.0	41,500
1.7	2,100	3.5	6,840	7.0	22,100	12.0	58,200
2.0	2,730	4.0	8,640	8.0	27,500	14.0	80,200
2.5	3,940	5.0	12,600	9.0	33,800	16.0	103,000

Discharge, in second-feet, 1935-38

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,790	5,950	8,020	*3,700	9,880	8,200	12,600	6,680	3,690	3,200	3,320	2,180
2	2,340	3,810	6,450	*4,200	8,750	8,020	12,600	6,680	3,150	7,360	3,150	2,020
3	2,490	3,160	5,140	29,900	8,750	8,200	20,100	6,190	3,440	6,350	2,750	1,910
4	2,380	3,100	4,680	60,200	12,200	8,020	21,600	6,510	3,440	5,290	1,990	1,950
5	2,410	2,520	4,090	80,200	21,300	7,840	15,800	7,010	3,440	4,200	1,930	2,040
6	2,280	2,680	3,950	78,000	20,800	7,480	19,600	7,010	4,070	4,730	2,300	1,990
7	2,090	3,230	3,810	49,300	14,700	7,310	42,900	6,350	3,690	3,440	4,890	2,180
8	2,130	5,780	3,810	47,500	10,700	6,790	52,000	5,880	3,820	3,080	7,710	1,780
9	2,110	6,450	4,090	40,100	9,310	6,790	37,600	5,730	5,290	2,800	6,350	1,700
10	2,410	5,300	3,810	37,000	11,400	6,790	33,100	5,440	5,290	2,780	5,730	2,040
11	2,320	4,090	4,090	35,600	12,200	10,400	36,700	5,730	4,730	2,730	4,200	2,730
12	2,380	3,410	3,950	21,800	10,300	12,600	27,500	5,440	4,330	2,890	5,010	2,550
13	2,340	6,640	4,880	14,700	8,940	13,400	19,600	7,010	4,730	3,940	4,460	2,730
14	2,260	19,800	12,600	11,800	28,200	12,600	15,300	7,710	6,510	3,200	3,560	2,200
15	2,260	16,500	18,300	10,700	56,500	9,880	13,000	6,350	6,350	2,910	2,940	2,400
16	2,170	9,500	16,000	13,000	80,200	8,940	11,800	5,580	4,870	2,510	2,780	2,450
17	2,560	7,660	11,000	14,200	83,500	21,500	10,600	4,870	3,690	2,430	7,450	2,060
18	2,540	10,300	8,560	13,800	41,400	64,200	9,810	5,290	3,690	2,470	17,100	1,870
19	2,340	7,660	7,140	34,900	24,500	94,800	9,030	4,460	7,530	4,870	8,080	1,780
20	2,340	6,450	6,120	68,200	19,800	96,200	8,840	4,730	14,000	3,010	4,200	1,680
21	2,280	4,990	5,620	103,000	15,200	44,400	8,840	4,870	7,180	2,730	3,200	1,950
22	2,130	4,530	4,530	100,000	13,000	25,800	8,260	4,870	4,600	4,600	2,620	1,640
23	2,170	4,240	3,540	43,300	11,000	20,100	8,450	4,200	4,070	6,040	2,640	1,540
24	2,260	4,090	*3,300	16,000	10,300	14,800	8,640	4,200	5,440	4,460	2,890	1,730
25	2,340	3,950	*3,000	13,000	9,880	13,000	8,640	4,200	5,730	4,460	1,910	1,750
26	2,280	3,540	*3,200	11,800	9,500	12,200	7,710	4,070	5,010	3,560	2,040	1,640
27	2,410	3,540	*3,400	11,800	9,310	11,800	7,360	4,070	4,070	3,150	2,240	1,540
28	2,520	3,540	*3,200	11,800	9,120	21,100	7,530	3,690	3,690	2,750	3,180	1,630
29	2,660	5,780	*2,800	10,300	8,940	28,700	7,010	3,820	3,440	2,300	3,320	1,560
30	5,950	9,500	*2,900	9,310	-	23,100	6,840	3,690	2,940	2,660	3,690	2,060
31	8,560	-	*3,300	10,300	-	16,200	-	3,440	-	2,890	3,320	-

*Stage-discharge relation affected by ice; discharge computed on basis of gage heights, weather records, and records for stations at Clover and Roanoke Rapids.

Discharge, in second-feet, of Roanoke River at Clarksville, Va., 1935-38--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,300	2,780	2,320	18,700	16,800	8,340	5,700	10,700	3,900	*5,200	6,120	*37,000
2	19,100	2,820	2,400	30,100	26,800	9,330	5,270	9,040	4,240	*4,600	5,850	*33,000
3	9,440	2,500	2,980	52,000	17,600	9,220	5,380	8,060	5,920	*4,000	6,580	*16,000
4	4,720	2,790	3,420	69,200	13,100	8,980	5,160	7,620	5,580	*3,400	7,400	*11,000
5	3,470	2,810	3,650	85,700	11,300	8,630	6,180	7,010	5,700	3,680	4,920	7,890
6	2,960	2,920	3,320	61,900	10,200	8,100	17,600	6,840	7,550	4,960	3,510	14,400
7	2,700	2,920	3,650	23,800	9,180	7,420	18,200	7,520	6,290	7,260	3,260	33,600
8	2,530	2,940	4,720	17,500	8,800	7,160	13,000	7,660	5,170	7,560	6,500	28,500
9	2,600	3,110	7,040	13,500	10,100	7,800	10,000	6,700	6,720	5,260	6,740	16,200
10	2,620	2,510	7,400	11,100	14,500	7,460	8,880	5,960	6,350	3,740	6,640	10,200
11	2,840	2,760	9,600	9,090	13,000	7,080	7,700	5,740	6,680	3,380	7,800	7,180
12	3,210	2,940	11,300	8,540	11,400	6,530	6,680	5,600	9,680	3,280	15,100	6,680
13	3,020	3,000	11,900	8,520	9,460	6,260	6,470	5,260	6,750	2,860	14,800	*6,200
14	2,620	3,500	10,200	9,800	8,760	6,200	6,240	5,290	4,480	3,560	12,800	*5,600
15	2,260	3,400	7,880	11,200	9,050	6,150	5,940	17,500	3,980	8,810	14,200	*5,200
16	2,450	3,480	6,740	16,800	9,180	7,520	5,920	23,600	5,340	6,820	8,140	*4,700
17	*7,000	2,620	8,890	19,900	9,040	8,420	5,880	12,500	5,220	4,260	4,820	*4,400
18	*30,000	2,720	9,900	35,000	8,500	8,000	5,460	8,800	9,400	4,010	4,150	4,300
19	*20,000	2,700	9,300	49,300	7,700	7,740	5,550	8,220	11,600	*4,300	3,870	*4,100
20	8,100	2,700	8,580	61,200	7,380	7,660	5,360	6,300	10,000	*4,500	4,180	*4,100
21	5,740	2,630	14,300	72,500	8,200	7,340	5,530	5,820	7,720	*8,600	4,340	3,580
22	4,600	2,680	13,200	78,000	13,500	6,740	5,660	5,510	5,460	*10,000	4,120	3,770
23	4,120	2,840	9,110	47,500	21,200	6,800	5,480	5,170	4,840	*8,400	11,100	3,630
24	3,720	2,310	7,260	19,600	15,900	6,440	5,430	4,920	4,500	*5,600	23,600	3,480
25	3,380	2,580	6,140	14,800	12,500	7,010	15,200	5,240	3,840	*4,300	*29,000	3,430
26	3,530	2,800	5,410	13,900	11,200	7,440	63,200	5,760	3,600	*4,400	*40,000	3,360
27	2,920	2,740	5,180	12,300	9,740	6,940	74,700	5,280	3,510	*9,800	*46,000	3,220
28	3,080	2,600	5,120	10,800	8,640	6,110	38,000	5,380	4,180	*11,000	*38,000	3,900
29	2,900	2,590	5,390	20,400	-	5,890	18,100	5,060	4,940	*7,200	*18,000	8,700
30	2,840	2,740	5,250	27,200	-	5,510	11,900	5,530	6,140	3,940	*13,000	6,840
31	2,760	-	7,230	22,800	-	5,610	-	4,600	-	3,680	*24,000	-

*Gage height missing; discharge computed on basis of recorder charts, weather records, and records for stations upstream and downstream from Clarksville.

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,860	10,600	9,810	7,260	8,940	6,500	5,880	4,280	5,310	8,630	11,800	3,060
2	4,200	9,620	8,480	7,680	8,420	6,080	6,420	4,300	5,220	6,300	9,510	3,800
3	3,880	8,740	7,440	8,460	7,700	6,300	6,670	4,390	4,880	5,440	7,520	4,160
4	8,110	8,120	7,260	8,400	6,980	8,330	6,340	*4,200	5,080	*12,000	9,580	4,250
5	30,400	7,730	7,120	7,380	7,050	9,080	5,660	*4,000	4,980	11,300	12,600	3,800
6	44,800	7,370	6,610	6,970	6,680	8,520	5,550	*4,200	5,160	8,620	15,600	3,270
7	44,800	7,360	7,340	14,200	6,300	9,170	5,450	*4,000	4,750	5,690	16,700	3,520
8	31,400	6,700	7,370	18,500	6,750	8,620	7,220	3,940	4,780	4,740	17,100	3,020
9	*10,000	6,820	6,820	16,400	6,200	7,480	13,700	4,130	5,760	4,400	12,700	3,020
10	*11,500	6,560	6,160	11,900	6,010	11,200	51,100	3,710	6,650	4,740	8,940	2,890
11	*12,500	6,350	6,060	9,430	6,050	18,400	11,900	3,740	14,200	5,420	8,010	3,160
12	10,900	6,600	5,900	9,180	6,040	17,600	8,840	3,680	9,650	6,850	6,900	3,180
13	8,250	11,800	5,260	9,070	6,050	12,000	7,300	3,690	9,720	5,910	6,400	2,570
14	7,180	23,200	5,840	8,830	6,000	9,550	6,710	4,000	7,620	5,780	5,500	3,060
15	6,800	16,100	6,110	7,760	6,210	8,650	6,110	5,500	5,580	5,860	5,140	3,200
16	6,720	11,300	6,100	7,120	6,040	8,060	6,240	5,860	4,300	5,760	4,600	3,360
17	6,240	9,380	6,040	6,750	5,890	7,840	5,790	5,640	4,130	4,680	4,600	3,410
18	5,910	8,440	6,190	7,040	5,900	8,900	5,700	4,600	8,630	4,060	4,510	3,280
19	6,090	7,900	6,430	6,660	5,620	10,800	*6,000	4,140	12,100	6,210	5,380	3,360
20	32,000	7,560	6,030	6,320	6,190	8,840	*6,500	4,100	17,800	19,000	6,010	4,080
21	62,300	7,340	6,130	6,200	7,740	7,550	*6,000	4,680	35,600	20,700	4,580	5,620
22	100,000	6,820	5,880	7,940	7,320	7,160	*5,600	5,530	50,200	31,300	4,050	4,200
23	83,800	6,730	5,740	11,600	6,260	7,020	*5,400	5,020	58,300	39,100	3,680	3,250
24	20,100	6,300	6,160	11,500	8,280	6,390	*5,200	4,280	36,800	59,200	3,740	*3,000
25	12,100	6,090	6,860	15,300	9,780	6,340	*5,000	5,710	15,900	60,200	3,580	*3,000
26	10,500	5,900	7,020	19,100	8,700	6,340	5,170	6,700	*10,500	64,200	3,340	*3,000
27	11,900	6,430	6,720	17,300	7,320	6,480	4,980	8,820	*10,000	57,400	3,270	*2,600
28	30,000	7,720	7,110	11,800	6,730	6,830	4,870	8,240	16,400	26,600	3,060	*2,800
29	39,100	12,900	7,680	9,160	-	6,180	4,700	6,790	27,000	17,000	3,300	*2,900
30	19,500	12,900	7,810	8,190	-	6,100	4,510	5,600	14,600	13,100	3,460	*3,000
31	12,900	-	7,320	8,370	-	5,700	-	4,600	-	12,400	3,130	-

*Missing or faulty gage height; discharge computed on basis of records for Roanoke River at Clover and Roanoke Rapids, Dan River at South Boston, Banister River at Halifax, and Hyco River near Omega.

Discharge of Roanoke River at Clarksville, Va., 1935-38-- Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1935	82,500	8,560	2,090	2,661	0.364	0.42
November	181,690	19,800	2,520	6,056	.827	.92
December	179,280	18,300	2,800	5,783	.790	.91
Calendar year 1935	2,962,280	55,900	1,960	8,116	1.11	15.05
January 1936	1,009,410	103,000	3,700	32,560	4.45	5.13
February	589,580	83,500	8,750	20,330	2.78	3.00
March	651,160	96,200	6,790	21,010	2.87	3.31
April	509,360	52,000	6,840	16,980	2.32	2.59
May	165,770	7,710	3,440	5,347	.730	.84
June	145,920	14,000	2,940	4,864	.664	.74
July	113,790	7,360	2,300	3,671	.502	.58
August	130,950	17,100	1,910	4,224	.577	.67
September	59,280	2,730	1,540	1,976	.270	.30
Water year 1935-36	3,818,690	103,000	1,540	10,460	1.43	19.41
October 1936	182,530	30,000	2,260	5,888	.804	.93
November	84,430	3,500	2,310	2,814	.384	.43
December	218,780	14,300	2,320	7,057	.964	1.11
Calendar year 1936	3,860,960	103,000	1,540	10,580	1.45	19.63
January 1937	952,650	85,700	8,520	30,730	4.20	4.84
February	332,730	26,800	7,380	11,880	1.62	1.69
March	225,830	9,330	5,510	7,285	.995	1.15
April	399,770	74,700	5,160	13,330	1.82	2.03
May	234,190	23,600	4,600	7,555	1.03	1.19
June	179,280	11,600	3,510	5,976	.816	.91
July	172,360	11,000	2,860	5,560	.760	.88
August	398,540	46,000	3,260	12,860	1.76	2.03
September	304,160	37,000	3,220	10,140	1.39	1.55
Water year 1936-37	3,685,250	85,700	2,260	10,100	1.38	18.74
October 1937	698,740	100,000	3,880	22,540	3.08	3.55
November	267,380	23,200	5,900	8,913	1.22	1.36
December	208,600	9,810	5,260	6,729	.919	1.06
Calendar year 1937	4,374,230	100,000	2,860	11,980	1.64	22.24
January 1938	311,170	19,100	6,200	10,040	1.37	1.58
February	193,150	9,780	5,620	6,898	.942	.98
March	264,010	18,400	5,700	8,516	1.16	1.34
April	200,510	15,100	4,510	6,684	.913	1.02
May	152,070	8,820	3,680	4,905	.670	.77
June	421,600	58,300	4,130	14,050	1.92	2.14
July	542,590	64,200	4,060	17,500	2.39	2.76
August	218,290	17,100	3,060	7,042	.962	1.11
September	100,820	5,620	2,600	3,361	.459	.51
Water year 1937-38	3,578,930	100,000	2,600	9,805	1.34	18.18

Roanoke River at Roanoke Rapids, N. C.

Location.- Water-stage recorder, lat. 36°28'15", long. 77°38'05", 1½ miles downstream from State highway bridge at city of Roanoke Rapids, Halifax County. Zero of gage is 43.79 feet above mean sea level (general adjustment of 1929).

Drainage area.- 8,410 square miles.

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 112,000 second-feet Oct. 24 (gage height, 22.82 feet); minimum, 2,610 second-feet Sept. 29 (gage height, 3.15 feet).
1930-38: Maximum discharge, that of Oct. 24, 1937; maximum gage height, 24.66 feet, from floodmarks, Jan. 23, 1936 (stage-discharge relation affected by backwater); minimum, 458 second-feet Sept. 21, 1932 (gage height, 1.25 feet); minimum daily discharge, 472 second-feet Sept. 21, 1932.

Remarks.- Records good except those above 30,000 second-feet and those for which gage heights were adjusted for effect of obstructed intake, which are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-6		Oct. 7 to Sept. 30			
4.2	4,750	3.0	2,380	8.0	17,880
4.4	5,230	3.3	2,860	10.0	26,740
4.7	5,990	3.6	3,420	13.0	42,000
5.0	6,810	4.0	4,220	16.0	61,300
5.5	8,300	4.5	5,330	19.0	82,850
6.0	9,950	5.0	6,600	22.0	106,000
7.0	13,800	6.0	9,800		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,540	13,300	12,900	7,800	9,450	7,350	6,320	4,540	4,980	14,100	15,400	3,420
2	5,480	11,300	10,200	8,110	9,800	7,050	6,600	4,320	5,220	9,100	12,500	3,910
3	4,750	10,500	8,760	9,800	9,100	6,900	7,200	4,220	5,940	6,900	9,800	4,430
4	4,870	9,450	7,800	9,450	8,430	7,800	7,200	4,430	6,900	5,940	9,100	4,430
5	*13,100	8,760	7,800	9,100	7,800	9,450	8,900	4,320	6,320	10,500	13,100	4,430
6	*34,800	8,430	7,800	8,110	7,800	9,800	6,190	4,220	5,450	12,500	16,700	4,220
7	*45,200	7,800	7,350	11,900	7,500	9,450	6,060	4,010	5,330	8,800	17,500	3,520
8	*42,600	7,800	7,800	24,400	7,200	9,800	6,460	4,010	5,100	6,060	17,900	3,610
9	*26,000	7,350	7,800	20,900	7,500	9,100	10,800	4,760	4,980	5,100	17,500	3,230
10	12,900	7,500	7,200	16,600	6,900	9,100	17,900	4,540	6,060	4,870	12,500	3,140
11	13,300	7,200	6,750	12,900	6,750	17,900	16,200	4,010	13,800	5,100	9,450	2,950
12	13,700	7,350	6,460	10,500	6,750	20,000	12,500	3,710	18,300	6,060	8,430	3,140
13	11,300	10,200	6,320	10,500	6,900	17,500	9,450	3,810	13,700	7,500	7,350	3,320
14	8,760	17,200	5,810	10,200	6,750	12,900	8,110	3,910	12,100	6,460	6,750	2,860
15	7,800	23,100	6,320	9,100	6,750	10,500	7,350	4,980	8,430	6,320	5,810	3,040
16	7,350	15,800	6,600	8,430	6,900	10,200	6,750	6,060	6,060	6,320	5,450	3,320
17	7,200	12,100	6,600	7,800	6,600	10,200	6,460	6,060	5,570	6,060	4,870	3,320
18	6,750	10,200	6,460	7,800	6,460	9,800	6,190	5,810	6,320	5,220	5,100	3,810
19	6,460	9,100	6,750	7,800	6,460	10,900	6,060	4,980	16,200	4,540	4,760	4,670
20	10,200	8,760	6,900	7,350	6,320	11,700	5,810	4,430	21,700	6,390	5,450	6,460
21	*41,000	8,430	6,320	7,050	6,750	9,450	6,600	4,320	38,800	11,800	6,190	6,600
22	*61,800	8,110	6,460	7,200	8,430	8,430	7,200	4,650	51,900	25,000	4,870	6,460
23	94,700	7,500	6,320	11,100	8,110	7,800	6,190	5,570	62,400	31,300	4,320	4,760
24	104,000	7,350	6,600	13,700	7,350	7,200	5,940	5,220	65,500	50,100	3,910	3,910
25	36,000	6,900	7,200	14,900	10,200	6,900	5,690	5,100	37,400	77,400	3,810	3,520
26	15,400	6,750	7,800	18,300	10,900	6,900	5,570	6,750	16,300	81,700	3,810	3,040
27	13,300	6,600	7,800	20,400	9,450	7,200	5,100	8,430	10,900	98,200	3,610	3,040
28	17,800	7,200	7,500	17,000	8,110	7,200	5,220	10,200	16,000	83,000	3,420	2,950
29	34,500	8,430	8,110	12,100	-	7,350	4,980	8,760	31,500	34,800	3,230	2,610
30	34,400	14,500	8,430	9,800	-	6,750	4,760	7,200	25,200	18,100	3,230	2,780
31	17,900	-	8,430	9,100	-	6,600	-	5,940	-	13,700	3,610	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	760,860	104,000	4,750	24,530	2.92	3.37
November	294,970	23,100	6,600	9,832	1.17	1.30
December	231,350	12,900	5,810	7,463	.887	1.02
Calendar year 1937	5,008,860	104,000	3,330	13,720	1.63	22.14
January	359,200	24,400	7,050	11,590	1.38	1.59
February	217,420	10,900	6,320	7,765	.923	.96
March	299,180	20,000	6,600	9,651	1.15	1.33
April	223,760	17,900	4,760	7,459	.887	.99
May	163,270	10,200	3,710	5,267	.626	.72
June	534,360	65,500	4,980	17,810	2.12	2.36
July	668,940	98,200	4,540	21,580	2.57	2.96
August	249,430	17,900	3,230	8,046	.957	1.10
September	114,900	6,600	2,610	3,830	.455	.51
Water year 1937-38	4,117,640	104,000	2,610	11,280	1.34	18.21

*Intake partly obstructed; discharge computed from gage heights adjusted on basis of Virginia Electric and Power Co.'s records of tailrace gage readings at their Roanoke Rapids plant.

20222 O—40——8

Blackwater River near Union Hall, Va.

Location.- Water-stage recorder, lat. 37°02'35", long. 79°41'07", at highway bridge at Kemps Ford, 3 miles upstream from Gills Creek and 4 miles north of Union Hall, Franklin County. Zero of gage is 693.13 feet above mean sea level.
Drainage area.- 208 square miles.
Records available.- March 1925 to September 1938.
Average discharge.- 13 years, 215 second-feet.
Extremes.- Maximum discharge during year, 10,000 second-feet Oct. 19 (gage height, 15.88 feet), from rating curve extended above 3,500 second-feet; minimum discharge, 111 second-feet Sept. 29, 30; minimum stage, 1.86 feet June 15.
1925-38: Maximum discharge observed, 10,800 second-feet Aug. 11, 1928, from flood hydrograph; minimum, 13 second-feet Sept. 20, 1932 (gage height, 1.42 feet).
Remarks.- Records good except those for periods of ice effect Dec. 11-13, Jan. 29, 30 (computed on basis of weather records, gage heights, and records for Pigg River near Toshes), and those for periods of missing or faulty gage heights, Nov. 3-17, July 24 (computed on basis of records for Pigg River near Toshes), which are fair.

Rating tables, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 20		June 21 to Aug. 3		Aug. 4 to Sept. 30	
2.0	158	2.0	148	2.0	128
2.2	229	2.3	262	2.3	240
2.5	350	2.6	396	2.6	374
3.0	571	3.0	592	3.0	562
3.5	810	3.5	855	3.5	810
4.0	1,080	4.0	1,140		
5.0	1,660	5.0	1,770		
6.0	2,300	6.0	2,420		
8.0	3,700				
10.0	5,280				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	165	350	296	233	288	203	218	165	158	187	527	125
2	158	329	284	245	256	203	210	165	142	183	420	135
3	232	310	276	229	252	248	203	158	168	213	1,900	135
4	2,240	290	268	222	252	337	192	155	203	263	490	154
5	1,600	280	276	222	245	284	189	155	158	183	425	141
6	1,020	270	312	222	241	292	185	152	142	163	741	125
7	603	270	284	300	245	268	214	145	136	155	942	128
8	449	260	264	280	229	241	280	152	158	143	504	125
9	379	260	264	252	225	237	342	152	136	181	509	122
10	454	250	256	237	225	300	276	142	136	183	374	122
11	363	250	250	245	225	354	241	142	236	221	324	125
12	312	400	240	245	225	296	225	152	189	163	288	128
13	288	1,000	240	241	222	276	222	145	155	145	249	144
14	312	500	245	225	218	264	210	178	132	143	232	141
15	321	400	233	222	218	256	207	241	123	155	211	158
16	284	360	245	214	218	245	199	168	117	133	203	148
17	268	340	252	218	214	245	192	148	165	123	195	154
18	256	321	256	218	207	248	189	142	323	143	191	154
19	4,820	316	248	210	218	229	196	148	492	673	180	144
20	4,860	316	233	210	229	222	196	158	1,620	2,700	169	141
21	1,080	296	229	222	207	222	189	165	1,080	2,150	158	138
22	736	284	225	252	203	218	192	152	1,680	1,540	151	131
23	589	276	229	241	222	207	192	142	537	883	148	125
24	476	272	233	280	248	203	178	152	368	1,000	144	119
25	414	968	241	689	222	199	172	155	288	694	139	114
26	388	260	229	539	218	210	172	168	449	547	139	114
27	1,230	333	222	371	218	237	168	229	464	393	135	114
28	736	543	241	329	214	207	165	178	305	444	128	116
29	507	396	245	290	-	196	165	152	242	420	128	114
30	432	329	229	280	-	196	161	148	206	2,030	128	114
31	388	-	229	292	-	207	-	175	-	910	128	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26,360	4,860	158	850	4.09	4.72
November	10,329	1,000	250	344	1.66	1.85
December	7,774	312	222	251	1.21	1.40
Calendar year 1937	123,402	4,860	85	338	1.62	22.09
January	8,475	689	210	273	1.31	1.51
February	6,404	288	203	229	1.10	1.14
March	7,550	354	196	244	1.17	1.35
April	6,140	342	161	205	.986	1.10
May	4,979	241	142	161	.774	.89
June	10,708	1,680	117	357	1.72	1.92
July	17,474	2,700	123	564	2.71	3.12
August	10,600	1,900	128	342	1.64	1.89
September	3,948	158	114	132	.635	.71
Water year 1937-38	120,741	4,860	114	331	1.59	21.60

Peak discharge.- Oct. 4 (6:30 p.m.) 3,560 sec.-ft.; Oct. 19 (10 p.m.) 10,000 sec.-ft.; June 22 (7:45 p.m.) 2,630 sec.-ft.; July 20 (7:30 p.m.) 3,190 sec.-ft.; July 30 (2 p.m.) 3,120 sec.-ft.; Aug. 3 (7:30 a.m.) 4,340 sec.-ft.

Pigg River near Toshes, Va.

Location.- Water-stage recorder, lat. 36°59'01", long. 79°30'52", half a mile downstream from Fryingpan Creek and 1.7 miles northwest of Toshes, Pittsylvania County. Zero of gage is 602.55 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 394 square miles.

Records available.- August 1930 to September 1938.

Extremes.- Maximum discharge during year, 11,900 second-feet Oct. 20 (gage height, 22.23 feet), from rating curve extended above 5,600 second-feet; minimum, 142 second-feet Sept. 1 (gage height, 3.40 feet).
1930-38: Maximum discharge, that of Oct. 20, 1937; minimum, 22 second-feet Aug. 31, 1932 (gage height, 2.32 feet).

Remarks.- Records good except those for periods of ice effect, Dec. 13, Jan. 29, 30, which were computed on basis of weather records, gage heights, and records for Blackwater River near Union Hall and are fair. Some regulation of low-water flow by operation of mill above station.

Rating tables, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1-20		June 23 to July 22		Oct. 21 to June 22		July 23 to Sept. 30	
3.6	237	8.0	1,930	3.8	263	3.6	184
4.0	340	10.0	2,930	4.0	316	4.0	282
4.5	498	12.0	4,120	4.5	466	4.5	428
5.0	672	14.0	5,520	5.0	634	5.0	590
6.0	1,050	17.0	7,700	6.0	1,010	6.0	965
7.0	1,480	20.0	10,100	7.0	1,440	7.0	1,380
				8.0	1,880	8.0	1,840

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	298	486	483	388	476	352	416	300	326	324	412	176
2	287	465	461	415	440	354	414	290	296	31[illegible]	337	230
3	423	450	434	403	430	410	381	289	324	366	619	204
4	4,150	430	429	382	416	451	358	278	366	64[illegible]	809	222
5	3,710	420	426	376	416	409	354	282	332	354	536	211
6	2,120	414	492	376	406	567	338	270	298	31[illegible]	1,480	192
7	493	402	452	774	390	490	416	262	275	28[illegible]	1,250	189
8	618	394	416	592	380	419	575	262	292	270	706	190
9	545	386	410	477	373	394	781	290	274	298	447	181
10	1,000	380	404	443	374	688	558	273	313	294	366	177
11	638	376	384	440	366	712	462	260	358	29[illegible]	318	176
12	519	785	372	463	372	538	426	266	398	30[illegible]	494	189
13	469	1,960	370	436	368	479	398	276	396	26[illegible]	310	194
14	462	800	394	420	368	437	386	322	288	24[illegible]	272	204
15	446	577	389	401	370	426	380	438	250	27[illegible]	252	203
16	420	502	390	387	372	422	362	311	244	23[illegible]	338	264
17	405	472	400	392	361	453	353	272	269	22[illegible]	235	214
18	392	442	402	382	352	568	366	274	505	21[illegible]	346	216
19	3,480	430	392	374	373	434	380	294	563	30[illegible]	256	213
20	9,600	422	380	370	454	406	354	411	890	1,010	215	206
21	1,530	400	380	386	399	403	352	429	1,480	2,30[illegible]	206	208
22	870	389	363	470	365	386	360	332	2,020	2,49[illegible]	202	200
23	702	385	388	523	396	380	346	292	920	2,52[illegible]	200	196
24	608	382	430	589	432	386	328	360	513	1,63[illegible]	183	182
25	550	385	418	1,360	410	359	319	418	435	79[illegible]	188	168
26	526	388	399	923	380	399	324	420	384	68[illegible]	178	168
27	2,480	563	392	590	378	400	304	514	536	47[illegible]	182	172
28	1,430	1,080	422	474	368	370	302	376	845	39[illegible]	180	168
29	740	753	414	450	-	355	296	318	454	36[illegible]	172	164
30	594	541	402	450	-	366	297	312	35[illegible]	544	174	210
31	530	-	394	485	-	362	-	368	-	633	174	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	41,035	9,600	287	1,324	3.36	3.87
November	16,259	1,960	376	542	1.38	1.54
December	12,682	492	363	409	1.04	1.20
Calendar year 1937	221,373	9,600	208	607	1.54	20.90
January	15,391	1,360	370	496	1.26	1.45
February	10,985	476	352	392	.995	1.04
March	13,575	712	352	438	1.11	1.28
April	11,686	781	296	389	.987	1.10
May	10,059	514	260	324	.822	.95
June	15,200	2,020	244	507	1.29	1.44
July	19,690	2,520	216	635	1.61	1.86
August	12,037	1,480	172	388	.985	1.14
September	5,887	264	164	196	.497	.55
Water year 1937-38	184,486	9,600	164	505	1.28	17.42

Peak discharge.- Oct. 4 (7 p.m.) 6,080 sec.-ft.; Oct. 20 (1:30 p.m.) 11,900 sec.-ft.

Snow Creek at Sago, Va.

Location.- Water-stage recorder, lat. 36°53'50", long. 79°39'05", at highway bridge, 200 feet downstream from First Fork and three-quarters of a mile northwest of Sago, Franklin County.
Drainage area.- 60 square miles.
Records available.- October 1934 to September 1938.
Extremes.- Maximum discharge during year, 1,660 second-feet Oct. 20 (gage height, 15.16 feet), from rating curve extended above 300 second-feet; minimum, 24 second-feet Sept. 28 (gage height, 1.70 feet).
1934-38: Maximum daily discharge, 1,700 second-feet (estimated) Jan. 19, 1936; minimum discharge, 13 second-feet Aug. 28, 1935 (gage height, 1.38 feet).
Remarks.- Records fair. Discharge for periods of ice effect, Dec. 12, 13, Jan. 28-30, computed on basis of weather records, gage heights, and records for Pigg River near Toshes; that for period of missing gage heights, Mar. 20-24, computed on basis of records for Pigg River near Toshes.

Rating tables, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1-20		Oct. 21 to June 27		June 28 to Aug. 6		Aug. 7 to Sept. 30	
2.1	40	2.0	57	2.0	47	1.8	30
2.5	71	2.5	95	2.5	86	2.0	43
3.0	115	3.0	135	3.0	130	2.5	80
4.0	217	4.0	225	4.0	225	3.0	124
5.0	327	5.0	327	5.0	327		
6.0	438	6.0	438				
8.0	680						
10.0	940						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	102	89	68	76	58	65	56	56	45	60	51
2	34	99	85	71	72	58	68	54	55	46	56	49
3	104	96	81	66	72	66	64	53	65	80	139	36
4	810	90	77	65	72	65	61	52	59	56	188	42
5	546	87	81	65	70	62	60	52	55	46	157	33
6	212	85	93	65	68	101	60	50	53	43	369	32
7	115	82	75	152	69	73	81	48	52	45	138	32
8	88	81	71	95	66	68	107	50	63	45	82	30
9	94	80	71	81	65	66	103	52	53	39	70	29
10	172	77	68	77	66	123	81	48	71	54	60	28
11	93	75	67	81	66	100	73	48	60	39	56	29
12	79	309	62	81	63	84	71	49	60	36	62	30
13	73	225	62	77	62	77	69	51	56	34	55	32
14	73	123	67	73	61	73	67	77	49	34	53	32
15	68	107	68	73	59	71	65	70	47	39	51	50
16	62	100	70	70	59	77	64	55	48	33	48	50
17	59	96	70	71	58	98	63	51	63	32	49	32
18	57	92	68	69	58	87	67	54	78	32	85	32
19	859	89	66	68	64	75	64	57	85	36	49	32
20	953	89	64	68	75	68	62	68	101	76	44	32
21	179	81	64	78	62	66	62	63	152	275	42	31
22	139	81	63	95	60	66	62	61	111	349	41	29
23	131	77	72	91	69	64	60	53	73	349	39	28
24	111	77	76	119	69	64	58	85	65	157	38	27
25	111	76	71	235	63	66	57	68	60	100	37	26
26	107	77	67	111	62	73	57	87	60	121	35	26
27	486	178	66	89	62	68	56	77	205	78	35	27
28	184	202	74	75	60	65	56	62	112	69	32	25
29	131	119	68	73	-	64	55	58	64	67	32	26
30	119	96	67	75	-	64	54	65	50	84	32	42
31	107	-	66	83	-	65	-	61	-	72	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square m'le	Run-off in inches
October	6,390	953	34	206	3.43	3.95
November	3,248	309	75	108	1.80	2.01
December	2,209	93	62	71.3	1.19	1.37
Calendar year 1937	37,340	980	32	102	1.70	23.11
January	2,660	235	65	85.8	1.43	1.65
February	1,928	76	58	65.3	1.09	1.14
March	2,275	123	58	73.4	1.22	1.41
April	1,992	107	54	66.4	1.11	1.24
May	1,935	87	48	59.2	.987	1.14
June	2,181	205	47	72.7	1.21	1.35
July	2,611	349	32	84.2	1.40	1.61
August	2,265	369	31	73.1	1.22	1.41
September	1,000	51	25	33.3	.555	.62
Water year 1937-38	30,494	953	25	83.5	1.39	18.90

Peak discharge.- Oct. 20 (2 a.m.) 1,660 sec.-ft.

Goose Creek near Huddleston, Va.

Location.- Water-stage recorder, lat. 37°10', long. 79°32', a quarter of a mile upstream from Haden Bridge, three-eighths of a mile upstream from Rockcastle Creek, and 4 miles upstream from Huddleston, Bedford County.
Drainage area.- 187 square miles.
Records available.- September 1930 to September 1938. March 1925 to September 1927 (gage heights only), at site a quarter of a mile downstream.
Extremes.- Maximum discharge during year, 10,700 second-feet Oct. 19 (gage height, 25.75 feet, from floodmarks), from rating curve extended above 1,800 second-feet; minimum, 46 second-feet Apr. 17 (gage height, 1.37 feet).
1930-38: Maximum discharge, that of Oct. 19, 1937; minimum, 3 second-feet Aug. 31, 1932, Jan. 30, 1934.
Remarks.- Records good except those for period of missing gage heights, Oct. 19-22, which were computed on basis of partial gage-height graph, floodmarks, and records for Otter River near Evington and are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-19		Oct. 20 to June 27 Aug. 7 to Sept. 30		June 28 to Aug. 6	
1.7	124				
2.0	206	1.5	70	1.6	112
2.5	350	1.7	117	2.0	216
3.0	498	2.0	200	2.5	357
4.0	812	2.5	343	3.0	502
6.0	1,520	3.0	492	4.0	812
8.0	2,270	4.0	812	6.0	1,520
10.0	3,050	6.0	1,520	8.0	2,270
12.0	3,850	8.0	2,270		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	402	285	147	200	117	144	100	79	178	196	81
2	88	381	248	155	172	117	139	94	77	165	267	85
3	152	352	225	144	172	300	136	92	94	159	1,100	85
4	1,270	323	211	141	172	279	128	90	94	139	456	90
5	780	297	211	139	164	197	125	88	81	129	1,070	83
6	438	262	270	139	158	197	122	85	79	124	2,320	77
7	292	262	206	328	158	166	147	81	72	122	1,230	74
8	117	248	203	259	147	152	186	81	102	117	604	77
9	186	236	189	208	144	147	253	86	81	112	462	79
10	228	220	178	186	150	334	200	81	158	269	387	79
11	161	208	164	193	141	220	169	81	141	119	308	81
12	142	402	164	175	141	239	152	88	90	103	262	81
13	137	863	178	166	141	206	144	79	83	99	234	83
14	203	508	178	152	139	194	136	102	70	101	208	81
15	178	393	166	147	133	228	133	130	64	105	186	81
16	172	334	166	141	130	192	130	90	62	97	172	81
17	145	305	172	144	130	200	110	79	77	94	164	85
18	140	268	172	139	130	256	122	81	180	145	172	90
19	4,200	248	161	133	136	203	141	92	104	382	144	83
20	2,500	250	150	130	139	189	122	112	906	390	125	81
21	1,200	217	147	155	126	178	117	112	1,050	663	117	79
22	800	203	144	200	125	166	147	83	1,050	1,410	112	70
23	620	189	144	228	144	158	122	74	508	1,820	104	70
24	524	183	144	268	161	152	112	92	366	1,120	100	68
25	447	178	141	716	133	141	110	97	314	562	92	72
26	417	178	139	477	130	172	107	136	530	458	85	72
27	1,880	384	136	300	133	186	100	158	523	322	85	70
28	1,160	684	161	225	128	155	100	107	770	269	83	70
29	700	462	150	220	-	147	97	92	303	272	85	64
30	556	340	144	228	-	147	94	85	213	230	85	74
31	462	-	144	220	-	147	-	85	-	250	83	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,385	4,200	88	658	3.52	4.06
November	9,800	863	178	327	1.75	1.95
December	5,491	285	136	177	.947	1.09
Calendar year 1937	105,230	4,200	40	288	1.54	20.95
January	6,593	716	130	213	1.14	1.31
February	4,079	200	125	146	.781	.81
March	5,882	334	117	190	1.02	1.18
April	4,045	253	94	135	.722	.81
May	2,935	158	74	94.7	.506	.58
June	8,321	1,050	62	277	1.48	1.65
July	10,525	1,820	94	340	1.82	2.10
August	11,100	2,320	83	358	1.91	2.20
September	2,346	90	64	78.2	.418	.47
Water year 1937-38	91,502	4,200	62	251	1.34	18.21

Peak discharge.- Oct. 4 (11 a.m.) 2,000 sec.-ft.; Oct. 19 (3 p.m.) 10,700 sec.-ft.; Oct. 27 (2 p.m.) 3,850 sec.-ft.; July 23 (9 p.m.) 4,300 sec.-ft.; Aug. 6 (1 a.m.) 5,700 sec.-ft.

Otter River near Evington, Va.

Location.- Water-stage recorder, lat. 37°13', long. 79°18', at highway bridge, 2 miles upstream from Flat Creek and 2 miles southwest of Evington, Campbell County.

Drainage area.- 325 square miles.

Records available.- November 1936 to September 1938.

Extremes.- Maximum discharge during period Nov. 2, 1936 to Sept. 30, 1937, 5,330 second-feet Jan. 3 (gage height, 15.17 feet), from rating curve extended above 2,500 second-feet; minimum not determined; minimum daily discharge, 100 second-feet Nov. 30.
Maximum discharge during water year 1937-38, 9,280 second-feet Oct. 19 (gage height, 23.14 feet), from rating curve extended above 2,500 second-feet; minimum, 117 second-feet Sept. 29 (gage height, 1.68 feet).

Remarks.- Records good except those for periods of missing or faulty gage heights, Nov. 8, 9, 11-13, 19-23, 25-30, 1936, Jan. 15-20, Mar. 27, 28, June 29, 1937, Feb. 15-19 1938, which were computed on basis of gage heights and records for Goose Creek near Huddleston and Falling River near Brookneal, and are fair.

Revisions.- Figures of discharge for the water year 1936-37, superseding those published in Water-Supply Paper 822, are published herein.

Rating tables Nov. 2, 1936, to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

Nov. 2, 1936, to Jan. 3, 1937 Jan. 21, 1937, to Oct. 19, 1937				Jan. 4-20, 1937 Oct. 20, 1937, to Sept. 30, 1938			
1.8	120	5.0	918	1.8	136	6.0	1,270
2.0	154	6.0	1,250	2.0	171	8.0	2,030
2.5	249	8.0	2,060	2.5	270	10.0	2,930
3.0	360	10.0	2,960	3.0	387	12.0	3,830
4.0	624	12.0	3,860	4.0	654	14.0	4,730
				5.0	946		

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	109	712	1,030	438	254	452	186	206	216	834
2		139	152	2,400	692	450	250	418	234	232	150	549
3		138	214	4,310	567	428	248	389	264	164	283	424
4		134	168	1,390	512	403	244	368	234	140	148	345
5		146	141	812	478	385	447	352	430	184	130	296
6		132	138	626	431	364	584	383	248	414	116	375
7		126	687	558	420	349	415	327	224	222	240	368
8		130	362	478	463	400	368	314	281	172	128	313
9		140	261	439	428	404	412	292	208	146	198	277
10		134	296	400	486	351	356	281	224	142	343	250
11		130	427	374	410	340	322	262	372	284	1,010	240
12		130	698	350	386	328	308	259	200	166	502	222
13		140	526	558	376	320	296	268	232	151	550	208
14		132	358	558	403	330	300	530	274	855	1,310	198
15		126	292	1,100	370	370	309	476	175	244	334	186
16		118	322	700	397	372	306	352	178	174	236	172
17		118	590	1,900	438	361	276	316	526	146	191	172
18		120	396	1,800	384	366	270	286	570	140	164	170
19		120	406	2,800	378	374	264	274	692	118	157	158
20		120	1,240	3,000	357	340	254	260	278	800	134	157
21		120	679	2,020	664	326	262	245	228	623	134	146
22		120	478	1,180	1,940	302	266	238	354	440	190	143
23		120	368	860	945	298	247	242	212	262	424	141
24		115	316	713	734	302	244	278	178	204	688	139
25		110	285	647	636	334	1,540	242	162	178	715	138
26		110	267	574	527	299	2,730	227	155	173	875	132
27		110	254	508	477	280	904	229	196	204	1,030	176
28		110	258	475	478	270	759	213	300	140	486	338
29		110	256	1,080	-	260	606	204	190	128	374	270
30		100	288	688	-	260	515	200	166	125	1,090	210
31		-	467	924	-	280	-	190	-	329	1,360	-

Discharge, in second-feet, of Otter River near Evington, Va., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	185	572	518	288	387	243	315	227	192	315	350	182
2	174	518	465	326	338	255	304	217	282	292	292	205
3	181	491	426	288	326	527	288	205	217	277	1,910	198
4	1,570	452	400	279	326	599	274	201	221	245	796	175
5	1,010	426	387	274	315	413	272	207	182	229	1,760	157
6	596	413	491	268	304	400	270	217	173	215	1,560	153
7	436	387	387	842	304	338	315	209	164	203	2,740	151
8	336	374	362	572	283	315	413	205	227	192	1,100	151
9	291	362	350	439	279	292	532	211	180	188	1,140	162
10	385	338	326	374	277	688	400	207	272	188	767	158
11	291	326	292	362	274	724	350	198	585	188	612	157
12	257	426	281	350	304	491	326	196	277	171	518	164
13	245	767	338	338	290	413	315	182	326	162	452	166
14	313	491	315	304	266	387	292	217	201	155	400	158
15	291	426	304	292	260	426	290	326	177	160	362	155
16	260	387	326	279	260	374	283	215	166	148	338	148
17	239	374	326	290	260	648	270	188	207	138	315	150
18	239	338	338	281	260	710	274	182	439	198	326	164
19	4,350	326	315	266	270	491	315	221	598	326	290	166
20	4,990	350	292	266	304	439	270	487	1,750	564	264	169
21	1,640	315	292	315	262	400	257	326	1,760	1,750	249	173
22	1,040	292	288	491	251	362	315	225	2,470	2,380	241	146
23	796	288	292	572	304	350	288	198	1,040	1,690	227	141
24	668	283	290	548	400	326	253	217	1,560	1,960	215	134
25	586	279	288	1,140	315	304	251	237	668	826	201	128
26	532	288	292	710	290	490	241	260	452	767	192	126
27	2,700	644	292	518	277	452	235	452	681	504	184	126
28	1,720	1,200	338	426	262	362	233	326	1,270	400	173	123
29	1,010	796	326	400	-	338	221	277	478	350	169	122
30	767	612	292	413	-	326	217	249	362	426	169	177
31	654	-	288	413	-	315	-	217	-	452	179	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	-	-	-	-	-	-
November 2-30, 1936	3,598	146	100	124	0.382	0.41
December	11,699	1,240	109	377	1.16	1.34
Calendar year						
January 1937	34,934	4,310	350	1,127	3.47	4.00
February	15,807	1,940	357	565	1.74	1.81
March	10,664	450	260	344	1.06	1.22
April	14,558	2,730	244	485	1.49	1.66
May	9,367	530	190	302	.929	1.07
June	8,171	692	155	272	.837	.93
July	7,906	855	118	255	.785	.90
August	13,906	1,360	116	449	1.38	1.59
September	7,747	834	132	258	.794	.89
Water year						
October 1937	28,752	4,990	174	927	2.85	3.29
November	13,541	1,200	279	451	1.39	1.55
December	10,517	518	281	339	1.04	1.20
Calendar year 1937	175,870	4,990	116	482	1.48	20.11
January 1938	12,924	1,140	266	417	1.28	1.48
February	8,248	400	251	295	.908	.95
March	13,198	724	243	426	1.31	1.51
April	8,879	532	217	296	.911	1.02
May	7,502	487	182	242	.745	.86
June	17,577	2,470	164	586	1.80	2.01
July	16,059	2,380	138	518	1.59	1.83
August	18,491	2,740	169	596	1.83	2.11
September	4,685	205	122	156	.480	.54
Water year 1937-38	160,373	4,990	122	439	1.35	18.35

Peak discharge.- Oct. 19, 1937 (8:30 p.m.) 9,280 sec.-ft.; Oct. 27, 1937 (8 p.m.) 4,360 sec.-ft.; Aug. 7, 1938 (8:30 a.m.) 3,960 sec.-ft.

Falling River near Brookneal, Va.

Location.- Water-stage recorder, lat. 37°04'54", long. 78°56'07", 300 feet downstream from Hat Creek and 2¼ miles north of Brookneal, Campbell County.
Drainage area.- 228 square miles.
Records available.- January 1935 to September 1938.
Extremes.- Maximum discharge during year 13,500 second-feet June 22 (gage height, 26.7 feet, from floodmark), from rating curve extended above 7,000 second-feet; minimum, 76 second-feet Sept. 17 (gage height, 3.87 feet).
1935-38: Maximum discharge, 14,700 second-feet Mar. 17 or 18, 1936 (gage height, 28.0 feet, from floodmarks), from rating curve extended above 7,000 second-feet; minimum, 46 second-feet, Sept. 13, 1936 (gage height, 3.82 feet).
Remarks.- Records good except those for period of ice effect, Jan. 28, 29 (computed on basis of weather records, gage heights, and records for Otter River near Evington) and those for period of missing gage heights, June 22-27 (computed on basis of partial gage-height graph, floodmark, and records for Otter River near Evington), which are fair.

Rating tables, water year 1937-38 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Oct. 4 July 23 to Sept. 30		Oct. 5 to Oct. 20 June 22 to July 22			Oct. 21 to June 21			
4.0	87	4.4	111	8.0	1,530	4.0	113	7.0	1,260
4.2	113	4.7	173	9.0	1,820	4.2	142	8.0	1,580
4.4	149	5.0	251	10.0	2,100	4.4	182	9.0	1,850
4.7	220	5.5	420	12.0	2,910	4.7	256	10.0	2,140
5.0	301	6.0	662	14.0	4,000	5.0	343	12.0	2,910
5.5	468	6.5	970	16.0	5,300	5.5	524	14.0	4,000
6.0	728	7.0	1,180	18.0	6,700	6.0	784	16.0	5,300
6.5	1,020					6.5	1,060		
7.0	1,220								
8.0	1,540								
9.0	1,820								

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	140	262	187	172	235	169	228	129	116	168	345	85
2	134	246	178	228	210	169	198	123	114	157	254	93
3	314	235	172	187	208	488	187	121	123	150	273	110
4	2,020	215	167	174	203	486	174	117	128	135	230	110
5	889	208	174	167	191	296	165	116	118	125	238	91
6	375	208	215	165	187	535	163	113	110	120	210	85
7	240	196	184	617	189	334	210	110	112	116	249	84
8	176	194	165	356	172	262	410	116	136	111	178	82
9	166	191	167	251	172	233	508	120	196	135	176	84
10	339	187	161	218	172	884	307	110	939	124	153	82
11	193	182	157	220	167	668	238	110	911	109	141	83
12	152	256	157	220	189	382	218	117	690	105	140	89
13	135	405	176	200	178	301	203	111	507	100	125	95
14	152	251	165	178	174	270	194	134	225	106	120	91
15	133	218	163	174	165	270	184	194	184	105	116	95
16	118	200	180	163	163	243	176	123	176	97	115	85
17	113	196	176	167	157	243	167	114	220	103	110	83
18	109	182	172	159	161	550	172	113	409	203	143	87
19	1,780	180	159	153	174	343	178	125	299	434	123	89
20	4,210	191	153	155	395	278	161	291	5,810	819	109	160
21	934	174	152	210	215	246	157	167	3,150	1,630	105	156
22	516	165	150	513	189	225	155	128	6,900	2,330	103	91
23	416	161	153	602	284	212	148	118	1,000	1,610	99	87
24	331	163	153	622	382	200	142	172	1,200	991	97	84
25	278	165	152	1,470	256	187	142	140	500	477	93	82
26	259	167	148	617	220	338	137	263	320	634	93	82
27	1,080	233	146	362	203	264	132	256	400	339	93	83
28	760	298	233	300	187	212	129	161	1,670	270	89	81
29	438	238	184	270	-	198	128	139	312	678	88	82
30	349	200	169	251	-	196	123	129	198	731	87	102
31	298	-	165	264	-	200	-	123	-	883	86	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,547	4,210	109	566	2.48	2.86
November	6,369	405	161	212	.930	1.04
December	5,233	233	146	169	.741	.85
Calendar year 1937	118,690	6,090	78	325	1.43	19.35
January	10,005	1,470	153	323	1.42	1.64
February	5,798	395	157	207	.908	.95
March	9,882	884	169	319	1.40	1.61
April	5,834	508	123	194	.851	.95
May	4,403	291	110	142	.623	.72
June	27,173	6,900	110	906	3.97	4.43
July	14,176	2,330	97	457	2.00	2.31
August	4,583	345	86	148	.649	.75
September	2,793	160	81	93.1	.408	.45
Water year 1937-38	113,795	6,900	81	312	1.37	18.56

Peak discharge.- June 22 (4 a.m.) 13,500 sec.-ft.

Dan River near Francisco, N. C.

Location.- Water-stage recorder, lat. 36°30'15", long. 80°20'55", at county highway bridge just downstream from Georges Mill, 3 miles east of Francisco, Stokes County, and 7.9 miles downstream from Little Dan River.

Drainage area.- 119 square miles.

Records available.- August 1924 to September 1938.

Average discharge.- 13 years (1924-26, 1927-38), 187 second-feet.

Extremes.- Maximum discharge during year, 12,400 second-feet Oct. 19 (gage height, 12.45 feet), from rating curve extended above 3,400 second-feet; minimum, 85 second-feet Sept. 21; minimum gage height, 1.23 feet Apr. 6.
1924-38: Maximum discharge, that of Oct. 19, 1937; minimum, 7.1 second-feet Sept. 8, 1932 (gage height, 0.43 foot).

Remarks.- Records good. Discharge for period of ice effect, Jan. 28, 29, computed on basis of gage heights, weather records, and records for stations on nearby streams. Slight diurnal fluctuation caused by operation of gristmills upstream.

Rating table, water year 1937-38 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 25 to Sept. 30)

1.2	81	3.0	820	7.0	4,850
1.5	144	4.0	1,590	9.0	7,500
2.0	296	5.0	2,550	11.0	10,300
2.5	510	6.0	3,640		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	285	225	228	228	161	154	133	190	168	338	210
2	109	274	179	222	201	168	122	126	166	184	338	187
3	109	259	201	210	201	173	107	124	235	336	769	176
4	636	249	225	198	198	176	97	116	213	313	618	232
5	1,330	242	228	195	192	168	95	118	176	216	369	166
6	432	249	252	190	192	210	95	116	149	190	377	149
7	252	239	201	239	190	190	122	112	179	176	470	151
8	201	232	219	213	179	173	135	116	197	163	398	151
9	195	228	245	195	182	168	146	114	151	163	334	144
10	278	222	168	187	179	239	124	114	168	161	296	142
11	201	216	192	204	182	245	112	112	368	176	274	137
12	179	346	213	195	176	207	107	112	311	154	259	144
13	168	458	207	192	176	195	140	112	222	142	245	162
14	168	292	198	182	171	182	154	149	173	156	232	155
15	163	259	195	179	171	182	151	179	149	156	232	140
16	151	245	216	176	173	187	149	137	154	142	219	146
17	149	235	210	173	171	190	146	118	205	140	281	144
18	146	226	249	179	171	179	179	118	283	144	267	140
19	5,310	225	225	171	201	171	166	126	718	158	201	135
20	1,650	228	242	173	207	168	154	131	350	390	195	131
21	677	213	239	182	182	168	154	142	292	985	182	124
22	470	195	263	213	173	163	156	120	256	1,170	187	118
23	465	195	242	219	195	161	163	120	207	1,050	182	118
24	365	195	239	255	213	161	149	135	184	1,440	176	118
25	326	204	225	700	190	156	142	158	213	710	168	112
26	304	204	216	361	184	156	137	179	201	526	177	99
27	752	412	210	259	179	154	135	192	390	411	188	118
28	500	470	259	260	168	151	131	146	397	369	161	122
29	381	330	228	240	-	149	129	166	216	371	166	120
30	334	256	216	232	-	151	129	394	187	330	166	131
31	304	-	216	239	-	151	-	290	-	381	161	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16,819	5,310	109	543	4.56	5.26
November	7,882	470	195	263	2.21	2.47
December	6,843	263	168	221	1.86	2.14
Calendar year 1937	95,055	5,310	93	260	2.18	29.75
January	7,061	700	171	228	1.92	2.21
February	5,225	228	168	187	1.57	1.64
March	5,453	245	149	176	1.48	1.71
April	4,080	179	95	136	1.14	1.27
May	4,525	394	112	146	1.23	1.42
June	7,300	718	149	243	2.04	2.28
July	11,571	1,440	140	373	3.13	3.61
August	8,626	769	161	278	2.34	2.70
September	4,322	232	99	144	1.21	1.35
Water year 1937-38	89,707	5,310	95	246	2.07	28.06

Peak discharge.- Oct. 5 (1:30 p.m.) 3,410 sec.-ft.; Oct. 19 (4:30 p.m.) 12,400 sec.-ft.; July 23 (11:30 a.m.) 3,880 sec.-ft.

Dan River at Leaksville, N. C.

Location.- Water-stage recorder, lat. 36°29'05", long. 79°45'30", at Leaksville, Rockingham County, half a mile downstream from State highway bridge and half a mile upstream from Smith River.

Drainage area.- 1,150 square miles.

Records available.- July 1929 to September 1938.

Extremes.- Maximum gage height during year, 27.90 feet Oct. 20 (discharge not determined); minimum discharge, 368 second-feet Sept. 27 (gage height, 1.18 feet).
1929-38: Maximum gage height, that of Oct. 20, 1937 (discharge not determined). All previously published peak discharges above 15,000 second-feet may have been in error because of possible backwater from Smith River. Minimum discharge, 84 second-feet Sept. 12, 1932 (gage height, 0.25 foot).

Remarks.- Records good except those for periods of missing gage heights, those estimated and those for Oct. 5, 6, 27, which are poor. Slight diurnal fluctuation caused by operation of power plants upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	787	*1,900	1,710	1,260	*1,400	*1,100	1,010	794	1,120	1,010	1,430	644
2	722	*1,700	1,540	1,430	*1,300	*1,100	1,150	807	905	863	1,290	1,010
3	722	*1,600	1,460	1,570	*1,300	*1,100	1,120	780	870	3,040	1,400	748
4	5,770	*1,500	1,400	1,360	*1,300	*1,100	975	768	975	3,100	1,850	683
5	17,300	*1,500	1,360	1,290	*1,200	*1,200	919	728	912	1,570	1,740	735
6	16,000	*1,400	1,460	1,260	*1,200	*1,300	898	722	898	1,150	1,990	605
7	3,470	*1,400	1,460	2,440	*1,200	*1,200	1,120	696	774	975	1,990	551
8	2,130	*1,300	1,290	2,360	*1,100	*1,100	1,600	696	1,340	868	1,800	545
9	1,710	*1,300	1,260	1,640	*1,100	*1,100	2,680	690	1,210	814	1,290	575
10	2,430	*1,300	1,220	1,400	*1,100	*1,800	1,780	683	933	868	1,150	605
11	1,990	*1,300	1,150	1,360	*1,100	*1,600	1,320	644	1,150	742	1,010	563
12	1,570	*3,200	1,080	1,460	*1,100	*1,400	1,180	722	1,430	856	975	569
13	1,360	*4,600	1,150	1,400	*1,100	*1,300	1,120	690	1,500	775	905	563
14	1,360	*3,000	*1,200	1,360	*1,100	*1,200	1,080	807	1,010	676	835	657
15	1,290	*2,000	*1,200	1,320	*1,100	*1,200	1,040	1,220	807	787	814	696
16	1,150	*1,700	*1,200	1,290	*1,100	*1,200	1,010	1,010	742	800	800	657
17	1,080	*1,500	*1,300	1,260	*1,100	*1,200	975	787	748	650	748	657
18	1,080	*1,400	*1,300	*1,200	*1,100	*1,200	1,040	709	1,080	787	1,670	593
19	†3,800	1,360	*1,200	*1,200	*1,300	*1,100	1,320	742	1,760	993	1,100	605
20	†30,000	1,360	*1,200	*1,200	*1,500	*1,100	1,180	761	2,280	2,580	748	575
21	†21,000	1,360	*1,200	*1,300	*1,300	*1,100	1,010	828	2,570	6,770	702	575
22	3,560	1,290	*1,200	*1,400	*1,200	1,080	975	748	2,580	7,690	683	533
23	2,730	1,220	*1,300	*1,500	*1,300	1,040	975	870	1,430	9,200	670	485
24	2,360	1,150	1,360	*1,800	*1,400	1,040	933	877	1,150	8,440	638	491
25	1,990	1,150	1,500	*4,000	*1,300	1,040	919	940	1,150	3,780	605	441
26	2,150	1,150	1,360	*2,400	*1,200	1,010	891	1,010	1,220	3,110	605	485
27	11,100	1,520	1,260	*1,700	*1,100	1,010	884	1,400	1,880	2,200	830	441
28	7,420	4,010	1,500	*1,600	*1,100	1,010	835	1,040	7,000	1,710	856	474
29	2,960	3,040	1,710	*1,500	-	940	780	842	2,140	1,500	624	474
30	2,280	1,990	1,400	*1,400	-	975	780	1,010	1,290	1,740	593	835
31	*2,000	-	1,360	*1,400	-	1,010	-	1,540	-	1,460	575	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	156,271	30,000	722	5,009	4.36	5.03
November	54,200	4,600	1,150	1,807	1.57	1.75
December	41,290	1,710	1,080	1,332	1.16	1.34
Calendar year 1937	775,545	30,000	585	2,125	1.85	25.08
January	49,060	4,000	1,200	1,583	1.38	1.59
February	33,700	1,500	1,100	1,204	1.05	1.09
March	35,855	1,800	940	1,157	1.01	1.16
April	33,499	2,680	780	1,117	.971	1.08
May	26,561	1,540	644	857	.745	.86
June	44,854	7,000	742	1,495	1.30	1.45
July	71,464	9,200	650	2,305	2.00	2.31
August	32,916	1,990	575	1,062	.923	1.06
September	18,070	1,010	441	602	.523	.58
Water year 1937-38	596,740	30,000	441	1,635	1.42	19.30

*Gage heights missing or valueless; discharge computed on basis of records for Dan River at Danville, Va., and Smith River at Martinsville, Va.
†Stage-discharge relation affected by backwater from Smith River; discharge estimated by rainfall run-off studies.

Dan River at Danville, Va.

Location.- Water-stage recorder, lat. 36°35'15", long. 79°22'55", at Southern Railway bridge in Danville, Pittsylvania County, 1,000 feet upstream from Fall Creek.
Drainage area.- 2,050 square miles.
Records available.- August 1934 to September 1938.
Extremes.- Maximum discharge during year, 54,100 second-feet Oct. 21 (gage height, 18.34 feet), from rating curve extended above 30,000 second-feet; minimum, 112 second-feet Sept. 29 (gage height, 1.06 feet); minimum daily discharge, 810 second-feet Sept. 26.
1934-38: Maximum discharge, that of Oct. 21, 1937; minimum, 82 second-feet Sept. 4, 1935 (gage height, 1.18 feet); minimum daily discharge, 436 second-feet Sept. 21, 1936.
Remarks.- Records good except those for periods of missing gage heights, Apr. 8-10, 18, 19, 24, May 4-8, 12-16, 19, 20, 22-24, which were computed on basis of records for station at South Boston and are fair. Flow regulated by operation of Dan River cotton mills above station. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 24				July 25 to Sept. 30	
2.6	1,170	8.0	14,400	2.2	820
3.0	1,830	10.0	20,600	2.5	1,210
3.5	2,810	12.0	27,400	3.0	2,040
4.0	3,880	14.0	34,900	4.0	4,010
5.0	6,210	16.0	43,300	5.0	6,250
6.0	8,720			6.0	8,730
				8.0	14,400

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,360	4,140	3,900	3,080	3,250	2,160	1,740	1,440	2,210	1,940	2,830	1,440
2	1,160	3,760	3,300	3,160	3,000	1,960	2,010	1,460	1,750	1,560	2,460	2,040
3	1,180	3,510	3,350	3,650	2,440	2,080	2,020	1,440	1,560	4,650	2,410	1,920
4	6,820	3,440	3,460	3,280	2,510	2,060	1,740	1,350	1,520	6,590	3,420	1,270
5	21,600	3,020	2,720	3,310	2,290	2,040	1,760	1,300	1,730	3,430	2,960	1,460
6	25,100	3,300	2,420	2,940	2,120	2,040	1,620	1,300	1,570	2,280	3,030	1,460
7	9,570	2,660	3,400	4,850	2,470	2,420	1,940	1,250	1,590	1,840	3,160	1,290
8	3,720	3,110	2,930	5,600	2,200	2,170	2,500	1,300	2,180	1,770	3,900	1,260
9	2,720	2,780	2,580	4,060	2,130	1,900	3,500	1,170	2,580	1,530	2,500	1,280
10	3,600	2,680	2,830	3,690	2,080	3,260	4,000	1,290	1,600	1,740	2,170	1,380
11	3,940	2,620	2,900	3,320	2,020	4,980	2,640	1,280	1,640	1,980	2,080	1,160
12	2,700	3,500	2,160	3,380	2,070	3,320	2,180	1,200	2,270	1,520	2,210	1,080
13	2,380	10,700	2,680	3,100	2,060	2,720	2,100	1,250	2,540	1,580	1,600	1,240
14	2,210	6,170	2,780	3,120	2,140	2,600	1,960	1,400	1,960	1,380	1,610	1,200
15	2,200	4,460	2,700	2,960	2,110	2,290	1,950	1,700	1,420	1,690	1,740	1,400
16	2,000	3,580	2,380	2,980	2,010	2,160	1,660	1,700	1,360	1,440	1,610	1,280
17	1,800	3,320	2,700	3,100	1,970	2,240	1,840	1,540	1,280	1,440	1,480	1,340
18	1,960	3,160	3,000	2,900	1,810	2,600	1,500	1,340	1,950	1,860	2,160	1,080
19	5,240	2,990	2,540	2,740	1,900	2,420	1,700	1,200	2,560	2,000	2,810	1,160
20	38,400	2,940	2,980	2,430	2,520	2,070	2,370	1,300	4,430	4,100	1,540	1,360
21	47,200	2,630	2,640	2,480	2,790	2,100	2,340	1,510	5,410	8,680	1,380	1,170
22	11,500	2,950	2,590	2,760	2,050	2,070	1,710	1,400	6,070	11,700	1,360	1,140
23	5,460	2,660	2,470	3,220	2,130	1,940	1,820	1,150	3,310	12,400	1,520	1,040
24	4,860	2,560	3,220	3,720	2,680	1,920	1,500	1,500	2,160	13,800	1,400	1,060
25	4,650	2,360	3,580	5,270	2,800	1,860	1,650	1,640	2,460	7,260	1,220	1,060
26	4,280	2,620	3,350	6,580	2,400	1,860	1,660	1,910	3,010	5,590	1,300	810
27	15,300	2,900	3,320	4,300	2,240	1,920	1,580	2,140	2,700	4,180	1,220	1,110
28	15,300	5,700	3,460	3,380	2,270	1,650	1,560	2,120	12,700	3,030	1,580	1,000
29	6,890	5,900	3,830	2,960	-	2,020	1,500	1,670	5,270	2,680	1,390	1,010
30	5,000	4,560	3,360	2,920	-	1,540	1,210	1,330	2,670	2,980	1,300	1,360
31	4,000	-	3,490	3,410	-	1,740	-	2,520	-	2,810	1,220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	264,100	47,200	1,160	8,519	4.16	4.60
November	110,680	10,700	2,360	3,689	1.80	2.01
December	93,020	3,900	2,160	3,001	1.46	1.68
Calendar year 1937	1,336,542	47,200	912	3,662	1.79	24.26
January	108,650	6,580	2,430	3,505	1.71	1.97
February	64,460	3,250	1,810	2,302	1.12	1.17
March	70,130	4,980	1,540	2,262	1.10	1.27
April	59,260	4,000	1,210	1,975	.963	1.07
May	46,100	2,520	1,150	1,487	.725	.84
June	85,460	12,700	1,280	2,849	1.39	1.55
July	121,320	13,800	1,380	3,914	1.91	2.20
August	62,570	3,900	1,220	2,018	.984	1.13
September	37,860	2,040	810	1,262	.616	.69
Water year 1937-38	1,123,610	47,200	810	3,078	1.50	20.38

Peak discharge.- Oct. 21, (4 a.m.) 48,800 sec.-ft.

Dan River at South Boston, Va.

Location.- Water-stage recorder, lat. 36°41'37", long. 78°54'09", at Norfolk & Western Railway bridge at South Boston, Halifax County, 6 miles upstream from Banister River. Zero of gage is 300.07 feet above mean sea level (from levels by corps of Engineers, U. S. Army).
Drainage area.- 2,730 square miles.
Records available.- August 1900 to May 1907. April 1923 to September 1938.
Average discharge.- 20 years (1900-1902, 1903-6, 1923-38), 2,948 second-feet.
Extremes.- Maximum discharge during year, 56,300 second-feet Oct 22 (gage height, 28.25 feet); minimum, 753 second-feet Sept. 27 (gage height, 4.63 feet); minimum daily discharge, 824 second-feet Sept. 27.
1900-1907, 1923-38: Maximum discharge, 58,200 second-feet Jan. 21, 1936 (gage height, 28.5 feet, from floodmarks), from rating curve extended above 40,000 second-feet; minimum, 161 second-feet Sept. 20, 1932 (gage height, 3.11 feet); minimum daily discharge, 208 second-feet Sept. 15, 1932.
Remarks.- Records good except those for periods of missing gage heights, which are fair. Water supply for South Boston diverted just above station. Dams and mills at Danville regulate low-water flow to some extent.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Oct. 7

6.2	1,690	16.0	10,600
7.0	2,220	18.0	13,400
8.0	2,930	20.0	17,200
10.0	4,530	22.0	22,700
12.0	6,320	24.0	31,300
14.0	8,330	26.0	42,500

Oct. 8 to Oct. 22

7.0	1,940
8.0	2,640
10.0	4,300
12.0	6,230

Note.- Same as preceding table above 13.7 feet.

Oct. 23 to Sept. 30

5.0	920
6.0	1,450
7.0	2,090
8.0	2,820
10.0	4,450
12.0	6,300

Note.- Same as preceding table above 13.7 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,940	3,780	†5,000	†3,300	†4,000	2,660	2,170	1,480	2,960	2,920	3,340	1,180
2	1,690	3,620	†3,500	†2,900	†3,700	2,500	2,400	1,650	2,480	2,430	3,070	1,830
3	1,630	3,380	†3,100	†3,000	2,780	2,420	2,820	1,700	2,110	1,980	2,830	2,130
4	2,510	3,140	†3,200	†3,300	2,610	2,660	2,250	1,620	2,030	7,930	3,120	1,810
5	14,000	2,980	†3,000	†3,000	2,890	2,620	2,210	1,540	1,960	7,300	3,660	1,290
6	22,400	2,900	2,370	†3,000	2,690	2,620	2,140	1,540	2,100	4,060	3,580	1,400
7	31,300	2,980	†2,300	†2,800	2,400	2,720	2,040	1,580	1,970	2,660	3,880	1,430
8	17,100	2,370	†3,000	†5,000	2,700	2,870	2,860	1,450	1,930	2,140	4,070	1,260
9	3,940	2,660	†2,700	†6,000	2,470	2,560	4,900	1,570	2,660	1,910	3,620	1,200
10	4,120	2,510	†2,400	†4,500	2,430	3,680	6,300	1,280	3,080	1,890	2,660	1,260
11	4,930	2,510	†2,500	†3,800	2,330	6,800	4,250	1,450	3,530	2,160	2,300	1,370
12	4,030	2,660	†2,500	3,590	2,380	6,200	3,260	1,370	2,720	2,520	†2,000	1,180
13	3,120	7,080	†2,100	3,650	2,420	4,040	2,770	1,400	3,360	2,740	†2,000	1,040
14	2,800	9,630	†2,500	3,200	2,410	3,440	2,590	1,620	3,020	2,230	†1,600	1,240
15	2,570	5,350	†2,600	3,070	2,470	3,130	2,420	1,970	2,310	1,900	†1,600	1,210
16	2,500	4,020	†2,500	2,920	2,440	2,890	2,370	2,220	1,720	2,150	†1,700	1,460
17	2,290	3,380	2,390	2,900	2,340	2,830	2,260	2,290	1,690	1,630	†1,600	1,370
18	2,010	3,220	2,530	†3,000	2,320	3,140	2,120	1,760	1,940	1,610	†1,500	1,390
19	2,730	2,980	2,750	†2,900	2,230	3,240	2,280	1,580	3,380	3,220	†2,000	1,160
20	15,800	2,980	2,280	†2,700	2,540	3,120	2,780	1,600	6,240	3,670	†2,500	†1,300
21	*35,000	2,820	2,620	†2,500	3,050	2,360	2,720	1,800	9,780	6,700	†1,500	†1,700
22	*52,000	2,440	2,310	†2,800	3,010	2,590	2,100	1,800	14,900	11,900	†1,300	†1,500
23	*20,000	2,580	2,340	3,540	2,460	2,540	2,190	1,770	6,880	14,400	†1,300	1,310
24	*8,000	2,370	2,540	†4,200	3,300	2,370	2,120	1,480	3,780	23,400	†1,600	1,080
25	*6,500	†2,200	3,140	†5,000	3,800	2,300	1,890	2,500	2,900	23,800	†1,400	1,120
26	*6,000	†2,300	3,320	†6,000	3,400	2,300	1,960	2,680	3,500	23,400	1,160	1,080
27	7,460	2,510	3,050	†7,000	2,940	2,510	1,940	3,250	3,430	15,600	1,210	824
28	17,600	3,540	3,140	†5,000	2,760	2,100	1,840	2,910	7,750	6,900	1,180	1,100
29	15,700	†7,000	†3,300	†4,000	-	2,100	1,790	2,570	12,100	3,950	1,610	1,010
30	5,710	†6,000	†3,500	3,540	-	2,260	1,750	1,900	4,700	3,410	1,280	1,090
31	4,450	-	†3,200	†3,800	-	2,060	-	1,790	-	3,910	1,220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	321,830	52,000	1,630	10,380	3.80	4.38
November	107,890	9,630	2,200	3,596	1.32	1.47
December	87,680	5,000	2,100	2,828	1.04	1.20
Calendar year 1937	1,691,830	52,000	1,100	4,635	1.70	23.06
January	115,910	7,000	2,500	3,739	1.37	1.58
February	77,270	4,000	2,230	2,760	1.01	1.05
March	91,630	6,800	2,060	2,956	1.08	1.24
April	77,490	6,300	1,750	2,583	.946	1.06
May	57,120	3,250	1,280	1,843	.675	.78
June	122,910	14,900	1,690	4,097	1.50	1.67
July	196,420	23,800	1,610	6,336	2.32	2.68
August	67,190	4,070	1,160	2,167	.794	.92
September	39,324	2,130	824	1,311	.480	.54
Water year 1937-38	1,362,664	52,000	824	3,733	1.37	18.57

Peak discharge.- Oct. 22 (10:30 a.m.) 56,300 sec.-ft.; Oct. 29 (4 a.m.) 20,800 sec.-ft.
*Gage height missing; discharge computed on basis of floodmark, four gage readings on Oct. 21, 22 by employee of city waterworks, and records for stations at Leaksville and Danville.
†Gage height missing; discharge computed on basis of records for station at Danville.

Mayo River near Price, N. C.

Location.- Water-stage recorder, lat. 36°32'00", long. 79°59'30", just downstream from Anglins Bridge, three-quarters of a mile downstream from State line, and 4 miles west of Price, Rockingham County.

Drainage area.- 260 square miles.

Records available.- July 1929 to September 1938.

Extremes.- Maximum discharge during year, 30,000 second-feet Oct. 19 (gage height, 14.00 feet), from rating curve extended above 1,000 second-feet; minimum, 151 second-feet Sept. 28 (gage height, 1.26 feet).
1929-38: Maximum discharge, that of Oct. 19, 1937; minimum, 41 second-feet Sept. 19,1932 (gage height, 0.52 foot).

Remarks.- Records good below 2,000 second-feet except those for periods of missing gage heights, which are fair; those above 2,000 second-feet are poor.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.3	160	3.5	1,500	9.0	12,600
1.5	216	4.0	2,040	10.0	15,600
1.7	298	5.0	3,400	11.0	18,950
2.0	444	6.0	5,150	12.0	22,450
2.5	720	7.0	7,300	13.0	26,000
3.0	1,070	8.0	9,800	14.0	30,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	224	*500	475	398	373	294	272	243	243	255	393	204
2	216	*500	449	424	344	285	285	232	232	272	364	289
3	236	*480	429	383	339	298	285	228	264	832	368	213
4	3,290	*460	413	373	335	303	264	232	264	610	504	255
5	4,150	449	418	364	330	307	259	220	224	333	378	213
6	1,650	444	485	354	326	335	255	216	213	330	434	197
7	660	429	418	615	326	321	408	213	234	289	548	200
8	*400	418	393	449	307	289	523	210	480	272	383	197
9	*380	413	393	383	307	281	561	216	247	251	354	220
10	*600	408	378	359	307	513	403	207	260	238	326	197
11	*400	403	373	368	312	444	344	204	444	272	307	197
12	*340	1,110	*360	354	303	368	321	210	516	251	289	191
13	*320	1,070	*340	364	298	344	312	213	378	224	272	197
14	*320	594	*340	339	303	326	298	294	264	232	264	245
15	*320	500	*360	330	312	316	289	364	228	272	281	194
16	*300	459	373	321	303	326	285	236	216	220	255	204
17	*300	439	368	326	294	330	281	216	263	204	257	197
18	*280	418	398	321	298	349	335	216	491	274	428	200
19	8,800	403	378	307	330	307	436	232	1,130	239	255	194
20	5,000	413	354	307	424	303	307	239	572	376	236	194
21	*1,600	388	349	326	330	298	298	251	506	2,030	228	185
22	*1,100	373	344	364	312	289	294	216	572	2,330	220	172
23	*1,000	368	413	368	344	285	294	200	403	1,500	216	172
24	*700	364	464	449	378	298	272	247	321	1,330	210	168
25	*600	359	424	836	335	276	264	276	330	730	204	165
26	*550	359	393	561	326	281	255	298	281	730	204	160
27	*1,800	875	378	449	316	281	251	348	424	561	248	165
28	*1,200	1,060	517	413	298	272	243	247	1,480	430	204	162
29	*800	660	444	398	-	272	239	228	439	459	191	162
30	*650	528	413	378	-	272	232	316	330	435	194	194
31	*550	-	398	378	-	272	-	316	-	418	191	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	38,736	8,800	216	1,250	4.81	5.54
November	15,644	1,110	359	521	2.00	2.23
December	12,432	517	340	401	1.54	1.78
Calendar year 1937	188,621	8,800	162	517	1.99	26.99
January	12,359	836	307	399	1.53	1.76
February	9,110	424	294	325	1.25	1.30
March	9,735	513	272	314	1.21	1.40
April	9,365	561	232	312	1.20	1.34
May	7,584	364	200	245	.942	1.09
June	12,249	1,490	213	408	1.57	1.75
July	17,609	2,390	204	568	2.18	2.51
August	9,206	548	191	297	1.14	1.31
September	5,903	289	160	197	.758	.85
Water year 1937-38	159,932	8,800	160	438	1.68	22.86

Peak discharge.- Oct. 4 (7 p.m.) 5,550 sec.-ft.; Oct. 5 (7 p.m.) 6,860 sec.-ft.; Oct. 19 (8:30 p.m.) 30,000 sec.-ft.; July 22 (5 a.m.) 3,560 sec.-ft.
*Gage height missing or valueless; discharge computed on basis of records for stations on nearby streams.

North Mayo River near Spencer, Va.

Location.- Water-stage recorder, lat. 36°34'05", long. 79°59'15", 800 feet downstream from highway bridge at Moores Mill and 4 miles southeast of Spencer, Henry County. Zero of gage is 730.94 feet above mean sea level (levels by Corps of Engineers, U. S. Army).

Drainage area.- 108 square miles.

Records available.- October 1928 to September 1938.

Extremes.- Maximum gage height during year, 14.33 feet Oct. 19 (discharge not determined); minimum discharge, 42 second-feet Sept. 25, 28 (gage height, 1.50 feet).
1928-38: Maximum gage height, that of Oct. 19, 1937; minimum discharge observed, 19 second-feet Sept. 2-5, 1930 (gage height, 2.12 feet, former site and datum).

Remarks.- Records good except those for periods of ice effect, Dec. 12-14, Jan. 29 (computed on basis of gage heights, weather records, and records for Mayo River near Price), those for period of missing gage heights, Feb. 16-25 (computed on basis of records for Mayo River near Price), and those above 600 second-feet, all of which are fair.

Rating tables, water year 1937-38 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Oct. 4, Oct. 20 to July 21

1.6	62	6.0	2,270
1.8	104	7.0	3,060
2.0	156	8.0	4,040
2.5	316	9.0	5,240
3.0	500	10.0	6,650
3.5	715	12.0	10,000
4.0	965	14.0	13,700
5.0	1,570		

Oct. 5 to Oct. 19

2.0	140
2.3	227
2.6	326
3.0	473
3.5	695
4.0	955

Note.- Same as preceding table above 4.3 feet.

July 22 to Sept. 30

1.6	57	2.6	339
1.8	97	3.0	488
2.0	148	3.5	705
2.3	239	4.0	960

Note.- Same as preceding table above 4.3 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	165	174	137	134	104	100	86	84	97	109	70
2	82	156	162	146	126	104	104	84	78	95	104	86
3	89	151	153	134	126	112	104	80	93	394	102	62
4	1,350	142	145	129	126	114	97	62	91	186	160	77
5	1,330	142	148	124	122	106	95	80	74	124	104	62
6	668	140	177	124	122	132	95	78	70	104	99	59
7	237	134	148	269	119	119	162	76	80	93	252	61
8	174	134	140	177	114	109	234	74	134	91	114	59
9	160	132	137	148	114	104	223	78	82	89	97	68
10	299	129	132	137	116	214	151	70	84	112	88	61
11	174	126	126	142	116	174	129	72	142	84	82	56
12	146	411	123	145	116	142	119	76	171	89	79	57
13	130	497	120	137	114	129	116	76	122	76	75	57
14	127	233	120	129	114	124	112	112	86	76	71	57
15	119	189	126	126	122	119	106	132	76	82	71	54
16	109	168	134	122	115	124	104	84	74	72	71	59
17	104	159	129	124	110	126	102	76	86	68	75	59
18	104	148	137	122	115	129	132	78	269	68	119	61
19	3,680	142	129	116	120	114	145	84	333	76	73	59
20	3,310	142	122	116	150	112	112	69	177	160	66	59
21	411	132	119	124	125	109	112	91	198	794	62	57
22	275	126	116	140	115	104	106	74	256	705	62	52
23	230	124	148	142	120	104	104	72	145	492	61	52
24	202	122	171	177	140	106	97	62	116	370	59	50
25	183	122	156	319	120	102	95	89	124	223	56	46
26	177	124	142	202	112	104	91	109	102	239	56	48
27	592	346	137	159	112	104	89	124	303	162	52	50
28	316	452	195	151	106	97	86	84	477	137	52	46
29	223	259	159	145	-	97	84	76	148	140	51	48
30	192	195	148	137	-	100	84	109	112	148	52	59
31	177	-	142	145	-	100	-	104	-	114	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15,452	3,680	82	498	4.61	5.32
November	5,642	497	122	188	1.74	1.94
December	4,415	195	116	142	1.31	1.51
Calendar year 1937	68,999	3,680	57	189	1.75	23.75
January	4,647	319	116	150	1.39	1.60
February	3,361	150	106	120	1.11	1.16
March	3,638	214	97	117	1.08	1.24
April	3,490	234	84	116	1.07	1.19
May	2,681	132	70	86.5	.801	.92
June	4,387	477	70	146	1.35	1.51
July	5,760	794	68	186	1.72	1.98
August	2,624	252	50	84.6	.783	.90
September	1,751	86	46	58.4	.541	.60
Water year 1937-38	57,848	3,680	46	158	1.46	19.87

Peak discharge.- Oct. 4 (8:45 p.m.) 2,340 sec.-ft.; Oct. 6 (12:30 a.m.) 1,920 sec.-ft.; Oct. 19 (9:15 p.m.) 14,300 sec.-ft.

Smith River at Martinsville, Va.

Location.- Water-stage recorder, lat. 36°39'45", long. 79°52'55", 2 miles south of Martinsville, Henry County, and 3 miles below Grassy Creek. Zero of gage is 656.86 feet above mean sea level (levels by Corps of Engineers, U. S. Army).

Drainage area.- 374 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum discharge during year, 39,000 second-feet Oct. 19 (gage height, 21.50 feet), from rating curve extended above 5,000 second-feet on basis of flow over dam; minimum, 37 second-feet Sept. 17 (gage height, 1.55 feet); minimum daily discharge, 158 second-feet May 8.
1929-38: Maximum discharge, that of Oct. 19, 1937; minimum, 5 second-feet May 20, 1934 (gage height, 1.20 feet); minimum daily discharge, 19 second-feet Oct. 6, 1935.

Remarks.- Records good. Stage-discharge relation affected by ice Dec. 13. Flow regulated by operation of dam and power plant 1,000 feet upstream.

Rating tables, water year 1937-38 except day of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Oct. 19				Oct. 20 to June 27				June 28 to Sept. 30	
2.4	330	6.0	4,510	2.2	206	4.0	1,600	2.2	221
2.7	488	7.0	6,360	2.4	290	5.0	2,900	2.4	309
3.0	686	8.0	8,400	2.7	442	6.0	4,510	2.7	466
3.5	1,100	10.0	12,700	3.0	635	7.0	6,360	3.0	663
4.0	1,610	12.0	17,100	3.5	1,060	8.0	8,400	3.5	1,070
5.0	2,900							4.0	1,600
								5.0	2,900

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	342	732	828	531	502	436	352	230	526	376	652	398
2	274	662	761	522	480	448	342	271	382	327	584	484
3	373	700	725	462	492	424	314	262	443	1,060	1,450	292
4	4,960	642	548	475	466	436	423	259	454	670	810	298
5	4,040	620	588	482	474	332	319	353	380	534	680	358
6	1,950	546	603	492	461	452	325	238	421	395	1,040	280
7	1,010	512	544	774	428	463	419	255	361	388	1,500	233
8	763	518	479	604	436	407	623	158	364	308	805	290
9	746	498	528	518	428	378	826	310	326	289	624	290
10	1,100	509	497	544	427	506	526	293	334	492	558	273
11	729	490	446	474	426	603	490	266	436	536	494	230
12	646	1,450	414	532	418	502	454	271	444	384	456	306
13	616	1,720	410	511	409	462	424	283	354	274	402	299
14	596	1,010	470	499	416	454	368	326	305	333	339	301
15	630	808	454	586	415	444	337	415	280	304	438	308
16	480	720	480	600	422	440	289	410	276	262	344	298
17	514	677	476	578	402	415	314	276	546	194	388	257
18	571	644	504	525	396	414	370	237	671	337	558	270
19	16,200	586	479	403	410	302	390	296	646	267	371	370
20	8,380	636	479	398	492	362	322	302	1,070	852	300	289
21	2,280	560	480	406	432	414	328	292	932	4,230	266	278
22	1,200	516	462	442	398	352	354	223	1,140	2,370	394	233
23	1,060	496	526	523	423	334	298	319	610	2,630	326	246
24	890	540	548	706	521	343	248	321	463	2,820	247	244
25	844	507	560	2,100	520	352	360	344	558	1,410	314	190
26	742	526	524	1,030	444	338	312	360	551	1,080	296	238
27	1,920	1,260	507	674	474	288	293	519	1,710	718	277	236
28	1,190	1,740	563	576	494	416	264	338	1,260	612	238	230
29	892	994	537	572	-	316	201	285	592	920	304	236
30	844	926	503	575	-	343	257	693	460	756	277	261
31	770	-	492	622	-	336	-	692	-	848	244	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	57,554	16,200	274	1,857	4.97	5.73
November	22,765	1,740	490	759	2.03	2.26
December	16,415	828	410	530	1.42	1.64
Calendar year 1937	269,574	16,200	180	739	1.98	26.83
January	18,736	2,100	398	604	1.61	1.86
February	12,506	521	396	447	1.20	1.25
March	12,512	603	288	404	1.08	1.24
April	11,147	826	201	372	.995	1.11
May	10,247	693	158	331	.885	1.02
June	17,295	1,710	276	576	1.54	1.72
July	26,938	4,230	194	869	2.32	2.68
August	15,976	1,500	238	515	1.38	1.59
September	8,616	484	190	287	.767	.86
Water year 1937-38	230,707	16,200	158	632	1.69	22.96

Peak discharge.- Oct. 4 (2 p.m.) 10,100 sec.-ft.; Oct. 5 (5:30 p.m.) 6,960 sec.-ft.; Oct. 19 (6:45 p.m.) 39,000 sec.-ft.; July 21 (4:30 a.m.) 6,560 sec.-ft.; July 23 (11 p.m.) 7,360 sec.-ft.; July 24 (1:30 a.m.) 5,980 sec.-ft.

Sandy River near Danville, Va.

Location.- Water-stage recorder and concrete control, lat. 36°37'05", long. 79°30'00", 500 feet downstream from bridge on road between Callahans Store and Mount Cross, 6 miles northwest of Danville, Pittsylvania County, and 6 miles upstream from mouth. Zero of gage is 454.89 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 113 square miles.

Records available.- November 1929 to September 1938.

Extremes.- Maximum discharge during year, 8,800 second-feet Oct. 20 (gage height, 9.98 feet), from rating curve extended above 1,000 second-feet; minimum, 36 second-feet Sept. 26 (gage height, 2.60 feet).
1929-38: Maximum discharge, that of Oct. 20, 1937; minimum, 3 second-feet Sept. 29, 1930.

Remarks.- Records good except those for periods of ice effect, Dec. 12, 13, Jan. 29 (computed on basis of weather records, gage heights, and records for Pigg River near Toshes and Smith River at Martinsville), those for period of missing gage heights, June 27-30 (computed on basis of records for Pigg River near Toshes and Smith River at Martinsville), and those above 2,000 second-feet, all of which are fair.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.8	52	3.6	246	4.6	1,070
3.0	76	3.8	354	5.0	1,540
3.2	111	4.0	496	5.5	2,180
3.4	168	4.3	760	6.0	2,860

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	132	91	97	116	80	80	70	67	90	105	208
2	63	121	90	121	107	80	84	66	66	83	85	132
3	70	111	85	105	107	91	80	67	70	206	88	70
4	864	103	85	99	111	91	78	67	67	119	175	72
5	883	95	86	95	105	80	73	67	76	88	85	63
6	434	93	101	97	101	93	71	66	71	79	198	60
7	172	91	103	286	103	85	88	63	76	75	95	60
8	124	91	91	162	97	79	105	62	246	72	80	59
9	114	91	90	127	95	79	132	64	82	78	75	56
10	329	88	88	114	93	175	101	61	80	211	71	55
11	140	88	85	116	95	137	91	60	85	82	76	55
12	111	231	82	119	91	103	93	63	95	73	86	56
13	101	269	80	111	88	90	95	64	124	68	70	58
14	99	140	85	97	88	85	91	79	70	101	67	56
15	95	114	85	97	93	84	86	124	66	154	67	55
16	88	101	88	91	79	86	80	70	63	73	63	55
17	85	97	88	90	79	95	82	68	64	66	64	54
18	84	91	88	85	82	107	97	64	121	70	152	55
19	1,830	88	85	80	95	91	132	66	168	67	72	56
20	3,790	91	84	80	146	95	88	95	352	263	64	59
21	319	88	84	91	97	99	84	145	931	857	63	58
22	190	85	84	119	88	97	80	84	433	387	61	51
23	162	84	97	134	103	91	80	68	146	734	59	51
24	132	82	127	204	107	86	79	95	124	436	58	49
25	116	82	109	435	93	82	76	79	301	242	56	48
26	157	84	99	212	86	86	75	119	170	276	55	47
27	2,740	121	93	143	86	88	70	116	450	146	53	49
28	473	137	119	124	85	84	67	80	200	116	52	48
29	225	109	105	120	-	80	68	71	120	107	54	48
30	172	95	99	116	-	80	70	68	100	129	52	77
31	149	-	97	129	-	80	-	70	-	99	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,375	3,790	63	464	4.11	4.74
November	3,293	269	82	110	.973	1.09
December	2,873	127	80	92.7	.820	.95
Calendar year 1937	66,048	3,790	45	181	1.60	21.79
January	4,096	435	80	132	1.17	1.35
February	2,716	146	79	97.0	.858	.89
March	2,589	175	79	92.2	.816	.94
April	2,576	132	67	85.9	.760	.85
May	2,403	145	60	77.5	.686	.79
June	5,084	931	63	169	1.50	1.67
July	5,652	857	66	182	1.61	1.86
August	2,451	198	50	79.1	.700	.81
September	1,920	208	47	64.0	.566	.63
Water year 1937-38	50,298	3,790	47	138	1.22	16.57

Peak discharge.- Oct. 20 (2 a.m.) 8,800 sec.-ft.; Oct. 27 (11 a.m.) 5,750 sec.-ft.

Banister River at Halifax, Va.

Location.- Water-stage recorder, lat. 36°45'30", long. 78°54'05", 1 mile north of Halifax, Halifax County, and 10 miles upstream from mouth. Zero of gage is 318.54 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 552 square miles.

Records available.- December 1928 to September 1938.

Extremes.- Maximum discharge during year, 17,200 second-feet June 22 (gage height, 31.22 feet from floodmarks), from rating curve extended above 7,500 second-feet; minimum not determined; minimum daily discharge, 105 second-feet Aug. 27.
1928-38: Maximum discharge, that of June 22, 1938; minimum, 6 second-feet many days in August and September 1932; minimum daily discharge, 6 second-feet Aug. 30, 1932.

Remarks.- Records good except those for periods of missing gage heights, June 22-28, which were computed on basis of floodmarks, output of power plant, and records for Pigg River near Toshes and are fair. Flow regulated, except for high stages, by power plant half a mile upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.4	124	5.0	794	16.0	4,350
1.7	165	6.0	1,030	18.0	5,470
2.0	210	8.0	1,550	20.0	6,850
2.5	291	10.0	2,120	23.0	9,190
3.0	378	12.0	2,740	26.0	11,900
4.0	570	14.0	3,460	29.0	14,900

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	360	752	577	375	629	398	466	207	246	546	626	156
2	313	688	349	242	658	486	554	263	246	380	342	274
3	422	635	376	667	562	615	185	314	430	326	497	304
4	2,090	422	432	589	530	629	552	227	398	436	618	280
5	5,160	612	283	458	469	558	315	227	238	291	976	285
6	4,350	474	630	528	339	344	370	327	252	388	1,030	253
7	2,350	391	519	834	610	740	394	267	252	258	529	111
8	1,070	592	363	1,250	514	634	604	129	423	276	556	252
9	876	544	516	754	363	604	758	330	247	273	354	146
10	1,110	550	332	815	416	764	712	203	597	461	284	253
11	1,380	334	516	624	568	1,480	685	224	1,880	331	276	264
12	894	668	216	698	388	1,020	508	223	684	766	508	106
13	736	932	365	667	259	596	408	223	255	245	248	243
14	565	1,010	400	637	556	752	407	549	256	263	228	223
15	556	818	489	634	460	642	429	654	244	696	274	154
16	524	644	425	234	359	586	536	513	256	722	299	258
17	418	604	487	578	525	610	235	372	451	476	270	246
18	515	580	468	562	276	635	334	294	962	542	532	178
19	1,080	413	222	368	537	602	549	301	493	980	284	234
20	5,520	582	557	378	592	252	548	316	922	966	274	450
21	6,450	307	326	588	842	662	296	435	3,870	1,740	246	293
22	3,450	532	370	638	603	598	448	378	15,000	2,540	327	254
23	1,110	448	546	962	586	364	342	552	5,000	3,440	220	244
24	736	406	559	1,010	725	587	260	332	1,000	5,350	248	122
25	731	453	258	1,690	860	574	308	534	700	2,060	245	136
26	660	406	418	1,530	666	398	306	712	600	3,370	248	253
27	1,260	608	594	932	310	160	271	654	800	1,650	105	244
28	3,260	448	560	638	656	638	376	650	1,700	905	170	142
29	2,600	692	466	582	-	524	282	356	1,480	756	248	216
30	1,080	633	547	438	-	326	295	554	976	669	234	272
31	782	-	590	722	-	418	-	239	-	908	238	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	52,408	6,450	313	1,691	3.06	3.53
November	17,178	1,010	307	573	1.04	1.16
December	13,756	630	216	444	.804	.93
Calendar year 1937	317,419	8,430	37	870	1.58	21.40
January	21,613	1,690	234	697	1.26	1.45
February	14,858	860	259	531	.962	1.00
March	18,196	1,480	160	587	1.06	1.22
April	12,733	758	185	424	.768	.86
May	11,559	712	129	373	.676	.78
June	40,558	15,000	238	1,362	2.47	2.76
July	33,010	5,350	245	1,065	1.93	2.22
August	11,534	1,030	105	372	.674	.78
September	6,846	450	106	228	.413	.46
Water year 1937-38	254,549	15,000	105	697	1.26	17.15

Peak discharge.- June 22, 17,200 sec.-ft.; July 24 (3 a.m.) 6,150 sec.-ft.; July 26 (11 a.m.) 4,650 sec.-ft.

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Hyco River near Omega, Va.

Location.- Water-stage recorder, lat. 36°38', long. 78°48', at highway bridge 1⅛ miles upstream from Hilly Creek, 2⅝ miles south of Omega, Halifax County, and 7 miles upstream from mouth.

Drainage area.- 338 square miles.

Records available.- March 1934 to September 1938.

Extremes.- Maximum discharge during year, 5,690 second-feet July 27 (gage height, 23.21 feet); minimum, 41 second-feet Oct. 1, Sept. 29 (gage height, 2.08 feet).
1934-38: Maximum discharge, 7,240 second-feet Sept. 8, 1934 (gage height, 27.50 feet), from rating curve extended above 3,600 second-feet; minimum, 3 second-feet Aug. 29, 1935 (gage height, 1.46 feet).

Remarks.- Records good except those for periods of missing gage heights, Jan. 10-13, 28, 29, Feb. 6-16, 18, 20, 21, which were computed on basis of records for Banister River at Halifax and are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 7, Sept. 22 to Sept. 30

2.2	53	5.0	449
2.6	97	6.0	617
3.0	148	8.0	974
3.5	218	10.0	1,400
4.0	292	12.0	1,950

Jan. 8 to Sept. 21

2.0	43	5.0	464	15.0	2,870
2.5	99	6.0	626	18.0	3,860
3.0	165	8.0	974	22.0	5,260
3.5	235	10.0	1,400		
4.0	310	12.0	1,950		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	127	107	183	286	186	128	83	106	400	340	102
2	42	117	102	385	250	164	154	80	95	250	258	365
3	44	112	98	566	221	193	207	76	100	207	221	108
4	285	108	97	465	214	288	178	73	150	497	288	102
5	1,010	101	101	307	200	272	146	81	176	775	432	94
6	1,130	99	112	240	190	325	134	97	120	303	1,190	76
7	1,050	101	118	1,630	185	340	138	72	112	186	728	64
8	385	98	105	1,980	180	250	505	62	578	142	400	58
9	183	97	96	1,690	175	207	1,420	61	694	122	242	53
10	369	96	103	900	170	1,130	1,300	56	786	175	186	50
11	549	95	102	500	165	1,630	953	50	1,490	287	155	52
12	393	204	104	450	160	1,280	440	47	711	1,040	139	45
13	211	938	102	420	160	704	318	47	745	830	125	49
14	163	758	98	400	155	416	258	62	533	1,000	117	52
15	144	481	98	332	155	332	221	116	262	1,280	100	43
16	134	270	98	280	150	288	193	125	158	703	93	46
17	122	211	102	258	147	272	175	87	168	288	87	43
18	113	176	104	242	140	310	165	68	342	173	119	45
19	199	156	103	214	138	288	161	63	2,210	135	218	48
20	1,180	159	97	200	130	235	147	65	3,400	186	112	278
21	1,380	168	90	214	125	214	134	65	4,170	518	88	462
22	1,550	144	86	466	124	193	132	61	4,230	1,070	79	184
23	598	125	92	842	132	176	124	53	4,130	1,130	73	101
24	232	113	165	623	374	166	115	87	3,790	3,000	68	74
25	176	109	225	1,010	544	151	108	536	2,540	3,590	64	63
26	154	112	204	815	370	148	103	483	504	4,680	60	55
27	169	122	166	496	272	164	100	830	578	5,580	55	51
28	225	134	225	350	221	143	95	479	1,070	5,550	52	48
29	204	132	307	270	-	133	92	200	1,350	4,590	49	43
30	169	121	247	258	-	130	88	137	930	1,760	49	52
31	144	-	197	265	-	129	-	115	-	544	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,748	1,550	41	411	1.32	1.41
November	5,784	938	95	193	.571	.64
December	4,051	307	86	131	.388	.45
Calendar year 1937	182,512	6,000	31	500	1.48	20.11
January	17,251	1,980	183	556	1.64	1.89
February	5,735	544	124	205	.606	.63
March	10,557	1,630	129	350	1.04	1.20
April	8,432	1,420	88	281	.831	.93
May	4,517	830	47	146	.432	.50
June	36,228	4,230	95	1,208	3.57	3.98
July	40,991	5,580	122	1,322	3.91	4.51
August	6,234	1,190	47	201	.595	.69
September	2,906	462	43	96.9	.287	.32
Water year 1937-38	155,734	5,580	41	427	1.26	17.15

Tar River near Nashville, N. C.

Location.- Water-stage recorder, lat. 35°51'00", long. 77°55'50", at Cockrell Bridge on Nashville-Wilson road 5 miles upstream from Sapony Creek and 10 miles south of Nashville, Nash County.

Drainage area.- 701 square miles.

Records available.- October 1928 to September 1938.

Average discharge.- 10 years, 782 second-feet.

Extremes.- Maximum discharge during year, 9,200 second-feet July 30 (gage height, 15.51 feet); minimum, 130 second-feet Sept. 18 (gage height, 2.38 feet).
1928-38: Maximum discharge, 16,900 second-feet Dec. 3, 1934 (gage height, 20.8 feet); minimum observed, 10 second-feet Sept. 20, 1932 (gage height, 1.50 feet).

Remarks.- Records good except those for periods of missing gage heights, which are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 9		Jan. 10 to Sept. 30			
2.6	210	2.4	135	6.0	1,710
3.0	344	2.7	221	8.0	2,850
3.5	535	3.0	322	10.0	4,165
4.0	740	3.5	522	12.0	5,700
5.0	1,200	4.0	740	14.0	7,530
6.0	1,700	4.5	965	16.0	9,800
8.0	2,850	5.0	1,210		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	449	*600	480	630	480	430	267	352	1,860	785	165
2	248	396	*700	461	762	438	480	260	312	641	651	162
3	248	381	*600	516	673	*460	630	287	702	645	586	174
4	308	377	457	830	586	535	651	287	631	1,110	505	289
5	469	362	441	615	548	762	544	256	830	1,180	468	392
6	905	351	449	535	526	673	484	256	520	651	883	260
7	808	351	469	920	522	552	497	243	348	480	1,710	224
8	575	348	469	1,940	497	518	619	224	408	402	888	203
9	426	344	441	2,920	472	484	1,980	215	617	348	526	185
10	426	340	434	3,300	442	634	2,200	218	708	318	451	171
11	754	330	426	1,230	446	1,350	2,430	209	432	741	371	148
12	988	374	392	965	446	2,310	1,170	203	1,480	1,040	329	148
13	555	635	366	988	459	1,480	785	240	2,200	673	301	151
14	445	1,400	392	898	451	785	651	610	2,360	1,540	270	159
15	396	1,100	396	740	442	673	586	675	2,780	1,280	247	148
16	370	675	396	651	386	586	535	695	763	630	237	148
17	348	555	403	608	426	871	493	484	438	509	221	143
18	337	496	396	565	414	2,140	476	348	1,120	367	218	148
19	330	469	396	548	418	1,350	459	318	1,710	322	237	326
20	374	473	388	518	418	875	442	308	2,530	695	237	2,360
21	763	473	370	480	463	718	446	467	3,810	565	206	1,400
22	852	461	359	480	451	630	522	*586	4,710	740	188	1,040
23	635	430	381	535	422	565	651	*500	5,680	920	182	521
24	1,300	396	595	762	463	522	762	*400	6,690	1,350	157	329
25	942	396	655	1,010	673	484	556	*378	7,080	2,640	162	273
26	575	385	675	1,660	965	459	463	*500	4,350	4,360	157	234
27	496	*460	615	1,360	673	514	422	740	1,230	5,700	174	231
28	535	*950	535	830	548	497	386	1,260	1,090	7,140	277	221
29	762	*1,000	516	630	-	459	378	830	1,450	8,720	273	215
30	615	*700	516	565	-	442	326	505	2,390	8,840	221	227
31	496	-	496	586	-	430	-	406	-	3,520	182	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,519	1,300	238	565	0.806	0.93
November	15,857	1,400	330	529	.755	.84
December	14,724	700	359	475	.678	.78
Calendar year 1937	404,015	9,440	188	1,107	1.58	21.45
January	29,126	3,300	461	940	1.34	1.54
February	14,622	965	386	522	.745	.78
March	23,676	2,310	430	764	1.09	1.26
April	21,654	2,430	326	722	1.03	1.15
May	13,375	1,260	203	431	.615	.71
June	59,721	7,080	312	1,991	2.84	3.17
July	59,927	8,840	316	1,933	2.76	3.18
August	12,320	1,710	157	397	.566	.65
September	10,795	2,360	143	360	.514	.57
Water year 1937-38	293,316	8,840	143	804	1.15	15.56

*Gage heights missing; discharge computed on basis of records for Tar River at Tarboro and Fishing Creek near Enfield.

Tar River at Tarboro, N. C.

Location.- Water-stage recorder, lat. 35°53'40", long. 77°32'00", at highway bridge at Tarboro, Edgecombe County. Zero of gage is 10.37 feet above mean sea level (southeastern supplementary adjustment).

Drainage area.- 2,100 square miles.

Records available.- July 1896 to December 1900, October 1931 to September 1938.

Extremes.- Maximum discharge during year, 13,500 second-feet Aug. 1 (gage height, 21.31 feet); minimum, 322 second-feet Sept. 16 (gage height, 1.99 feet).
1896-1900, 1931-38: Maximum discharge, 23,800 second-feet Dec. 6, 1934 (gage height, 27.38 feet); minimum, 36 second-feet Oct. 17, 22, 1933 (gage height, 0.45 foot).
Maximum stage known, 34.2 feet, present datum, July 27, 1919 (discharge, 37,200 second-feet), from rating curve extended above 30,000 second-feet.

Remarks.- Records good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 17 to June 4)

2.0	325	6.0	1,850	16.0	7,900
2.5	475	8.0	2,860	18.0	9,600
3.0	650	10.0	4,000	20.0	11,750
4.0	1,030	12.0	5,200	22.0	14,450
5.0	1,430	14.0	6,500		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	598	1,310	2,150	1,630	2,100	1,590	1,110	970	1,950	7,690	13,300	528
2	615	1,110	1,950	1,550	2,050	1,390	1,110	853	1,590	6,850	10,300	475
3	598	1,010	2,250	1,430	2,100	1,350	1,270	704	1,470	4,720	5,600	460
4	615	950	2,400	1,470	2,050	1,350	1,470	704	1,850	2,970	2,700	580
6	704	930	2,350	1,630	1,850	1,510	1,710	704	2,920	2,750	1,850	580
6	911	950	2,200	1,670	1,710	1,850	1,510	668	3,820	2,650	1,550	834
7	1,470	796	2,150	2,000	1,630	1,900	1,390	562	3,360	2,000	1,750	796
8	1,550	796	2,100	3,300	1,630	1,670	1,510	632	2,550	1,470	2,700	615
9	1,270	815	2,050	4,300	1,550	1,510	3,350	562	2,050	1,190	2,200	562
10	1,070	796	1,950	5,200	1,470	1,590	5,610	528	1,850	1,110	1,630	510
11	1,010	778	1,800	5,970	1,390	2,200	6,640	632	1,950	911	1,430	460
12	1,330	872	1,670	5,840	1,390	3,080	7,130	834	1,590	1,120	1,190	400
13	1,850	1,230	1,510	4,600	1,390	4,120	7,060	815	1,860	1,590	1,070	400
14	1,510	1,510	1,430	3,820	1,390	4,060	5,900	1,010	3,080	1,350	911	352
15	1,190	2,450	1,390	3,300	1,430	2,920	4,240	1,670	3,640	2,100	796	367
16	1,030	2,800	1,390	2,700	1,390	2,300	2,750	2,200	4,240	2,000	668	361
17	970	2,100	1,350	2,350	1,310	2,050	2,100	2,300	3,460	1,350	668	373
18	892	1,590	1,310	2,200	1,270	2,100	1,710	1,900	2,050	1,030	704	415
19	872	1,470	1,350	1,950	1,270	3,240	1,590	1,430	2,050	872	650	954
20	834	1,430	1,270	1,800	1,230	3,410	1,470	1,190	3,770	746	686	2,630
21	815	1,390	1,230	1,710	1,190	2,700	1,350	1,390	5,320	1,070	746	6,200
22	990	1,390	1,230	1,630	1,190	2,200	1,390	1,430	6,780	1,230	650	7,620
23	1,510	1,390	1,150	1,670	1,190	1,900	1,510	1,550	7,980	1,350	650	7,830
24	1,270	1,270	1,470	1,800	1,190	1,670	1,590	2,250	9,150	1,960	615	7,550
25	1,590	1,190	1,850	2,600	1,350	1,550	1,900	2,600	10,500	3,440	528	6,570
26	1,850	1,110	2,200	3,190	1,590	1,430	1,670	2,200	11,500	5,020	475	4,160
27	1,550	1,070	2,250	3,640	1,950	1,390	1,470	2,800	12,300	6,920	460	2,250
28	1,270	1,270	2,050	3,640	1,800	1,310	1,350	3,080	11,200	8,540	445	1,470
29	1,190	2,350	1,950	2,860	-	1,350	1,190	3,300	9,330	9,900	415	1,190
30	1,510	2,500	1,750	2,350	-	1,270	1,070	3,240	8,220	11,300	545	1,030
31	1,550	-	1,710	2,050	-	1,150	-	2,550	-	12,700	528	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	36,084	1,950	598	1,164	0.554	0.64
November	40,623	2,800	778	1,354	.645	.72
December	54,760	2,400	1,150	1,766	.841	.97
Calendar year 1937	1,234,998	21,300	415	3,384	1.61	21.87
January	85,850	5,970	1,430	2,769	1.32	1.52
February	43,050	2,100	1,190	1,538	.732	.76
March	63,110	4,120	1,150	2,036	.970	1.12
April	75,020	7,130	1,070	2,501	1.19	1.33
May	47,258	3,300	528	1,524	.726	.84
June	143,380	12,300	1,470	4,779	2.28	2.54
July	109,899	12,700	746	3,545	1.69	1.95
August	58,410	13,300	415	1,884	.897	1.03
September	58,552	7,830	361	1,952	.930	1.04
Water year 1937-38	815,996	13,300	361	2,236	1.06	14.46

Fishing Creek near Enfield, N. C.

Location.- Water-stage recorder, lat. 36°08'55", long. 77°41'45", at bridge on U. S. Highway 301, 2,000 feet downstream from Atlantic Coast Line Railroad bridge, 2 miles southwest of Enfield, Halifax County, and 4¾ miles downstream from Rocky Creek.

Drainage area.- 462 square miles.

Records available.- October 1923 to September 1938 in reports of Geological Survey. October 1918 to December 1936 (annual discharge summaries) in Bulletin 39 of North Carolina, Department of Conservation and Development.

Average discharge.- 15 years, 514 second-feet.

Extremes.- Maximum discharge during year, 3,920 second-feet June 23 (gage height, 14.06 feet); minimum, 83 second-feet Sept. 16 (gage height, 1.00 foot).
1923-38: Maximum discharge, 15,200 second-feet Dec. 2, 1934 (gage height, 17.66 feet), from rating curve extended above 10,000 second-feet; minimum, about 10 second-feet Oct. 19, 1933.
Maximum stage known, 21.0 feet Apr. 19, 1910.

Remarks.- Records good except those for period of missing gage heights, Nov. 11-13, which were computed on basis of recorded range in stage and records for Tar River at Tarboro and near Nashville and are fair. Slight diurnal fluctuation at low stages from operation of mills upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	272	308	308	462	308	284	194	290	523	365	100
2	116	242	308	308	503	290	320	188	244	383	330	104
3	117	236	423	320	436	290	489	170	322	329	467	100
4	144	236	436	345	410	504	489	170	1,590	322	365	203
5	278	230	384	320	384	605	358	170	1,200	316	337	309
6	410	224	384	296	371	462	302	158	638	284	407	170
7	358	230	489	698	358	410	320	152	383	258	365	135
8	284	236	462	1,490	358	358	611	126	277	225	337	120
9	212	212	384	1,560	332	320	1,760	151	258	206	379	109
10	230	224	371	1,160	320	410	2,350	512	322	188	302	105
11	573	220	358	686	320	1,020	1,510	449	264	198	241	91
12	590	260	308	635	345	1,130	776	212	431	176	208	88
13	358	420	284	605	371	730	551	182	1,300	188	189	91
14	272	1,030	296	527	358	503	467	276	2,130	188	158	91
15	242	830	308	449	332	423	411	553	1,800	170	164	98
16	236	489	302	410	320	384	369	736	713	158	142	94
17	212	371	302	384	302	454	342	467	383	158	142	90
18	206	332	308	384	296	900	329	284	529	146	208	97
19	177	308	302	358	296	1,010	329	225	1,060	164	337	127
20	218	320	302	345	296	719	342	218	1,370	290	222	2,320
21	302	384	266	332	308	503	316	254	2,170	356	152	3,350
22	320	358	260	358	320	436	411	502	3,230	356	148	2,340
23	278	302	272	570	290	384	509	320	3,810	369	128	677
24	466	284	423	727	345	358	523	212	3,710	781	122	290
25	665	266	545	711	475	332	411	225	3,220	1,400	130	212
26	517	260	475	878	503	308	322	585	2,010	2,150	118	182
27	345	266	397	711	397	320	284	752	970	2,710	107	150
28	410	332	358	517	345	345	258	926	976	2,830	91	135
29	503	384	358	423	-	308	238	840	1,190	2,600	116	136
30	397	358	368	384	-	284	218	524	870	1,200	130	144
31	308	-	332	410	-	290	-	355	-	516	114	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,862	665	116	318	0.688	0.79
November	10,116	1,030	212	337	.729	.81
December	11,063	545	260	357	.773	.89
Calendar year 1937	245,545	5,210	90	681	1.47	20.01
January	17,599	1,560	296	568	1.23	1.42
February	10,153	503	290	363	.786	.82
March	15,098	1,130	284	487	1.05	1.21
April	16,199	2,350	218	540	1.17	1.30
May	11,088	926	126	358	.775	.89
June	37,660	3,810	244	1,255	2.72	3.04
July	20,126	2,830	146	649	1.40	1.61
August	7,021	467	91	226	.489	.56
September	12,258	3,350	88	409	.885	.99
Water year 1937-38	178,243	3,810	88	488	1.06	14.33

Eno River at Hillsboro, N. C.

Location.- Water-stage recorder and sharp-crested rectangular weir and masonry control, lat. 36°04'20", long. 79°06'30", 1,000 feet downstream from State Highway 10 at Hillsboro, Orange County, and 2 miles downstream from Sevenmile Creek.

Drainage area.- 66.5 square miles.

Records available.- November 1927 to September 1938.

Extremes.- Maximum discharge during year not determined (probably occurred during period of missing gage heights); minimum, 12 second-feet Sept. 16 (gage height, 1.46 feet).
1927-38: Maximum discharge, 4,650 second-feet Oct. 2, 1929 (gage height, 18.0 feet, from graph based on staff gage readings); minimum, 1.2 second-feet Sept. 24-26, 1932 (gage height, 0.50 foot).

Remarks.- Records good except those for periods of missing gage heights, which are poor.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.4	10	2.6	91	6.0	646
1.6	17	3.0	149	8.0	987
1.8	25	3.5	236	10.0	1,415
2.0	35	4.0	335	12.0	2,040
2.3	56	5.0	491	14.0	2,800

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*19	21	23	30	63	37	32	23	16	49	73	15
2	*18	21	23	135	46	34	46	21	15	41	84	16
3	*17	21	21	86	42	44	45	20	61	535	170	20
4	*200	20	21	51	42	51	37	19	63	‡106	129	34
5	*170	19	21	42	39	40	32	18	30	‡73	116	20
6	*100	19	23	38	38	42	32	17	24	50	134	18
7	*34	19	22	708	39	40	79	17	43	41	79	17
8	*26	19	20	162	36	37	187	16	89	36	58	17
9	*24	18	21	99	35	34	510	15	30	66	50	15
10	*140	19	23	73	35	340	140	16	23	196	43	13
11	*50	20	21	71	35	145	81	15	21	‡84	40	13
12	†28	103	19	115	36	83	61	14	53	‡81	39	13
13	†25	156	20	83	34	57	53	16	85	140	34	14
14	†23	56	21	61	34	54	47	30	28	100	31	13
15	†23	40	22	52	34	50	43	28	21	118	30	12
16	†22	33	22	47	34	134	40	19	18	56	30	12
17	†22	30	22	46	34	63	37	17	15	42	28	12
18	†22	28	21	47	34	57	36	17	34	38	54	12
19	*70	28	21	42	34	47	36	17	465	71	34	13
20	*50	30	20	39	34	44	34	17	251	63	28	51
21	34	28	21	38	33	42	41	15	339	129	26	44
22	25	26	20	40	32	40	44	13	‡1,210	232	24	21
23	23	25	25	55	48	39	39	13	118	264	23	17
24	23	26	58	74	165	37	33	14	70	2,520	22	15
25	22	25	49	131	74	33	30	24	54	*1,000	21	13
26	22	25	36	73	52	33	30	36	40	*2,000	20	12
27	23	25	31	52	46	34	28	52	36	*900	20	12
28	29	26	44	44	40	31	26	28	‡1,210	*260	19	12
29	26	27	44	40	-	30	26	23	132	*150	17	13
30	25	23	36	40	-	32	23	19	65	*100	17	19
31	22	-	32	49	-	30	-	18	-	78	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,357	200	17	43.8	0.659	0.76
November	976	156	18	32.5	.489	.55
December	823	58	19	26.5	.398	.46
Calendar year 1937	30,851	1,370	14	84.5	1.27	17.24
January	2,683	708	30	86.5	1.30	1.50
February	1,248	165	32	44.6	.671	.70
March	1,834	340	30	59.2	.890	1.03
April	1,928	510	23	64.3	.967	1.08
May	627	52	13	20.2	.304	.35
June	4,659	1,210	15	155	2.33	2.60
July	11,119	2,520	36	359	5.40	6.22
August	1,509	134	16	48.7	.732	.84
September	528	51	12	17.6	.265	.30
Water year 1937-38	29,291	2,520	12	80.2	1.21	16.39

*Gage height missing; discharge computed on basis of records for stations on nearby streams.
†Gage height missing; discharge computed from gage-height graph drawn on basis of once-daily staff readings and records for stations on nearby streams.
‡Gage height missing; discharge computed on basis of partial gage height record and flood-peak studies.

Neuse River near Northside, N. C.

Location.- Water-stage recorder, lat. 36°02'25", long. 78°45'05", at Fish Dam Bridge, 1½ miles downstream from Seaboard Air Line Railway bridge and 2 miles south of Northside, Granville County. Zero of gage is 228.32 feet above mean sea level from levels by Corps of Engineers, U. S. Army).
Drainage area.- 526 square miles.
Records available.- July 1927 to September 1938.
Average discharge.- 11 years, 542 second-feet.
Extremes.- Maximum discharge during year, 18,500 second-feet July 27; maximum gage height, 28.85 feet July 27; minimum discharge, 23 second-feet Sept. 10 (gage height, 1.29 feet).
1927-38: Maximum discharge, 26,600 second-feet Oct. 3, 1929 (gage height, 28.64 feet), from rating curve extended above 8,000 second-feet; minimum, 3.1 second-feet Sept. 20, 1932 (gage height, 0.87 foot).
Remarks.- Records good below 1,000 second-feet, fair between 1,000 and 4,000 second-feet, and poor above 4,000 second-feet. Rate of change in stage is a factor in the determination of discharge during floods. Considerable diurnal fluctuation from operation of power plants upstream. Low flow slightly regulated by storage in Durham Reservoir. For diversion see Flat River at dam, near Bahama.
Correction.- The day and figure of maximum discharge for the water year 1932-33 and the gage-height figure for that day as published in Water-Supply Paper 742 are in error. They should be corrected to read as follows: Maximum discharge, 4,470 second-feet Dec. 27 (gage height, 16.85 feet).

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	191	228	253	667	304	262	157	96	566	888	126
2	83	204	211	520	512	270	372	158	85	458	684	46
3	76	201	193	807	372	287	398	179	187	440	921	47
4	124	196	185	530	355	476	330	171	617	1,280	859	60
5	772	187	184	406	338	389	270	113	307	677	717	78
6	486	168	187	338	304	312	236	94	166	494	837	64
7	344	170	219	2,190	296	321	357	91	129	458	578	47
8	244	166	219	3,560	296	304	728	86	792	414	583	46
9	206	185	219	2,020	278	270	2,050	85	571	364	566	36
10	344	187	219	829	270	912	2,090	93	287	616	566	29
11	452	187	189	717	270	1,810	816	77	499	665	548	26
12	285	306	158	900	278	900	600	72	446	1,250	446	25
13	235	1,200	174	803	253	651	548	97	520	896	352	36
14	196	722	200	717	262	583	494	262	558	600	236	33
15	204	423	195	634	270	583	458	380	414	548	211	47
16	170	338	197	583	253	1,080	440	190	372	530	228	49
17	154	296	203	548	262	2,200	423	121	364	414	211	42
18	148	262	189	566	262	985	304	101	268	427	287	44
19	170	244	184	548	262	617	244	89	1,690	634	321	50
20	1,020	228	171	530	244	494	244	93	2,180	700	253	227
21	718	236	187	494	253	476	312	269	2,800	651	228	502
22	452	219	179	512	253	432	434	123	4,950	886	174	219
23	360	236	168	617	244	406	664	88	5,730	983	192	128
24	327	219	476	617	474	380	355	123	3,100	3,340	185	85
25	252	197	512	1,090	817	321	244	190	1,620	6,480	184	75
26	218	182	380	868	494	270	228	142	778	9,410	171	64
27	235	211	287	667	372	296	219	658	530	15,400	176	85
28	327	244	304	583	312	296	211	414	1,350	8,400	155	70
29	276	278	372	530	-	270	195	179	2,770	5,230	150	74
30	235	244	321	476	-	262	185	120	1,130	3,530	158	69
31	201	-	270	530	-	287	-	118	-	1,980	150	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,450	1,020	76	305	0.580	0.67
November	8,327	1,200	166	278	.529	.59
December	7,380	512	158	238	.452	.52
Calendar year 1937	270,558	6,000	62	741	1.41	19.12
January	24,983	3,560	253	806	1.53	1.76
February	9,523	817	244	340	.646	.67
March	17,444	2,200	262	563	1.07	1.23
April	14,711	2,090	185	490	.932	1.04
May	5,133	658	72	166	.316	.36
June	35,306	5,730	85	1,177	2.24	2.50
July	67,721	15,400	364	2,217	4.21	4.85
August	12,215	921	150	394	.749	.86
September	2,529	502	25	84.3	.160	.18
Water year 1937-38	215,722	15,400	25	591	1.12	15.23

Neuse River near Clayton, N. C.

Location.- Water-stage recorder, lat. 35°38'55", long. 78°24'30", at bridge 3 miles east of Clayton, Johnston County. Zero of gage is 128.12 feet above mean sea level(from levels by Corps of Engineers, U. S. Army).

Drainage area.- 1,140 square miles.

Records available.- July 1927 to September 1938.

Average discharge.- 11 years, 1,310 second-feet.

Extremes.- Maximum discharge during year, 12,000 second-feet July 30 (gage height, 15.01 feet); minimum, 189 second-feet Sept. 14 (gage height, 1.29 feet).
1927-38: Maximum discharge, 28,100 second-feet Oct. 3, 1929 (gage height, 21.62 feet), from rating curve extended above 14,100 second-feet; minimum, 44 second-feet Sept. 15, 1932 (gage height, 0.28 foot).

Remarks.- Records good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.3	191	3.0	907	9.0	5,620
1.6	270	4.0	1,530	11.0	7,620
2.0	217	5.0	2,210	13.0	9,700
2.5	638	7.0	3,810	15.0	12,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	458	531	567	688	1,120	688	595	450	462	2,980	10,100	314
2	417	504	567	663	1,300	638	688	417	397	1,240	6,690	354
3	377	509	624	822	1,080	638	822	405	496	850	1,550	325
4	381	496	567	1,300	878	714	850	417	822	1,020	1,430	347
5	688	496	558	995	794	822	714	413	965	1,630	1,370	273
6	995	509	585	794	767	822	638	385	740	1,340	2,070	273
7	850	479	619	1,580	740	688	714	335	518	822	2,000	280
8	638	454	604	3,720	686	638	1,400	332	446	714	1,180	252
9	544	466	581	3,900	663	636	3,220	317	1,150	638	936	224
10	638	479	600	4,260	638	850	3,540	314	1,300	609	850	209
11	794	479	572	2,640	663	2,140	3,630	290	714	683	794	198
12	794	604	531	1,720	663	2,820	2,280	283	907	1,020	767	196
13	638	1,340	518	1,790	663	2,070	1,200	409	1,020	1,430	663	209
14	558	1,790	518	1,600	638	1,200	1,020	850	650	1,600	590	205
15	531	1,400	536	1,340	614	1,020	907	1,120	1,020	933	454	198
16	487	878	549	1,140	638	995	822	850	714	740	442	209
17	483	740	540	1,060	624	1,790	767	600	633	740	433	246
18	454	663	544	965	609	3,060	740	458	1,030	609	549	240
19	462	633	549	965	614	2,560	688	401	1,500	633	496	642
20	553	638	513	907	638	1,240	590	362	3,550	1,200	531	1,500
21	1,080	609	504	907	767	965	581	373	5,160	1,270	458	850
22	1,120	595	463	878	638	878	740	471	5,920	1,370	421	794
23	1,240	572	531	907	609	794	965	500	5,430	1,720	442	581
24	1,060	572	1,180	1,060	688	740	1,240	500	5,430	3,390	405	438
25	767	558	1,300	1,560	1,270	714	850	446	5,820	5,820	373	343
26	663	526	1,180	1,930	1,460	663	638	595	6,420	7,020	347	303
27	600	522	936	1,720	1,060	628	562	907	5,100	8,720	466	307
28	638	544	794	1,240	794	663	522	1,430	1,900	9,260	509	283
29	688	567	767	1,020	-	628	500	1,080	2,000	10,400	366	317
30	663	590	794	936	-	614	462	663	3,060	11,800	343	321
31	581	-	740	936	-	585	-	544	-	11,600	343	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,910	1,240	377	675	0.592	0.68
November	19,743	1,790	454	658	.577	.64
December	20,450	1,300	463	660	.579	.67
Calendar year 1937	609,023	9,590	290	1,669	1.46	19.86
January	45,943	4,260	663	1,482	1.30	1.50
February	22,318	1,460	609	797	.699	.73
March	33,923	3,060	585	1,094	.960	1.11
April	32,865	3,630	462	1,096	.961	1.07
May	16,917	1,430	283	546	.479	.55
June	65,474	6,420	397	2,182	1.91	2.13
July	93,814	11,800	609	3,026	2.65	3.06
August	38,368	10,100	343	1,238	1.09	1.26
September	11,451	1,500	196	381	.334	.37
Water year 1937-38	422,176	11,800	196	1,157	1.01	13.77

Neuse River near Goldsboro, N. C.

Location.- Water-stage recorder, lat. 35°20'40", long. 78°01'35", a quarter of a mile upstream from bridge on State Highway 40, 2½ miles upstream from Stoney Creek, and 3 miles south of Goldsboro, Wayne County.

Drainage area.- 2,370 square miles.

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 11,400 second-feet Aug. 4 by current-meter measurement; maximum gage height, 19.23 feet Aug. 4; minimum discharge, 472 second-feet Sept. 13, 15, 16 (gage height, 2.47 feet).

1930-38: Maximum discharge, 26,300 second-feet Apr. 11, 1936; maximum gage height, 25.3 feet Apr. 11, 1936; minimum discharge, 85 second-feet Sept. 14, 1932 (gage height, 1.03 feet).

Maximum discharge known, 38,600 second-feet Oct. 5, 1929 (gage height, 25.3 feet, former site and datum) by current-meter measurement.

Remarks.- Records good. Recorder not operating Oct. 1 to Nov. 8; gage heights determined from graph drawn on basis of twice-daily gage readings. Discharge during floods computed using rate of change of stage as a factor.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	680	900	1,200	1,380	1,790	1,560	1,040	1,000	1,380	9,350	10,500	800
2	680	820	1,250	1,300	1,790	1,300	1,040	920	1,250	8,650	10,900	700
3	680	800	1,250	1,200	1,970	1,160	1,250	840	1,080	7,650	11,200	680
4	660	740	1,340	1,200	2,020	1,120	1,520	800	1,380	6,900	11,300	840
5	640	720	1,340	1,480	1,790	1,120	1,700	720	2,680	5,810	11,000	1,340
6	700	700	1,250	1,660	1,610	1,250	1,610	700	3,130	3,600	10,000	1,340
7	980	700	1,250	1,700	1,520	1,340	1,380	680	2,850	2,680	8,520	900
8	1,200	700	1,200	2,060	1,430	1,250	1,430	620	1,880	2,020	6,580	780
9	1,250	680	1,160	3,250	1,380	1,160	3,780	580	1,480	1,560	4,400	800
10	900	700	1,120	4,040	1,300	1,200	5,470	542	1,660	1,340	2,240	780
11	800	680	1,120	4,500	1,250	1,560	6,420	525	2,330	1,160	1,740	680
12	900	740	1,080	4,720	1,300	2,430	7,040	508	2,020	1,080	1,560	542
13	1,040	860	1,040	4,760	1,340	3,310	7,350	508	1,790	1,250	1,380	490
14	1,040	1,160	1,000	4,320	1,380	3,660	7,060	542	2,380	1,430	1,250	490
15	880	1,920	960	3,430	1,340	3,070	5,820	800	2,240	1,880	1,120	508
16	840	2,280	960	2,740	1,300	2,150	3,940	1,340	1,840	1,880	1,000	508
17	760	1,920	980	2,330	1,250	1,840	2,330	1,610	1,610	1,480	920	740
18	740	1,430	980	2,060	1,200	1,880	1,920	1,300	1,340	1,200	860	1,430
19	700	1,160	960	1,920	1,160	2,630	1,920	960	1,250	1,080	820	1,920
20	680	1,120	960	1,790	1,120	3,250	1,880	780	1,970	1,120	880	3,680
21	680	1,080	960	1,700	1,120	2,900	1,790	680	3,610	1,480	840	6,200
22	800	1,040	920	1,660	1,160	1,920	2,020	600	5,120	2,150	800	8,300
23	1,300	1,000	920	1,610	1,160	1,560	2,280	580	6,270	2,530	740	10,200
24	1,340	980	1,040	1,610	1,120	1,430	2,530	680	6,960	2,800	700	10,300
25	1,520	940	1,340	1,740	1,160	1,300	2,740	760	7,360	3,610	680	8,070
26	1,300	920	2,060	2,150	1,480	1,200	2,530	940	7,520	5,050	620	5,180
27	1,080	900	2,240	2,740	1,920	1,160	1,970	1,080	7,520	6,200	820	2,200
28	980	1,040	1,970	3,020	1,880	1,080	1,560	1,340	7,760	7,120	1,000	1,520
29	960	1,080	1,660	2,630	-	1,080	1,300	1,790	8,390	8,300	1,080	1,340
30	980	1,160	1,520	2,100	-	1,080	1,120	1,970	9,240	9,350	1,120	1,380
31	960	-	1,430	1,840	-	1,040	-	1,660	-	10,100	980	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	28,650	1,520	640	924	0.390	0.45
November	30,870	2,280	680	1,029	.434	.48
December	38,460	2,240	920	1,241	.524	.60
Calendar year 1937	1,231,466	22,000	558	3,374	1.42	19.30
January	74,640	4,760	1,200	2,408	1.02	1.18
February	40,240	2,020	1,120	1,437	.606	.63
March	53,990	3,660	1,040	1,742	.735	.85
April	85,740	7,350	1,040	2,858	1.21	1.35
May	28,355	1,970	508	915	.386	.44
June	107,290	9,240	1,080	3,576	1.51	1.68
July	121,810	10,100	1,080	3,929	1.66	1.91
August	107,550	11,300	620	3,469	1.46	1.68
September	74,636	10,300	490	2,488	1.05	1.17
Water year 1937-38	792,233	11,300	490	2,170	.916	12.42

Neuse River at Kinston, N. C.

Location.- Water-stage recorder, lat. 35°15'30", long. 77°35'10", at Kinston, Lenoir County, two blocks downstream from bridge on State Highway 11. Zero of gage is 10.80 feet above mean sea level (North Carolina State Highway bench mark).

Drainage area.- 2,690 square miles.

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 11,800 second-feet Aug. 7 (gage height, 16.65 feet); minimum, 628 second-feet Sept. 16 (gage height, 3.24 feet).
1930-38: Maximum discharge, 24,400 second-feet Apr. 14, 1936 (gage height, 20.9 feet); minimum, 124 second-feet Sept. 26, 1932 (gage height, 1.29 feet, former site and datum).
Maximum stage known, 24.6 feet, former site and datum, July 1919 (discharge, about 39,000 second-feet).

Remarks.- Records good except those for periods of missing gage heights, which are fair.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.2	612	7.0	2,380	13.0	6,800
3.5	710	8.0	3,000	14.0	7,800
4.0	895	9.0	3,680	15.0	9,150
4.5	1,110	10.0	4,380	16.0	10,680
5.0	1,350	11.0	5,130	17.0	12,600
6.0	1,850	12.0	5,910		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*800	1,090	1,700	1,700	2,220	2,050	1,220	1,500	2,000	8,300	8,300	1,090
2	*800	1,040	1,550	1,650	2,050	1,800	1,250	1,300	1,650	8,680	9,150	935
3	*800	975	1,700	1,600	2,050	1,550	1,450	1,200	1,500	9,150	10,000	955
4	*800	935	1,800	1,450	2,160	1,400	1,500	1,110	1,550	9,450	10,700	1,020
5	*800	875	1,800	1,450	2,220	1,300	1,650	1,060	1,700	9,150	11,400	1,040
6	*750	875	1,700	1,600	2,050	1,300	1,750	955	2,380	8,440	11,800	1,300
7	*800	855	1,750	2,100	1,950	1,400	1,850	915	2,940	7,200	11,800	1,450
8	955	835	*1,700	2,500	1,850	1,450	1,850	875	3,060	5,180	*11,000	1,130
9	1,200	835	*1,600	2,680	1,750	1,450	3,200	835	2,500	3,240	*9,500	935
10	1,220	815	*1,500	3,200	1,650	1,450	5,370	798	2,000	1,950	*7,000	875
11	1,110	815	*1,500	3,820	1,600	1,700	6,800	745	1,900	1,550	*4,800	875
12	998	915	*1,400	4,380	1,600	1,850	7,300	728	2,380	1,300	*3,200	815
13	975	1,180	*1,400	4,760	1,650	2,380	7,300	728	2,500	1,200	2,000	728
14	1,130	1,220	*1,300	4,980	1,650	3,130	7,400	798	2,380	1,250	1,650	710
15	1,180	1,350	*1,300	5,060	1,650	3,540	7,500	855	2,500	1,450	*1,500	659
16	1,060	1,850	1,220	4,680	1,600	3,610	7,400	895	2,500	*1,800	*1,400	628
17	975	2,270	1,200	3,890	1,550	3,000	6,900	1,250	2,100	*2,000	*1,300	1,610
18	915	2,100	*1,200	3,000	1,500	2,270	5,260	1,600	1,850	1,700	*1,200	2,440
19	875	1,700	*1,200	2,500	1,450	2,160	3,540	1,450	1,600	1,350	*1,100	2,620
20	895	1,450	*1,200	2,270	1,400	2,620	2,870	1,200	1,650	1,250	*1,000	3,060
21	935	1,350	*1,200	2,100	1,300	3,130	2,500	975	2,660	1,250	*1,100	4,080
22	875	1,250	*1,200	2,000	1,300	3,200	2,740	875	3,330	1,450	*1,000	5,200
23	915	*1,200	*1,100	1,950	1,350	2,440	3,470	780	4,460	2,000	*950	6,240
24	1,250	*1,200	*1,100	1,900	1,450	1,850	3,680	728	5,130	2,840	*900	7,400
25	1,400	*1,100	*1,500	2,050	1,450	1,650	3,540	780	5,750	3,750	*850	8,720
26	1,500	*1,100	1,600	2,270	1,450	*1,500	3,400	895	6,330	4,530	*800	9,750
27	1,450	*1,100	2,050	2,500	1,600	*1,400	3,200	1,090	6,900	5,670	935	9,600
28	1,300	*1,100	2,380	2,870	1,950	*1,300	2,620	1,250	7,200	6,240	1,130	7,320
29	1,180	1,220	2,270	3,200	-	*1,300	2,050	1,400	7,600	6,600	1,200	4,520
30	1,110	1,700	2,000	3,060	-	*1,300	1,750	1,750	8,040	7,000	1,180	3,200
31	1,110	-	1,800	2,620	-	1,250	-	2,220	-	7,500	1,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32,063	1,500	750	1,034	0.384	0.44
November	36,300	2,270	815	1,210	.450	.50
December	47,920	2,380	1,100	1,546	.575	.66
Calendar year 1937	1,449,132	21,200	660	3,972	1.48	20.04
January	85,790	5,060	1,450	2,767	1.03	1.19
February	47,450	2,220	1,300	1,695	.630	.66
March	61,730	3,610	1,250	1,991	.740	.85
April	112,310	7,500	1,220	3,744	1.39	1.55
May	33,540	2,220	728	1,082	.402	.46
June	100,040	8,040	1,500	3,335	1.24	1.38
July	134,320	9,450	1,200	4,333	1.61	1.86
August	131,045	11,800	*800	4,227	1.57	1.81
September	90,905	9,750	628	3,030	1.13	1.26
Water year 1937-38	913,413	11,800	628	2,503	.930	12.62

*Gage height missing; discharge computed on basis of recorded range in stage and records for station near Goldsboro.

Flat River at Bahama, N. C.

Location.- Water-stage recorder, lat. 36°11'25", long. 78°53'00", at head of Lake Michie, 1¼ miles upstream from county highway bridge, 1½ miles upstream from Dial Creek, and 1½ miles north of Bahama, Durham County. Zero of gage is 255.05 feet above mean sea level.

Drainage area.- 150 square miles.

Records available.- July 1925 to September 1938.

Average discharge.- 13 years, 149 second-feet.

Extremes.- Maximum discharge during year, 16,000 second-feet July 26 (gage height missing), computed on basis of records for Flat River at dam near Bahama and Dial Creek near Bahama; minimum, 14 second-feet Sept. 1 (gage height, 1.43 feet).
1925-38: Maximum discharge, that of July 26, 1938; minimum, 0.37 second-foot Sept. 26, 27, 1932 (gage height, 0.23 foot).

Remarks.- Records good except those for period of missing gage heights, July 26 to Aug. 6, which were computed on basis of records for stations on nearby streams and are fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-4				Oct. 5 to Sept. 30					
1.4	13.9	3.0	140	1.4	13	3.5	271	8.0	5,860
1.7	27	3.5	278	1.7	25	4.0	510	9.0	7,970
2.0	42	4.0	504	2.0	38	5.0	1,320	10.0	10,440
2.5	71			2.5	64	6.0	2,530		
				3.0	128	7.0	4,080		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	34	42	53	128	60	50	31	30	114	200	16
2	17	32	39	325	95	58	112	30	23	94	220	46
3	17	33	39	201	83	84	98	27	45	625	440	42
4	469	34	34	117	80	174	67	25	158	304	320	152
5	444	31	35	90	74	98	55	28	57	128	240	51
6	319	35	40	77	67	102	54	38	55	94	190	34
7	98	36	42	1,360	67	107	108	28	43	76	150	30
8	60	32	38	399	61	75	403	26	641	66	132	26
9	47	29	35	203	57	66	1,250	24	130	60	107	24
10	370	32	39	150	58	1,030	292	21	93	320	96	24
11	149	27	38	146	60	362	162	19	430	127	82	23
12	76	143	29	222	66	195	130	19	263	530	66	22
13	57	468	31	158	66	143	107	22	436	528	76	22
14	52	156	36	123	59	121	91	32	106	154	62	24
15	45	95	31	107	56	106	78	91	64	163	52	21
16	41	66	34	92	57	121	70	48	50	101	49	24
17	39	58	35	88	54	146	63	27	56	68	46	21
18	36	52	36	83	53	110	59	26	46	58	114	19
19	115	48	34	73	54	92	60	26	1,980	56	70	22
20	196	54	34	67	58	82	54	27	1,180	57	52	163
21	94	56	30	64	59	76	53	25	2,210	216	44	203
22	62	50	31	78	50	68	52	22	5,270	753	38	50
23	48	44	35	150	54	64	50	22	379	472	34	28
24	44	44	89	186	251	62	46	23	209	4,280	34	23
25	40	40	106	412	187	56	40	159	186	1,980	33	23
26	36	38	66	212	107	57	39	52	176	9,000	32	23
27	48	45	54	135	87	54	40	121	119	1,800	45	23
28	68	50	80	104	74	52	36	54	1,610	460	37	22
29	52	54	91	86	-	48	33	36	337	320	31	39
30	45	48	63	87	-	53	33	31	158	280	27	45
31	37	-	54	98	-	48	-	30	-	220	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,240	469	17	105	0.700	0.81
November	1,964	468	27	65.5	.437	.49
December	1,420	106	29	45.8	.305	.35
Calendar year 1937	72,049	4,350	13.9	197	1.31	17.86
January	6,246	1,860	53	201	1.34	1.54
February	2,222	251	50	79.4	.529	.55
March	3,970	1,030	48	128	.853	.98
April	3,765	1,250	33	126	.840	.94
May	1,190	159	19	38.4	.256	.30
June	16,542	5,270	23	551	3.67	4.10
July	23,524	9,000	56	759	5.06	5.83
August	3,136	440	17	101	.673	.78
September	1,285	203	16	42.8	.285	.32
Water year 1937-38	68,524	9,000	16	188	1.25	16.99

Peak discharge.- Jan. 7 (11 a.m.) 3,440 sec.-ft.; June 19 (7 a.m.) 4,080 sec.-ft.; June 22 (1:30 a.m.) 14,200 sec.-ft.; July 24 (9:30 a.m.) 6,260 sec.-ft.

Flat River at dam, near Bahama, N. C.

Location.- Water-stage recorder, lat. 36°09'05", long. 78°50'55", just downstream from Durham municipal dam at old Tilley mill site, 3 miles southeast of Bahama, Durham County, and 4 miles upstream from confluence with Eno River.
Drainage area.- 171 square miles.
Records available.- August 1927 to September 1938.
Average discharge.- 11 years, 168 second-feet.
Extremes.- Maximum discharge during year, 18,600 second-feet July 26 (gage height, 19.50 feet), from computation of discharge over Durham municipal dam; no flow Sept. 4-13.
1927-38: Maximum discharge, that of July 26, 1938; no flow Sept. 4-13, 1938.
Remarks.- Records good except those for period of obstructed intake, July 28 to Aug. 22, which were computed from gage-height graph constructed on basis of staff-gage readings made three times daily and water-stage recorder record of power-plant tailrace and are fair. Considerable regulation by Durham Reservoir just above station, where a daily average of 9.1 second-feet of water was diverted during the year for Durham water supply, about 60 percent of which was returned to Neuse River as sewage. Large diurnal fluctuation from operation of power plants.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Sept. 13

0.7	0.00	4.0	706
.9	.29	5.0	1,090
1.0	1.25	7.0	1,940
1.3	17	9.0	2,900
1.6	43	11.0	4,070
2.0	96	13.0	5,510
2.5	207	15.0	7,750
3.0	366	17.0	12,100

Sept. 14-30

0.7	0.00
.9	.3
1.0	1.8
1.3	21
1.6	50

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	90	102	87	232	96	97	64	34	242	373	3.3
2	3.7	87	96	67	91	104	99	93	41	212	384	1.8
3	4.1	90	88	92	89	103	98	92	35	269	369	1.6
4	5	92	86	106	96	98	93	60	41	453	370	0
5	52	83	67	107	86	80	95	34	34	281	376	0
6	84	78	85	95	82	70	73	34	32	271	304	0
7	86	71	98	200	85	99	98	35	42	285	208	0
8	86	84	104	247	99	104	88	35	56	268	335	0
9	81	91	108	211	93	99	108	34	90	216	351	0
10	77	94	88	270	98	85	120	34	64	212	367	0
11	75	98	90	257	87	234	168	34	102	278	320	0
12	85	88	80	264	89	204	207	34	161	288	258	0
13	78	78	97	272	65	186	204	34	261	277	94	0
14	88	77	105	288	98	280	208	34	267	281	104	23
15	83	87	95	256	100	231	215	34	288	300	97	39
16	77	91	100	231	89	206	215	33	276	261	104	38
17	71	88	95	273	101	160	193	27	242	219	103	37
18	76	90	92	274	100	143	74	36	83	295	113	38
19	82	84	74	288	87	138	78	33	750	312	94	39
20	217	74	86	280	71	127	79	33	1,340	262	114	29
21	219	71	98	263	102	139	82	33	1,640	208	108	31
22	164	94	95	267	99	145	80	26	5,200	271	90	57
23	126	100	60	239	98	150	74	27	616	268	100	39
24	154	103	82	292	97	136	71	35	323	3,050	104	42
25	82	82	58	290	96	84	73	36	285	2,220	105	31
26	90	85	77	298	77	67	81	86	264	9,730	104	34
27	94	89	71	291	79	76	87	28	288	1,930	84	41
28	85	68	85	283	102	96	89	38	1,080	531	89	36
29	82	86	87	253	-	99	88	28	512	385	92	41
30	78	90	81	199	-	105	87	31	269	326	98	41
31	71	-	76	249	-	110	-	41	-	286	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,670.8	219	3.7	86.2	0.504	0.58
November	2,583	103	68	86.1	.504	.56
December	2,706	108	58	87.3	.511	.59
Calendar year 1937	80,556.4	3,940	3.3	221	1.29	17.51
January	7,089	298	67	229	1.34	1.54
February	2,688	232	65	96.0	.561	.58
March	4,054	280	67	131	.766	.88
April	3,422	215	71	114	.667	.74
May	1,226	93	26	39.5	.231	.27
June	14,734	5,200	32	491	2.87	3.20
July	24,657	9,730	212	795	4.65	5.36
August	5,904	384	84	190	1.11	1.28
September	642.7	57	0	21.4	.125	.14
Water year 1937-38	72,376.5	9,730	0	198	1.16	15.72

Peak discharge.- June 22 (2:15 a.m.) 11,400 sec.-ft.; July 24 (1:30 p.m.) 4,880 sec.-ft.; July 26 (12:30 p.m.) 18,500 sec.-ft.

Dial Creek near Bahama, N. C.

Location.- Water-stage recorder and combination V-notch and masonry weir, lat. 36°10'50", long. 78°51'55", three-eighths of a mile upstream from confluence with Flat River and Lake Michie, and 3 miles (revised) northeast of Bahama, Durham County.
Drainage area.- 4.9 square miles.
Records available.- October 1925 to September 1938.
Average discharge.- 12 years (1926-38), 4.14 second-feet.
Extremes.- Maximum discharge during year, 597 second-feet July 26 (gage height, 5.30 feet), from rating curve extended above 100 second-feet; minimum, 0.66 second-foot Oct. 3 (gage height, 0.58 foot).
1925-38: Maximum discharge, that of July 26, 1938; maximum gage height, 5.60 feet April 27, 1928; no flow at times in 1926 and each year of period 1930-33.
Remarks.- Records good except those for period when control was damaged, July 26 to Sept. 12, which are poor. Discharge below 14 second-feet, except during period when control was damaged, determined by use of 2-foot, 90° V-notched weir, rating for which was checked by discharge measurements. Discharge for day of ice effect, Jan. 29, computed on basis of gage heights, weather records, and records for stations on nearby streams; that for periods of missing gage heights, Jan. 30, July 10-12, Sept. 10-13, computed on basis of partial gage-height record and records for stations on nearby streams.

Rating tables, water year 1937-38 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 5-9)

Oct. 1 to July 26 and Sept. 12-30

0.5	0.46	1.2	3.95	3.0	101	0.6	0.71	1.4	14.7	3.0	152
.6	.71	1.5	6.9	3.5	169	.8	1.45	1.7	30	3.5	226
.8	1.45	2.0	14	4.0	246	1.0	3.28	2.0	50	4.0	310
1.0	2.52	2.5	45			1.2	7.74	2.5	95		

July 26 to Sept. 12

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.68	2.11	2.52	2.40	3.95	2.65	2.71	1.32	0.84	3.56	4.62	0.90
2	.68	2.05	2.40	9.1	3.12	2.65	3.41	1.20	.74	2.98	5.1	.94
3	.77	2.00	2.22	4.64	3.26	6.0	2.91	1.20	5.9	24	16	1.66
4	20	1.89	2.22	3.71	3.12	4.37	2.52	1.20	2.34	6.2	4.62	1.66
5	7.0	1.89	2.28	3.05	2.91	3.64	2.34	1.28	1.41	3.48	32	1.16
6	3.48	1.94	2.65	3.19	2.91	4.12	2.28	1.12	1.24	2.71	34	1.04
7	2.16	1.89	2.40	69	2.84	3.05	5.8	.90	4.26	2.28	9.6	1.08
8	1.54	1.79	2.16	11	2.52	2.91	7.0	.94	4.85	1.89	6.5	.94
9	1.50	1.84	2.28	6.9	2.52	2.71	28	1.04	2.40	2.22	4.62	.84
10	6.8	1.79	2.28	5.2	2.58	25	7.6	.84	11	6.6	3.66	.74
11	2.46	1.79	2.11	7.0	2.84	9.5	5.0	.77	8.8	2.46	3.03	.75
12	1.79	11	2.11	6.0	2.84	6.0	4.37	.74	4.28	11	3.03	1.10
13	1.69	8.8	1.94	4.82	2.65	5.3	3.87	1.76	3.52	7.4	2.53	1.04
14	1.64	4.64	1.94	4.12	2.71	4.29	3.41	3.40	1.84	3.88	2.16	.97
15	1.50	3.71	1.94	3.71	2.58	3.71	3.12	3.42	1.41	3.26	1.91	.80
16	1.41	3.19	1.94	3.41	2.65	7.7	2.91	1.64	1.36	2.16	1.86	.71
17	1.41	2.84	2.00	3.48	2.58	6.1	2.46	1.16	1.97	1.79	1.74	.71
18	1.41	2.52	2.11	3.05	2.65	4.64	2.46	1.01	1.45	1.54	5.6	.77
19	42	2.40	2.05	2.98	2.71	3.87	2.34	1.08	12	2.39	2.28	3.58
20	23	2.98	1.84	2.84	2.71	3.71	2.16	1.04	33	5.1	1.86	12
21	5.9	2.58	1.79	2.91	2.28	3.48	2.11	1.28	64	6.0	1.68	2.82
22	4.12	2.34	1.79	4.46	2.22	3.26	2.34	.87	72	4.35	1.62	1.59
23	3.71	2.22	3.23	4.29	2.65	3.12	2.46	.84	9.0	11	1.45	1.36
24	3.05	2.11	4.82	6.9	9.8	2.91	2.22	1.08	9.1	94	1.32	1.20
25	2.78	2.11	3.41	7.7	4.91	2.78	2.05	1.01	5.7	20	1.28	1.04
26	2.58	2.11	2.91	4.64	3.71	2.84	1.89	1.47	3.48	206	1.16	1.01
27	5.0	2.28	2.58	3.64	3.48	2.78	1.74	2.46	3.05	32	2.16	1.01
28	3.48	4.96	3.67	3.19	2.98	2.58	1.59	1.59	52	13	1.24	.97
29	2.71	3.33	2.98	3.0	-	2.52	1.50	1.20	9.0	9.3	1.12	1.08
30	2.46	2.78	2.58	3.05	-	2.58	1.32	1.04	4.82	7.7	1.04	2.34
31	2.34	-	2.46	4.79	-	2.58	-	1.01	-	6.0	.94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	161.05	42	0.68	5.20	1.06	1.22
November	89.88	11	1.79	3.00	.612	.68
December	75.81	4.82	1.79	2.45	.500	.58
Calendar year 1937	2,140.61	72	.43	5.86	1.20	16.25
January	208.17	69	2.40	6.72	1.37	1.58
February	88.68	9.8	2.22	3.17	.647	.67
March	143.35	25	2.52	4.62	.943	1.09
April	115.89	28	1.32	3.86	.788	.88
May	40.91	3.42	.74	1.32	.269	.31
June	336.78	72	.74	11.2	2.29	2.56
July	506.25	206	1.54	16.3	3.33	3.84
August	161.73	34	.94	5.22	1.07	1.23
September	47.91	12	.71	1.60	.327	.36
Water year 1937-38	1,976.39	206	.68	5.41	1.10	15.00

Little River near Princeton, N. C.

Location.- Water-stage recorder, lat. 35°30'40", long. 78°09'30", a quarter of a mile upstream from county bridge, three quarters of a mile upstream from Little Creek, and 3 miles north of Princeton, Johnston County.

Drainage area.- 229 square miles.

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 3,270 second-feet Sept. 21 (gage height, 11.65 feet); minimum, 12 second-feet Oct. 3, 4, Aug. 21, 22.
1930-38: Maximum discharge, 4,030 second-feet Dec. 2, 1934 (gage height, 12.68 feet); minimum, 1.0 second-foot several days in September 1932 and Oct. 2, 3, 1932.
Maximum stage known, 14.90 feet sometime in September 1924.

Remarks.- Records good except those below 40 second-feet and those for periods of missing gage heights, which are poor. Considerable diurnal fluctuation from operation of power plant upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 22 to Apr. 8)

Oct. 1 to Apr. 8				Apr. 9 to Sept. 30					
0.8	23	2.0	210	0.8	14	2.0	178	6.0	976
1.0	42	2.5	311	1.0	28	2.5	263	8.0	1,480
1.3	81	3.0	402	1.3	64	3.0	353	10.0	2,280
1.6	126	4.0	580	1.6	111	4.0	551	12.0	3,540

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	98	*80	111	146	100	93	51	204	342	175	86
2	64	85	*80	99	160	98	96	*76	132	197	121	62
3	18	70	*80	106	154	94	114	*70	211	149	74	118
4	37	73	*130	103	158	106	146	*45	1,040	139	85	532
5	44	56	112	102	146	114	111	*55	810	137	96	192
6	57	53	118	99	120	110	120	*65	321	121	70	88
7	81	24	105	200	134	113	121	*60	174	121	101	84
8	104	*90	103	406	106	93	293	*28	141	114	128	84
9	102	*85	100	402	115	97	676	*45	115	82	88	64
10	50	*70	88	332	115	147	1,250	*50	103	51	109	59
11	78	*65	96	297	120	349	679	*45	143	86	97	28
12	105	*70	80	324	118	332	508	31	133	64	74	62
13	69	*90	98	300	120	250	335	32	246	61	62	63
14	62	*150	80	254	125	198	238	59	194	58	31	57
15	76	*100	82	217	108	140	183	174	106	62	69	54
16	74	*110	94	200	120	132	158	238	70	70	57	45
17	49	*90	84	185	105	133	132	159	79	24	51	35
18	55	*90	85	159	100	145	129	123	97	73	60	44
19	72	*90	76	160	99	121	136	81	293	67	71	217
20	65	*80	105	152	99	105	134	78	1,070	74	49	2,690
21	43	47	82	135	102	113	159	67	1,540	77	17	3,200
22	50	101	89	135	85	101	195	64	1,300	60	26	2,370
23	52	79	85	130	99	102	190	76	954	77	23	1,060
24	50	81	126	142	108	98	*130	82	622	278	42	462
25	89	68	210	168	136	93	*150	132	439	586	54	238
26	86	92	206	276	141	80	*90	115	317	740	50	170
27	105	69	177	246	132	72	*70	213	222	960	163	132
28	98	*79	149	217	126	96	*55	210	1,020	960	196	129
29	59	*140	132	197	-	89	*60	136	1,380	656	145	130
30	99	*100	124	146	-	92	*70	125	874	448	177	121
31	42	-	114	152	-	69	-	210	-	236	149	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,100	105	18	67.7	0.296	0.34
November	2,495	150	24	83.2	.363	.40
December	3,370	210	76	109	.476	.55
Calendar year 1937	122,848	3,470	18	337	1.47	19.94
January	6,174	406	99	199	.869	1.00
February	3,401	160	85	121	.528	.55
March	3,962	349	72	128	.559	.64
April	7,221	1,250	55	241	1.05	1.17
May	2,995	236	28	96.6	.422	.49
June	14,338	1,540	70	478	2.09	2.33
July	7,172	960	24	231	1.01	1.16
August	2,710	196	17	87.4	.382	.44
September	12,676	3,200	28	423	1.85	2.06
Water year 1937-38	68,634	3,200	17	188	.821	11.13

*Gage height for day or part of day missing; discharge computed on basis of partial record, precipitation records, and records for Contentnea Creek near Wilson.

Contentnea Creek near Wilson, N. C.

Location.- Water-stage recorder, lat. 35°41'15", long. 77°56'50", at bridge on U. S. Highway 301, just downstream from municipal power plant, 1 mile upstream from Atlantic Coast Line Railroad bridge, and 3 miles southwest of Wilson, Wilson County.

Drainage area.- 236 square miles.

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 2,790 second-feet Sept. 22 (gage height, 10.42 feet); minimum, 4 second-feet May 5; minimum daily discharge, 6 second-feet May 4. 1930-36: Maximum discharge, 4,820 second-feet Jan. 31, 1937 (gage height, 13.37 feet); minimum, about 0.2 second-foot Oct. 6-15, 1932, Nov. 24 to Dec. 2?, 1933. Maximum stage known, about 24.3 feet sometime in September 1924.

Remarks.- Records good except those below 20 second-feet, which are poor. Extreme diurnal fluctuation from operation of power plants upstream. Considerable storage in pond above municipal power plant for short periods during low flows.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 13				Apr. 14 to Sept. 30			
0.8	6	3.0	490	0.8	5	3.0	462
1.0	15	3.5	670	1.0	13	4.0	762
1.3	39	4.0	810	1.3	35	5.0	997
1.6	83	5.0	1,040	1.6	75	6.0	1,245
2.0	173	6.0	1,275	2.0	167	8.0	1,830
2.5	314			2.5	302	10.0	2,630

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	130	138	90	159	119	114	31	62	525	254	22
2	11	7	134	66	142	111	126	32	108	302	36	22
3	11	58	210	243	284	90	77	21	192	223	127	64
4	59	12	206	44	126	111	265	6	563	168	186	27
5	80	12	195	87	127	95	128	7	1,140	322	252	214
6	81	75	127	60	90	76	128	60	1,300	424	225	23
7	82	19	111	282	90	115	134	51	703	325	110	66
8	81	35	121	313	94	111	232	21	318	153	317	68
9	61	49	139	430	104	107	694	10	138	69	257	31
10	9	49	137	470	107	125	1,180	47	280	25	57	22
11	9	45	132	409	106	290	1,160	52	311	24	98	24
12	9	65	29	332	121	312	1,050	12	215	24	58	19
13	54	64	79	315	81	342	786	47	97	36	59	17
14	120	78	132	304	98	309	376	146	103	129	25	19
15	11	152	26	286	102	251	267	88	109	19	20	25
16	54	107	137	255	103	117	263	281	44	19	22	25
17	11	68	78	167	107	116	75	294	98	24	22	26
18	15	69	133	120	104	177	158	258	144	26	23	64
19	69	68	27	185	115	117	87	10	379	27	23	216
20	56	71	139	133	69	81	78	45	623	28	22	710
21	11	75	27	130	99	199	171	147	934	28	22	2,210
22	56	68	134	183	106	122	172	17	1,300	130	22	2,630
23	221	66	81	67	105	109	181	209	1,300	136	22	2,010
24	10	66	143	182	105	102	105	19	940	27	22	979
25	10	68	256	204	119	102	256	228	533	543	22	341
26	10	19	256	268	121	119	95	204	291	967	22	219
27	10	136	242	266	85	68	99	223	260	1,230	102	129
28	120	14	171	206	238	120	90	261	249	1,170	464	24
29	22	249	99	197	-	186	92	104	467	1,140	553	130
30	64	151	211	66	-	192	93	223	651	754	453	137
31	12	-	85	136	-	122	-	117	-	314	256	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,493	221	9	48.2	0.204	0.24
November	2,145	249	7	71.5	.303	.34
December	4,135	256	26	133	.564	.65
Calendar year 1937	122,213	4,510	4	335	1.42	19.25
January	6,496	470	44	210	.890	1.03
February	3,307	284	69	118	.500	.52
March	4,615	342	68	149	.631	.73
April	8,752	1,180	75	292	1.24	1.38
May	3,271	294	6	106	.449	.52
June	13,852	1,300	44	462	1.96	2.19
July	9,331	1,230	19	301	1.28	1.48
August	4,153	553	20	134	.568	.65
September	10,513	2,630	17	350	1.48	1.65
Water year 1937-38	72,063	2,630	6	197	.835	11.38

Contentnea Creek at Hookerton, N. C.

Location.- Water-stage recorder, lat. 35°25'40", long. 77°35'05", at Hookerton, Green County, about 300 feet downstream from highway bridge and 2⅛ miles upstream from Wheat Swamp Creek.

Drainage area.- 789 square miles.

Records available.- November 1928 to September 1938.

Extremes.- Maximum discharge during year, 2,590 second-feet Apr. 10, 11; maximum gage height, 12.39 feet Apr. 10; minimum discharge, 88 second-feet Sept. 16; minimum gage height, 2.41 feet Oct. 1.
1928-38: Maximum discharge, 11,100 second-feet Oct. 6, 1929 (gage height, 18.9 feet); minimum, 13 second-feet Sept. 16, 17, 1932 (gage height, 1.17 feet).
Maximum stage known, 23.3 feet sometime in September 1928.

Remarks.- Records good except those for periods of missing gage heights, which are poor, and those below 100 second-feet, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	154	539	430	539	386	344	302	400	2,040	1,940	460
2	112	143	539	415	491	358	344	281	372	1,980	1,760	400
3	104	143	619	372	507	372	386	*240	337	1,680	1,460	295
4	105	154	653	358	507	351	445	*200	415	1,680	958	281
5	116	166	619	351	523	344	*460	*170	491	1,400	507	288
6	115	143	603	372	523	358	*460	*150	571	1,090	386	260
7	128	135	635	473	491	358	*480	*140	707	905	415	260
8	162	123	557	765	475	358	*800	128	865	825	430	260
9	176	121	523	885	400	316	*2,000	131	1,020	725	400	186
10	173	133	460	945	372	356	2,590	143	1,060	555	386	148
11	*150	130	430	1,000	386	555	2,590	142	*850	372	400	139
12	*140	154	400	1,040	430	653	2,520	120	*500	281	337	123
13	*150	267	386	1,060	445	689	2,450	*130	905	225	253	106
14	*130	337	372	1,040	445	689	2,450	*200	925	198	205	98
15	*140	316	316	965	430	689	2,320	*280	635	205	172	91
16	*150	288	302	865	386	635	2,080	*320	430	295	154	91
17	*180	274	323	785	372	587	1,720	*340	358	344	140	488
18	173	281	309	707	358	523	1,310	*360	323	288	154	785
19	157	267	330	619	358	460	985	*380	288	225	166	765
20	200	260	330	539	344	430	845	380	618	198	179	965
21	195	260	344	491	*340	415	707	344	1,120	205	138	1,310
22	168	260	295	491	*360	386	653	253	1,280	232	119	1,560
23	173	253	302	475	*360	372	805	198	1,340	225	107	1,800
24	184	239	358	491	*380	372	925	198	1,500	267	98	1,980
25	184	225	475	587	*380	344	885	198	1,640	*480	110	2,200
26	241	218	507	707	*400	316	689	260	1,800	*900	104	2,380
27	205	218	539	765	415	288	555	302	*1,000	*1,200	98	2,320
28	160	295	555	745	400	295	491	415	*1,900	*1,400	124	1,980
29	154	571	571	725	-	337	400	460	*1,900	*1,600	160	1,460
30	141	635	555	653	-	330	344	445	1,940	*1,800	248	1,000
31	143	-	460	587	-	337	-	460	-	1,940	415	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,812	241	101	155	0.196	0.23
November	7,163	635	121	239	.303	.34
December	14,236	653	295	459	.582	.67
Calendar year 1937	378,671	7,320	96	1,037	1.31	17.86
January	20,703	1,060	351	668	.847	.98
February	11,817	539	340	422	.535	.56
March	13,261	689	288	428	.542	.62
April	34,033	2,590	344	1,134	1.44	1.61
May	8,070	460	120	260	.330	.38
June	28,390	1,940	288	946	1.20	1.34
July	25,970	2,040	198	838	1.06	1.22
August	12,523	1,940	98	404	.512	.59
September	24,479	2,380	91	816	1.03	1.15
Water year 1937-38	205,457	2,590	91	563	.714	9.69

*Gage height missing; discharge computed on basis of maximum and minimum range in stage, rainfall records, and records for Contentnea Creek near Wilson and Little River near Princeton.

Haw River near Benaja, N. C.

Location.- Water-stage recorder, lat. 36°14'55", long. 79°33'45", at site of old High Rock Mill, 500 feet upstream from county-road crossing, half a mile upstream from county line, and 6 miles east of Benaja, Rockingham County.
Drainage area.- 168 square miles.
Records available.- October 1928 to September 1938.
Average discharge.- 10 years, 172 second-feet.
Extremes.- Maximum discharge during year, 3,570 second-feet Oct. 5 (gage height, 11.83 feet); minimum, 27 second-feet Sept. 29 (gage height, 1.21 feet).
1928-38: Maximum discharge, 5,020 second-feet Oct. 3, 1929 (gage height, 13.54 feet), from rating curve extended above 3,200 second-feet; minimum, 6.3 second-feet Sept. 1, 1932 (gage height, 0.73 foot).
Remarks.- Records good except those for period of missing gage heights, Nov. 4-17, which were computed on basis of recorded range in stage and records for station at Haw River and are fair. Occasional slight diurnal fluctuation from operation of gristmills.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-5

1.6	67	4.0	536
1.8	94	5.0	800
2.0	123	6.0	1,080
2.3	172	7.0	1,380
2.6	224	8.0	1,700
3.0	302	10.0	2,430
3.5	414	12.0	3,730

Oct. 6 to Sept. 30

1.2	26	2.0	126
1.4	42	2.3	176
1.6	66	2.6	229
1.8	95	3.0	304

Note.- Same as preceding table above 3.1 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	294	145	150	174	144	110	76	95	256	94	36
2	70	202	134	193	173	132	139	72	80	193	94	38
3	66	161	128	213	152	142	161	73	100	253	92	40
4	275	160	124	216	144	161	154	69	126	379	89	43
5	2,460	160	124	190	142	169	128	62	144	346	98	38
6	3,050	150	139	169	132	157	118	65	98	274	247	39
7	1,460	150	147	294	131	152	137	57	84	137	265	44
8	575	140	131	357	126	142	188	52	102	95	229	33
9	346	140	128	346	123	131	247	49	110	100	173	34
10	265	130	129	304	121	247	247	53	86	181	96	32
11	211	140	116	247	124	357	220	51	72	137	83	38
12	184	200	112	229	137	357	168	48	65	102	77	35
13	150	280	112	229	131	314	140	54	61	69	69	46
14	134	320	123	209	124	247	128	92	58	60	56	44
15	126	300	126	188	129	184	121	126	50	76	49	41
16	123	240	131	169	134	162	118	118	41	66	54	43
17	112	200	136	162	129	156	112	84	50	53	49	48
18	107	161	142	159	126	156	132	73	51	50	88	50
19	184	149	136	150	126	149	159	73	92	70	104	42
20	544	150	124	144	136	137	154	73	144	104	79	60
21	614	142	115	145	147	134	129	89	211	162	58	63
22	486	128	112	147	131	129	118	76	191	225	44	54
23	368	121	121	150	139	126	113	65	126	423	50	43
24	274	118	154	164	209	123	106	90	98	1,180	45	44
25	211	118	174	195	256	120	96	101	98	842	39	39
26	161	123	162	202	256	113	92	150	106	640	41	31
27	229	154	140	178	207	112	88	183	123	462	40	39
28	624	176	161	137	169	108	83	174	284	274	69	37
29	772	190	174	131	-	108	80	118	390	166	45	31
30	536	173	166	140	-	107	76	90	304	120	48	52
31	357	-	149	159	-	108	-	101	-	100	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15,166	3,050	68	489	2.91	3.36
November	5,270	320	118	176	1.05	1.17
December	4,215	174	112	136	.810	.93
Calendar year 1937	95,975	3,050	46	263	1.57	21.25
January	6,066	357	131	196	1.17	1.35
February	4,228	256	121	151	.899	.94
March	5,084	357	107	164	.976	1.13
April	4,062	247	76	135	.804	.90
May	2,657	183	48	85.7	.510	.59
June	3,640	390	41	121	.720	.80
July	7,595	1,180	50	245	1.46	1.68
August	2,707	265	39	87.3	.520	.60
September	1,257	63	31	41.9	.249	.28
Water year 1937-38	61,937	3,050	31	170	1.01	13.73

*Peak discharge.- Oct. 5 (11:45 p.m.) 3,570 sec.-ft.

202922 O—40——7

Haw River at Haw River, N. C.

Location.- Water-stage recorder, lat. 36°05'35", long. 79°21'40", at town of Haw River, Alamance County, 400 feet downstream from Southern Railway bridge.

Drainage area.- 599 square miles.

Records available.- October 1928 to September 1938.

Average discharge.- 10 years, 602 second-feet.

Extremes.- Maximum discharge, 11,000 second-feet (estimated), July 26 (gage height missing); minimum, 26 second-feet Sept. 26 (gage height, 1.84 feet); minimum daily discharge, 29 second-feet Sept. 25.
1928-38: Maximum discharge, 17,000 second-feet Feb. 28, 1929 (gage height, 23.96 feet), from rating curve extended above 12,000 second-feet; minimum, 3 second-feet Sept. 5, 1930; minimum daily discharge, 5 second-feet Sept. 6, 1930.

Remarks.- Records good except those for periods of missing gage heights, which are poor. Large diurnal fluctuation from operation of power plants upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.8	23	3.0	278	6.0	1,350	12.0	4,800
2.0	41	3.5	437	7.5	1,970	14.0	6,410
2.3	86	4.0	607	9.0	2,800	16.0	8,210
2.6	159	5.0	966	10.5	3,700	18.0	10,200

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	191	642	388	369	624	488	321	156	220	730	*360	92
2	143	522	417	846	505	385	362	191	192	471	*400	112
3	154	430	372	800	411	414	417	174	300	†3,470	*440	68
4	*440	394	287	505	398	642	404	168	437	2,600	*550	58
5	*1,800	372	294	356	369	488	420	140	362	†782	*600	106
6	*2,400	356	328	356	356	454	430	148	278	573	*1,800	144
7	*1,500	346	375	*3,000	375	471	488	135	232	407	*1,300	108
8	*850	309	350	*2,000	343	394	759	104	794	294	*800	46
9	*650	290	294	*1,100	334	362	1,680	162	375	260	*600	68
10	*700	284	306	*850	316	2,110	964	156	290	1,030	*400	88
11	*600	235	287	*850	324	1,730	624	142	595	552	*300	49
12	*400	652	247	*950	340	1,350	454	162	316	2,280	*220	104
13	*340	1,430	290	*850	353	1,040	385	170	321	454	*180	88
14	*300	1,000	294	*700	434	782	340	86	197	269	*150	139
15	*280	782	297	*550	420	624	315	266	179	522	*160	159
16	*280	660	309	*500	353	522	278	287	197	232	*130	86
17	*260	573	309	*460	328	437	278	205	151	165	*150	84
18	*280	488	309	434	324	427	309	168	113	235	*300	47
19	707	454	382	396	315	382	385	137	1,390	256	*240	92
20	3,960	424	388	385	321	366	382	174	712	291	*160	160
21	1,660	359	281	394	343	372	382	135	782	658	*180	148
22	1,190	337	232	471	362	420	391	148	1,040	1,190	*170	98
23	836	294	259	556	430	437	359	185	488	2,710	†159	91
24	660	278	454	539	694	356	297	226	346	†6,060	148	90
25	556	259	539	854	764	315	269	334	445	*4,000	76	29
26	488	294	437	712	590	272	226	560	1,100	*8,500	116	79
27	708	356	420	522	522	287	214	607	454	*4,000	68	125
28	1,310	488	590	414	522	309	200	394	1,680	*1,000	77	40
29	1,390	471	556	346	-	290	185	290	1,190	*700	171	87
30	1,160	404	437	394	-	290	168	247	1,120	*500	155	116
31	818	-	391	522	-	306	-	208	-	*400	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	27,011	3,960	143	871	1.45	1.67
November	14,163	1,430	235	473	.790	.88
December	11,119	590	232	359	.599	.69
Calendar year 1937	310,953	10,800	53	852	1.42	19.28
January	21,983	3,000	346	709	1.18	1.36
February	11,772	764	315	420	.701	.73
March	17,522	2,110	272	565	.943	1.09
April	12,686	1,680	168	423	.706	.79
May	6,667	607	86	215	.359	.41
June	16,288	1,680	113	543	.907	1.01
July	45,591	*8,500	165	1,471	2.46	2.84
August	10,654	*1,800	68	344	.574	.66
September	2,801	160	29	93.4	.156	.17
Water year 1937-38	198,277	*8,500	29	543	.907	12.30

*Gage height missing; discharge computed on basis of records for stations near Benaja and Pittsboro.
†Recorder not operating properly; discharge computed from gage heights based on partial record.

Haw River near Pittsboro, N. C.

Location.- Water-stage recorder, lat. 35°41'00", long. 79°05'40", about 100 feet upstream from Robinsons Creek, 2 miles downstream from bridge on State Highway 90, and 5 miles east of Pittsboro, Chatham County. Zero of gage is 180.06 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).
Drainage area.- 1,310 square miles.
Records available.- November 1928 to September 1938.
Extremes.- Maximum discharge during year, 27,400 second-feet July 26 (gage height, 17.40 feet); minimum, 37 second-feet Sept. 28 (gage height, 1.70 feet); minimum daily discharge, 94 second-feet Sept. 28.
1928-38: Maximum discharge, 47,300 second-feet Oct. 2, 1929 (gage height, 22.1 feet); minimum, 9 second-feet Oct. 13, 1930 (gage height, 1.32 feet); minimum daily discharge, 18 second-feet Sept. 30, Nov. 13, 1933.
Flood of August 1908 reached a stage of about 32.1 feet (discharge, 98,000 second-feet, from rating curve extended above 46,000 second-feet).
Remarks.- Records good except those for periods of missing gage heights, Nov. 5-8, Feb. 20 to Mar. 8, which were computed on basis of rainfall records, recorded range in stage, and records for station at Haw River and are fair. Large diurnal fluctuation from operation of power plant upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used April 11 to May 27)

2.0	79	4.0	1,360	9.0	7,600
2.3	149	5.0	2,300	10.0	9,320
2.6	270	6.0	3,360	11.0	11,180
3.0	530	7.0	4,600	13.0	15,120
3.5	930	8.0	6,010	15.0	19,700

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	364	826	626	714	1,180	900	602	286	439	1,360	762	232
2	282	682	650	1,340	1,140	700	666	325	380	954	754	204
3	229	446	626	2,300	890	800	874	280	467	768	1,320	160
4	276	594	562	1,450	810	1,200	818	370	1,950	6,260	1,330	204
5	1,520	550	453	1,090	762	900	746	298	1,050	1,600	1,010	270
6	3,720	550	488	930	658	850	706	276	714	1,010	2,200	274
7	3,230	500	602	8,170	698	900	1,200	200	586	842	2,790	254
8	1,730	480	634	5,890	722	750	2,250	196	798	610	1,400	228
9	1,010	467	570	2,540	658	682	7,710	265	1,290	516	1,010	201
10	994	418	509	1,810	610	3,000	3,390	205	658	842	754	156
11	1,270	467	481	1,540	610	5,160	1,360	246	562	1,690	610	156
12	778	594	460	2,000	650	2,450	1,220	210	738	2,590	562	177
13	570	3,000	404	1,860	634	1,900	1,000	228	562	1,500	439	120
14	474	1,910	460	1,500	674	1,500	882	417	610	810	325	120
15	432	1,360	488	1,270	778	1,270	770	453	446	532	332	141
16	411	1,090	502	1,010	706	1,580	682	411	336	818	272	176
17	358	938	460	946	626	2,280	570	481	361	453	320	247
18	364	826	488	930	594	1,270	578	358	933	338	797	129
19	474	762	453	850	610	994	642	289	4,390	388	682	208
20	3,980	730	474	786	600	866	706	254	3,300	1,050	314	405
21	2,680	634	618	746	650	858	666	199	3,250	835	404	866
22	1,630	594	488	746	700	826	842	247	2,860	2,940	238	546
23	1,130	586	446	890	800	842	810	292	2,380	2,980	166	325
24	938	481	782	1,010	1,100	834	658	341	1,050	14,200	219	183
25	794	530	1,220	1,460	1,600	706	530	404	1,090	12,100	261	126
26	674	453	994	1,720	1,200	618	546	1,300	1,490	19,100	238	216
27	784	481	818	1,220	1,000	706	502	2,280	1,270	9,390	204	135
28	1,680	674	866	930	1,000	634	358	1,090	3,880	2,880	156	94
29	1,630	818	1,220	778	-	626	364	690	2,790	1,750	208	183
30	1,320	762	970	650	-	594	338	516	1,630	1,220	225	178
31	994	-	810	818	-	570	-	516	-	906	243	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	36,770	3,980	229	1,186	0.905	1.04
November	23,203	3,000	418	773	.590	.66
December	19,622	1,220	404	633	.483	.56
Calendar year 1937	632,383	18,600	169	1,733	1.32	17.97
January	49,894	8,170	650	1,609	1.23	1.42
February	22,660	1,600	594	809	.618	.64
March	37,766	5,160	570	1,218	.930	1.07
April	32,986	7,710	338	1,100	.840	.94
May	13,923	2,280	196	449	.343	.40
June	42,260	4,390	336	1,409	1.08	1.20
July	93,232	19,100	338	3,007	2.30	2.65
August	20,545	2,790	156	663	.506	.58
September	6,913	866	94	230	.176	.20
Water year 1937-38	399,774	19,100	94	1,095	.836	11.36

Peak discharge.- July 26 (4:30 p.m.) 27,400 sec.-ft.

Cape Fear River at Lillington, N. C.

Location.- Water-stage recorder, lat. 35°24'25", long. 78°48'45", at highway bridge just downstream from Norfolk Southern Railway bridge at Lillington, Harnett County, and 1 mile downstream from Neill Creek. Zero of gage is 105.71 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).

Drainage area.- 3,440 square miles.

Records available.- December 1923 to September 1938.

Average discharge.- 14 years, 3,307 second-feet.

Extremes.- Maximum discharge during year, 47,000 second-feet July 27 (gage height, 17.87 feet); minimum, 76 second-feet Sept. 15 (gage height, 0.47 foot); minimum daily discharge, 190 second-feet Sept. 12.

1923-38: Maximum discharge, 101,000 second-feet Oct. 2, 1929 (gage height, 27.55 feet); minimum, 8 second-feet Oct. 8, 1926 (gage height, 0.01 foot); minimum daily discharge, 8 second-feet Oct. 8, 1926.

Remarks.- Records good. Large diurnal fluctuation caused by operation of Buckhorn power plant 14 miles upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.8	142	2.0	820	5.0	4,850	11.0	19,300
1.0	210	2.5	1,280	6.5	7,560	13.0	26,200
1.3	350	3.0	1,850	8.0	10,900	15.0	34,000
1.6	530	4.0	3,200	9.5	14,880	17.0	42,760

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	774	1,280	1,360	1,560	1,620	1,720	1,640	752	972	2,920	2,350	741
2	793	1,170	1,160	1,110	2,280	1,250	1,440	612	918	2,300	1,620	540
3	535	914	1,290	3,240	2,280	1,600	2,440	714	1,030	1,550	2,110	632
4	477	846	877	3,680	2,070	1,630	3,090	602	3,290	5,550	3,440	470
5	817	843	362	2,690	1,520	1,210	2,330	530	4,560	4,160	3,190	848
6	2,860	782	1,050	2,280	1,340	1,670	2,000	642	2,640	2,810	2,560	678
7	4,080	716	924	8,220	1,610	1,610	1,840	589	2,000	2,240	4,420	1,200
8	2,760	671	880	19,500	1,240	1,610	4,170	564	1,090	1,180	3,150	1,350
9	1,790	798	856	9,250	1,380	1,220	17,000	479	1,430	1,270	2,120	737
10	1,120	526	970	5,530	1,250	2,100	17,800	328	2,370	604	1,710	744
11	1,150	703	1,030	4,510	1,220	12,000	7,800	380	2,140	1,670	1,340	492
12	1,500	1,150	824	4,080	1,440	7,520	4,850	517	1,210	2,300	1,030	190
13	986	2,280	822	4,340	1,140	4,760	3,680	675	1,560	3,870	1,020	440
14	730	3,960	832	3,680	1,080	3,450	2,570	744	1,960	2,030	686	232
15	770	3,040	736	2,900	1,410	2,720	2,320	1,070	1,340	1,190	739	442
16	552	2,520	711	2,420	1,170	2,380	1,740	873	972	932	411	230
17	599	1,870	826	2,220	1,230	4,690	1,360	1,000	860	689	586	390
18	501	1,460	928	1,680	1,360	4,440	1,550	984	1,040	552	636	230
19	738	1,340	758	1,850	1,100	3,370	1,260	706	3,900	1,530	1,110	1,430
20	1,150	1,080	720	1,610	1,080	2,960	1,280	363	7,580	2,390	916	1,700
21	4,570	926	826	1,560	1,210	2,410	1,660	508	7,800	4,550	630	2,550
22	2,910	996	1,130	1,220	1,230	2,020	1,450	496	7,080	6,130	340	2,380
23	2,640	934	972	1,320	1,150	1,610	1,530	524	6,470	7,560	528	1,360
24	1,880	907	1,440	1,870	1,670	1,610	1,750	1,010	3,640	19,900	317	796
25	1,300	821	2,780	2,280	2,570	1,610	1,330	1,570	2,450	34,400	402	505
26	1,080	752	2,970	2,670	3,240	1,150	1,360	1,620	2,190	36,900	492	249
27	954	922	2,420	2,620	2,700	1,510	1,180	9,740	2,300	38,300	496	658
28	1,060	831	2,060	2,350	2,330	1,600	954	6,250	5,370	14,600	1,150	280
29	1,980	870	1,850	1,690	-	1,100	954	3,050	8,650	7,500	1,920	560
30	2,370	1,200	2,210	1,610	-	1,470	813	2,330	4,310	4,810	1,060	298
31	2,350	-	1,960	1,450	-	1,150	-	1,390	-	2,840	486	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	47,776	4,570	477	1,541	0.448	0.52
November	37,108	3,960	526	1,237	.360	.40
December	39,034	2,970	711	1,259	.366	.42
Calendar year 1937	1,397,940	32,400	213	3,830	1.11	15.12
January	106,990	19,500	1,110	3,451	1.00	1.15
February	44,920	3,240	1,080	1,640	.466	.49
March	81,150	12,000	1,100	2,618	.761	.88
April	96,141	17,800	813	3,171	.922	1.03
May	41,612	9,740	328	1,342	.390	.45
June	93,122	8,650	860	3,104	.902	1.01
July	218,967	38,300	552	7,063	2.05	2.36
August	42,965	4,420	317	1,386	.403	.46
September	23,352	2,550	190	778	.226	.25
Water year 1937-38	872,137	38,300	190	2,389	.694	9.42

Peak discharge.- July 27 (2 a.m.) 47,000 sec.-ft.

Reedy Fork near Gibsonville, N. C.

Location.- Water-stage recorder, lat. 36°10'30", long. 79°37'00", a quarter of a mile downstream from Huffines Mill, 1¼ miles upstream from Buffalo Creek, and 6 miles northwest of Gibsonville, Guilford County.
Drainage area.- 133 square miles.
Records available.- September 1928 to September 1938.
Average discharge.- 10 years, 123 second-feet.
Extremes.- Maximum discharge during year, 942 second-feet Oct. 20 (gage height, 4.82 feet); minimum, 5.4 second-feet Sept. 24, 25 (gage height, 0.32 foot); minimum daily discharge, 13 second-feet Sept. 25.
1928-38: Maximum discharge, 4,390 second-feet Jan. 20, 1936 (gage height, 13.28 feet), from rating curve extended above 1,400 second-feet; minimum, 0.8 second-foot Aug. 27, 1932 (gage height, 0.35 foot); minimum daily discharge, 1.8 second-feet Aug. 24, 1930.
Remarks.- Records good except those for periods of missing gage heights, May 15 to July 6, July 19-29, Sept. 28-30, which were computed on basis of rainfall records, recorded range in stage, and records for stations on nearby streams and are poor. Considerable diurnal fluctuation from operations of power plant upstream. Flow slightly regulated by storage for Greensboro water supply 14 miles upstream, where an average daily discharge of 11.0 second-feet was diverted during the year.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-20		Oct. 21 to Sept. 30			
1.2	36	0.6	13	2.0	154
1.4	52	.8	19	2.5	270
1.6	76	1.0	27	3.0	397
1.8	110	1.3	45	4.0	660
2.0	150	1.6	78	5.0	1,010
2.3	218				
2.6	292				
3.0	397				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	161	130	62	164	144	46	37	46	60	43	24
2	37	141	174	204	75	63	62	38	36	50	42	25
3	36	136	94	215	60	76	62	35	60	550	42	24
4	91	132	58	99	59	88	90	36	90	260	38	24
5	276	130	53	102	53	70	166	35	80	180	70	29
6	195	143	69	176	53	70	176	32	60	120	468	22
7	184	75	122	354	53	70	156	31	46	73	155	23
8	202	57	66	222	51	60	111	30	100	52	61	22
9	177	51	55	206	48	59	140	33	70	43	50	26
10	209	50	54	210	51	239	98	32	46	75	62	19
11	130	51	50	186	53	253	72	26	80	73	46	32
12	66	146	40	215	55	320	63	32	65	53	37	39
13	54	168	54	213	121	272	58	32	50	39	32	27
14	52	126	50	173	172	217	51	50	36	35	30	22
15	49	167	56	80	90	197	50	60	28	39	32	26
16	45	188	69	64	55	97	48	55	24	34	28	23
17	43	197	58	63	50	68	47	48	26	30	29	21
18	44	188	109	57	48	63	65	36	40	32	35	22
19	122	174	172	55	48	56	74	32	80	42	33	36
20	344	88	152	54	49	53	75	36	200	95	28	25
21	183	65	63	119	53	91	155	30	130	90	27	28
22	199	59	49	183	132	169	181	36	100	80	31	26
23	204	54	52	155	143	140	150	40	70	300	25	22
24	188	56	74	92	116	59	56	50	55	750	24	21
25	181	56	70	103	87	49	48	70	44	400	25	13
26	169	61	69	82	66	47	43	85	140	500	24	25
27	191	74	150	67	136	44	42	110	60	260	27	24
28	320	89	172	56	181	44	39	100	220	160	29	26
29	300	78	84	58	-	44	39	70	150	110	28	30
30	320	68	65	132	-	45	36	50	80	63	27	42
31	232	-	60	192	-	44	-	55	-	45	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,887	344	36	158	1.19	1.37
November	3,249	197	50	108	.812	.91
December	2,593	174	40	83.6	.629	.73
Calendar year 1937	60,388	2,440	28	165	1.24	16.89
January	4,255	354	54	137	1.03	1.19
February	2,322	181	48	82.9	.623	.65
March	3,311	320	44	107	.805	.93
April	2,499	181	36	83.3	.626	.70
May	1,442	110	26	46.5	.350	.40
June	2,312	220	24	77.1	.580	.65
July	4,693	750	30	151	1.14	1.31
August	1,653	468	24	53.3	.401	.46
September	768	42	13	25.6	.192	.21
Water year 1937-38	33,984	750	13	93.1	.700	9.51

Horsepen Creek at Battle Ground, N. C.

Location.- Water-stage recorder and modified Parshall flume, lat. 36°08'30", long. 79°51'20", at bridge on U. S. Highway 411, three-quarters of a mile north of Battle Ground, Guilford County, and about 2½ miles upstream from confluence with Reedy Fork.

Drainage area.- 15.9 square miles.

Records available.- November 1925 to July 1931, May 1934 to September 1938.

Extremes.- Maximum discharge during year, 296 second-feet July 24 (gage height, 5.22 feet); minimum, 1.7 second-feet Sept. 25 (gage height, 0.30 foot).
1925-31, 1934-38: Maximum discharge, 980 second-feet Jan. 19, 1936 (gage height, 7.07 feet), from rating curve extended above 330 second-feet; minimum, 0.7 second-foot July 24, 1926.

Remarks.- Records fair. Discharge for days of ice effect, Dec. 11, 12, Jan. 28, 29, computed on basis of gage heights, weather records, engineers' notes, and records for stations on nearby streams.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	8.3	8.6	10	11	7.9	7.9	5.4	4.8	3.7	5.9	2.4
2	5.1	8.0	7.7	55	10	7.5	10	5.2	4.8	3.7	5.4	2.5
3	5.6	7.4	7.2	19	9.8	26	8.1	5.2	8.2	31	5.0	2.7
4	31	7.2	7.2	13	9.6	14	7.3	5.0	5.7	9.4	17	2.8
5	15	6.9	8.0	11	8.9	11	6.9	5.0	11	5.7	7.8	2.4
6	9.4	6.9	10	11	8.7	15	6.7	4.6	5.7	4.8	7.0	2.4
7	7.2	6.6	7.2	85	8.5	10	9.8	4.5	4.5	4.2	4.6	2.4
8	5.4	6.4	6.9	27	8.1	8.9	15	4.5	5.0	3.9	4.4	2.3
9	6.1	6.1	7.4	16	8.1	8.5	20	4.3	4.5	4.0	4.0	2.1
10	21	6.4	6.9	13	8.1	109	10	4.3	4.1	4.2	3.7	2.1
11	7.4	6.4	6.4	18	8.5	30	8.5	4.3	3.7	4.2	3.3	2.3
12	6.1	62	6.4	17	8.3	17	8.1	4.3	3.7	3.7	3.0	2.3
13	5.6	26	6.4	13	8.3	13	7.5	5.4	3.6	3.5	3.0	2.1
14	5.8	14	6.4	12	8.1	12	7.3	8.9	3.4	3.9	2.8	2.1
15	5.8	10	6.4	11	7.9	11	7.1	5.9	3.4	4.0	2.8	2.1
16	5.6	9.4	6.6	10	7.9	11	7.1	4.8	3.6	3.5	2.7	2.0
17	5.8	8.8	6.6	10	7.7	10	7.9	4.6	4.1	3.3	3.6	2.1
18	5.6	8.3	7.2	9.8	8.1	9.4	10	5.0	4.3	9.0	5.4	2.4
19	41	8.3	6.1	9.6	8.3	8.8	8.9	5.0	9.8	11	3.1	2.3
20	24	9.1	5.8	9.4	7.7	8.7	7.3	4.6	45	12	2.8	2.8
21	9.7	7.2	5.6	9.4	7.3	8.3	6.9	4.5	14	7.2	2.7	2.7
22	7.7	6.9	5.4	10	7.5	7.9	7.1	3.9	7.2	5.9	2.5	2.3
23	7.4	6.9	8.3	10	11	7.7	6.9	8.6	5.2	67	2.4	2.1
24	6.6	6.9	12	14	20	7.7	6.5	5.7	4.6	157	2.5	2.0
25	6.1	6.9	9.4	15	10	7.5	6.3	5.0	4.8	34	2.8	1.8
26	17	7.4	8.0	11	9.1	7.5	5.9	22	5.8	55	5.8	2.1
27	165	28	8.6	10	8.5	7.1	5.8	8.2	6.6	16	14	2.1
28	26	18	15	9.4	8.5	6.9	5.6	5.7	12	11	3.7	2.0
29	14	11	10	9.4	-	7.1	5.4	5.0	5.0	8.0	2.8	2.5
30	10	9.4	8.8	9.4	-	7.1	5.4	5.2	4.1	6.8	2.8	3.7
31	8.8	-	8.0	15	-	6.9	-	5.0	-	6.5	2.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	501.9	165	5.1	16.2	1.02	1.18
November	341.1	62	6.1	11.4	.717	.80
December	240.5	15	5.4	7.76	.488	.56
Calendar year 1937	5,977.3	251	3.6	16.4	1.03	14.00
January	502.4	85	9.4	16.2	1.02	1.18
February	253.5	20	7.3	9.05	.569	.59
March	430.1	109	6.9	13.9	.874	1.01
April	243.2	20	5.4	8.11	.510	.57
May	179.6	22	3.9	5.79	.364	.42
June	212.2	45	3.4	7.07	.445	.50
July	507.1	157	3.3	16.4	1.03	1.19
August	141.8	17	2.4	4.57	.287	.33
September	69.9	3.7	1.8	2.33	.147	.16
Water year 1937-38	3,623.3	165	1.8	9.93	.625	8.49

Buffalo Creek near Greensboro, N. C.

Location.- Water-stage recorder, lat. 36°03'30", long. 79°43'35", at McConnell road crossing, 3 miles east of Greensboro, Guilford County, and 6 miles upstream from North Buffalo Creek.

Drainage area.- 32.8 square miles.

Records available.- August 1928 to September 1938.

Average discharge.- 10 years, 35.1 second-feet.

Extremes.- Maximum discharge during year probably occurred July 24 (gage height missing); minimum, 1.9 second-feet Sept. 12 (gage height, 1.92 feet).
1928-38: Maximum discharge, 1,870 second-feet Feb. 28, 1929 (gage height, 8.74 feet), from rating curve extended above 720 second-feet; minimum, 0.2 second-foot Oct. 2, 1930.

Remarks.- Records poor. Sewage from Greensboro enters creek just above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	15	17	19	33	15	14	7.0	7.0	7.5	20	3.6
2	7.5	15	16	74	22	15	23	7.0	6.5	7.0	16	3.5
3	8.5	15	15	57	21	39	19	7.0	41	16	20	3.5
4	33	15	14	29	19	40	14	6.5	28	29	11	3.5
5	33	15	15	23	18	24	13	6.0	11	10	11	3.6
6	19	15	22	20	17	28	12	6.0	17	*9.0	19	3.6
7	14	15	18	178	18	22	22	5.5	8.5	*8.0	9.5	3.4
8	11	14	15	213	16	18	42	5.5	11	*7.0	7.5	3.1
9	10	15	16	49	15	16	106	5.5	8.0	*6.0	8.5	2.7
10	43	15	16	29	15	172	42	5.5	6.5	*6.0	14	2.6
11	19	15	13	37	16	246	21	5.0	6.0	*7.0	7.5	2.3
12	15	72	12	58	19	53	16	4.8	5.5	*6.0	6.5	2.1
13	12	177	13	39	16	30	15	5.5	6.0	*5.0	6.0	2.6
14	12	54	14	28	16	24	13	14	5.5	*6.0	5.5	2.8
15	13	25	14	25	16	22	12	11	5.0	*6.0	5.5	3.2
16	12	19	15	22	15	21	11	6.5	4.5	*5.0	5.5	2.7
17	12	18	15	22	15	22	10	5.5	6.0	*5.0	5.5	3.2
18	13	18	15	20	14	19	17	5.5	12	*6.0	7.0	3.0
19	50	17	13	18	15	16	18	6.5	8.5	*18	7.0	2.7
20	291	19	13	18	15	16	12	6.0	10	*12	5.5	3.3
21	171	15	13	17	13	15	10	5.5	22	*13	5.0	3.6
22	24	14	13	21	14	15	12	5.0	9.0	*14	5.0	3.0
23	16	13	24	28	24	14	12	15	7.0	*30	6.5	2.7
24	15	13	60	41	79	14	10	10	6.0	*300	7.5	2.6
25	14	12	36	86	37	13	8.5	8.0	5.5	*100	7.0	2.2
26	14	13	24	37	23	12	8.5	27	23	*200	10	2.7
27	85	51	20	23	19	12	7.5	24	7.5	*75	38	2.4
28	137	44	44	20	17	11	7.5	9.5	64	*22	6.5	2.2
29	31	27	29	16	-	12	7.0	7.5	20	*15	4.2	2.2
30	19	20	22	19	-	12	7.0	7.0	10	11	4.0	3.9
31	16	-	20	32	-	13	-	7.0	-	13	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,178.0	291	7.5	38.0	1.16	1.34
November	805	177	12	26.8	.817	.91
December	606	60	12	19.5	.595	.69
Calendar year 1937	15,107.5	645	4.5	41.4	1.26	17.13
January	1,318	213	16	42.5	1.30	1.50
February	577	79	13	20.6	.628	.65
March	1,001	246	11	32.3	.985	1.14
April	542.0	106	7.0	18.1	.552	.62
May	257.3	27	4.8	8.30	.253	.29
June	387.5	64	4.5	12.9	.393	.44
July	974.5	300	5.0	31.4	.957	1.10
August	295.8	38	4.0	9.54	.291	.34
September	88.5	3.9	2.1	2.95	.090	.10
Water year 1937-38	8,030.6	300	2.1	22.0	.671	9.12

*Gage height faulty; discharge computed on basis of records for stations on nearby streams.

North Buffalo Creek near Greensboro, N. C.

Location.- Water-stage recorder, lat. 36°07'10", long. 79°42'35", at county-highway bridge, 3 miles upstream from Buffalo Creek and 6 miles northwest of Greensboro, Guilford County.

Drainage area.- 36.4 square miles.

Records available.- August 1928 to September 1938.

Average discharge.- 43.6 second-feet.

Extremes.- Maximum discharge during year, 912 second-feet Oct. 20 (gage height, 6.67 feet); minimum, 4.4 second-feet Sept. 18 (gage height, 1.69 feet).
1928-38: Maximum discharge, 1,750 second-feet Jan. 19, 1936 (gage height, 11.38 feet), from rating curve extended above 1,040 second-feet; minimum, 1.6 second-feet Aug. 28, 1932.

Remarks.- Records good. Diurnal fluctuation from operation of mills except at high stages. Sewage from Greensboro and Proximity Mills enters creek above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 27 to Aug. 26)

Oct. 1 to Jan. 7				Jan. 8 to Sept. 30	
1.9	12.0	3.0	128	1.7	4.6
2.0	17.7	3.5	217	1.8	7.2
2.2	32	4.0	333	2.0	17.3
2.4	51	4.5	465	2.3	39
2.7	85				

Note.- Same as preceding table above 2.5 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	22	24	25	37	26	23	11	15	16	25	10
2	13	24	23	123	31	26	33	12	15	14	23	9.8
3	13	23	21	51	30	85	22	14	55	39	25	7.5
4	86	21	21	37	28	46	22	16	19	22	21	6.4
5	53	21	21	32	26	33	22	16	11	18	29	6.9
6	30	18	33	30	25	39	22	14	19	19	46	9.8
7	21	16	23	331	28	31	40	11	17	16	17	13
8	18	19	23	72	26	29	62	9.3	26	16	16	10
9	16	20	25	42	26	28	77	11	17	12	17	9.3
10	68	21	22	38	26	339	32	14	16	9.8	20	6.9
11	23	21	18	57	28	74	28	14	12	13	17	6.4
12	21	188	16	57	24	43	28	14	10	11	14	8.6
13	20	96	18	43	21	33	26	17	12	9.8	11	11
14	20	40	21	36	25	31	25	34	14	11	9.8	11
15	18	30	22	34	25	30	21	16	14	12	11	12
16	15	27	21	33	26	32	18	13	13	9.8	14	10
17	13	25	21	35	25	30	16	15	19	8.8	16	7.8
18	14	23	21	35	24	27	25	15	44	12	20	6.4
19	179	24	18	33	23	23	35	16	93	33	13	9.2
20	426	24	18	31	21	23	23	16	99	27	12	12
21	49	24	21	35	22	24	21	12	46	29	8.5	13
22	31	20	20	36	30	25	21	9.3	26	31	10	11
23	24	21	40	30	48	24	17	22	23	149	14	11
24	19	23	49	66	85	23	14	18	20	237	14	8.5
25	20	20	30	68	37	21	16	15	18	59	14	6.2
26	22	20	24	41	28	19	18	52	48	157	12	7.8
27	218	63	23	31	26	19	17	23	17	37	71	11
28	60	38	51	28	26	19	20	14	82	28	7.8	12
29	34	30	30	25	-	22	16	11	22	24	8.8	13
30	26	26	26	25	-	22	15	13	19	20	11	19
31	20	-	24	49	-	22	-	15	-	19	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,606	426	13	51.8	1.42	1.64
November	988	188	16	32.9	.904	1.01
December	768	51	16	24.8	.681	.79
Calendar year 1937	19,208.4	600	7.2	52.6	1.45	19.63
January	1,609	331	25	51.9	1.43	1.65
February	827	85	21	29.5	.810	.84
March	1,268	339	19	40.9	1.12	1.29
April	775	77	14	25.8	.709	.79
May	502.6	52	9.3	16.2	.445	.51
June	861	99	10	28.7	.788	.88
July	1,119.2	237	8.8	36.1	.992	1.14
August	558.9	46	7.8	18.0	.495	.57
September	296.5	19	6.2	9.88	.271	.30
Water year 1937-38	11,179.2	426	6.2	30.6	.841	11.41

West Fork of Deep River near High Point, N. C.

Location.- Water-stage recorder and modified Parshall flume, lat. 36°00'15" (revised), long. 79°58'40", a quarter of a mile upstream from State highway bridge at head of High Point Reservoir, about 2 miles northwest of Jamestown, and 3½ miles northeast of High Point, Guilford County.

Drainage area.- 32.1 square miles (revised).

Records available.- June 1923 to September 1926, July 1928 to September 1938.

Average discharge.- 13 years (1923-26, 1928-38), 31.7 second-feet.

Extremes.- Maximum discharge during year, 1,420 second-feet July 23 (gage height, 11.30 feet); minimum, 2.6 second-feet Oct. 2, June 25 (gage height, 2.45 feet).
1923-26, 1928-38: Maximum discharge, 2,570 second-feet Jan. 19, 1936 (gage height, 13.84 feet); minimum, 0.3 second-foot Sept. 1, 1932.

Remarks.- Records good. Slight diurnal fluctuation from operation of gristmill 4 miles upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	14	17	22	26	16	16	9.4	12	13	18	5.7
2	7.0	15	16	105	20	16	24	9.1	11	9.7	13	5.7
3	8.3	15	15	35	20	55	17	9.1	21	428	15	8.6
4	39	13	15	27	19	32	15	9.1	13	131	12	6.4
5	22	13	17	22	18	24	14	8.6	10	26	12	5.3
6	15	13	24	22	18	38	13	8.6	9.4	17	12	5.3
7	10	13	16	171	17	24	22	8.1	9.6	14	10	5.5
8	9.0	13	15	48	16	21	41	8.1	12	12	9.9	5.1
9	8.2	13	17	31	15	19	49	7.8	9.4	14	9.4	4.6
10	23	13	15	26	16	268	22	7.8	8.6	22	9.1	5.1
11	12	12	13	35	18	62	18	7.8	8.1	11	8.1	5.3
12	10	67	13	38	17	36	16	7.6	7.8	10	7.8	5.1
13	9.0	36	14	30	16	29	15	8.9	7.3	9.1	7.3	5.3
14	11	22	14	25	16	25	14	17	6.4	11	7.1	6.9
15	10	17	15	22	15	23	14	12	6.4	13	6.8	5.1
16	9.6	16	15	20	15	23	14	8.6	6.4	9.1	6.8	4.8
17	9.3	15	15	20	15	22	14	8.1	7.3	8.1	16	5.1
18	9.6	14	16	19	16	20	24	8.6	8.1	42	23	5.1
19	42	14	16	17	17	18	18	8.9	21	41	8.0	5.3
20	62	16	13	17	19	19	14	8.6	64	85	7.1	6.2
21	19	14	13	17	15	18	14	8.6	21	40	6.8	5.8
22	17	13	12	23	14	17	15	86	13	46	6.6	4.6
23	14	13	25	21	36	16	13	255	12	411	6.2	4.6
24	13	13	30	41	66	16	12	22	11	226	5.9	4.2
25	12	13	22	40	29	15	12	15	76	95	5.7	4.1
26	17	14	18	24	23	15	12	74	134	134	5.9	4.2
27	282	46	21	18	20	14	11	30	18	36	19	5.3
28	53	33	36	16	18	14	10	17	145	23	7.3	4.1
29	27	22	22	16	-	14	9.9	15	24	19	6.9	4.4
30	21	19	20	19	-	15	9.6	14	15	16	6.6	12
31	20	-	18	39	-	14	-	13	-	18	6.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	828.3	282	7.0	26.7	0.832	0.96
November	564	67	12	18.8	.586	.65
December	548	36	12	17.7	.551	.64
Calendar year 1937	13,659.8	946	4.8	37.4	1.17	*15.83
January	1,026	171	16	33.1	1.03	1.19
February	570	66	14	20.4	.636	.66
March	958	268	14	30.9	.963	1.11
April	512.5	49	9.6	17.1	.533	.59
May	731.4	255	7.6	23.6	.735	.85
June	727.8	145	6.4	24.3	.757	.84
July	1,990.0	428	8.1	64.2	2.00	2.31
August	301.5	23	5.7	9.73	.303	.35
September	164.8	12	4.1	5.49	.171	.19
Water year 1937-38	8,922.3	428	4.1	24.4	.760	10.34

*Computed on basis of revised figure of drainage area.

Deep River near Randleman, N. C.

Location.- Water-stage recorder, lat. 35°54'10" (revised), long. 79°51'15" (revised), 500 feet downstream from county bridge at Coltrane's mill, half a mile south of Guilford County line, and 7 miles north of Randleman, Randolph County. Zero of gage is 638.11 feet above mean sea level.

Drainage area.- 124 square miles.

Records available.- October 1928 to September 1938.

Extremes.- Maximum discharge during year, 3,170 second-feet July 24 (gage height, 14.72 feet); minimum, 1.3 second-feet May 11 (gage height, 1.52 feet); minimum daily discharge, 5.2 second-feet Sept. 28.

1928-38: Maximum discharge, 8,470 second-feet Feb. 28, 1929 (gage height, 23.9 feet); minimum, 0.5 second-foot Nov. 28, 1931 (gage height, 1.41 feet); minimum daily discharge, 1.2 second-feet Nov. 12, 1933.

Remarks.- Records good except those for periods when intake was partly obstructed, which are fair. Large diurnal fluctuations from operation of Coltrane's mill. Slight regulation by storage in High Point reservoir.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 10, May 24 to Sept. 30

1.6	4.1	4.0	331
1.8	10.5	5.0	541
2.0	21	6.5	875
2.5	66	8.0	1,240
3.0	137	10.0	1,760

Mar. 11 to May 23

1.7	5.5
1.8	9.0
2.0	19.5
2.5	65

Note.- Same as preceding table above 2.6 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	71	60	67	108	64	49	34	37	39	153	*7.8
2	17	59	57	278	85	62	51	31	34	33	134	*8.2
3	11	36	55	176	76	92	58	19	92	312	122	*11
4	67	48	34	114	72	119	71	32	60	503	102	*22
5	60	45	33	91	50	81	59	9.0	42	183	63	*12
6	49	35	78	79	63	105	52	26	52	69	189	8.1
7	47	26	57	789	79	104	73	12	43	52	52	9.7
8	44	54	53	274	62	75	119	16	61	43	54	7.9
9	26	42	37	155	62	67	275	20	37	51	46	8.3
10	44	35	52	128	41	918	128	19	35	*63	39	7.4
11	54	32	34	133	64	357	97	7.6	17	*47	31	12
12	46	145	29	171	47	178	75	36	32	*41	15	12
13	27	185	60	144	55	130	62	27	46	*22	22	9.5
14	32	90	46	111	71	117	63	29	43	*29	7.8	*26
15	29	84	42	83	60	96	60	18	33	*46	16	*7.6
16	21	62	30	83	61	93	41	21	30	*25	9.6	*23
17	17	60	46	94	39	89	40	20	33	*20	10	*31
18	37	43	35	77	49	82	82	22	25	58	28	7.1
19	146	51	34	71	41	57	65	40	49	77	6.2	10
20	450	40	58	70	45	67	60	59	71	64	12	8.4
21	118	36	39	68	64	80	50	37	60	103	5.4	17
22	71	61	45	46	59	65	52	16	45	140	15	15
23	43	42	60	77	69	63	42	401	42	643	11	5.8
24	45	47	131	110	202	54	35	112	38	1,720	7.0	19
25	62	26	102	189	134	52	54	58	21	362	*5.6	8.2
26	52	26	77	117	80	38	49	155	159	754	*5.3	5.4
27	561	106	70	88	77	40	36	142	77	236	*34	15
28	276	144	142	72	82	66	31	61	603	168	*18	5.2
29	111	95	103	49	-	55	30	44	131	150	*11	5.7
30	68	78	79	66	-	56	24	53	70	144	*11	33
31	63	-	73	104	-	47	-	46	-	152	*7.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,738	581	11	88.3	0.712	0.82
November	1,904	185	26	63.5	.512	.57
December	1,851	142	29	59.7	.481	.55
Calendar year 1937	52,375.6	3,080	9.0	143	1.15	15.70
January	4,174	789	46	135	1.09	1.26
February	1,997	202	39	71.3	.575	.60
March	3,569	918	38	115	.927	1.07
April	1,983	275	24	66.1	.533	.59
May	1,622.6	401	7.6	52.3	.422	.49
June	2,118	603	17	70.6	.569	.63
July	6,364	1,720	*20	205	1.65	1.90
August	1,242.4	189	*5.3	40.1	.323	.37
September	378.3	33	5.2	12.6	.102	.11
Water year 1937-38	29,941.3	1,720	5.2	82.0	.661	8.96

Peak discharge.- Jan. 7 (9:30 a.m.) 1,340 sec.-ft.; Mar. 10 (12:30 p.m.) 1,780 sec.-ft.; July 24 (4:15 a.m.) 3,170 sec.-ft.

*Gage height affected by partial obstruction of intake but, owing to diurnal fluctuations, not seriously impaired.

Deep River at Ramseur, N. C.

Location.- Water-stage recorder, lat. 35°44'10", long. 79°38'40", 2,000 feet downstream from railroad station at Ramseur, Randolph County, and 1½ miles downstream from Sandy Creek. Zero of gage is 419.50 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).
Drainage area.- 346 square miles.
Records available.- November 1922 to September 1938.
Average discharge.- 15 years (1923-38), 356 second-feet.
Extremes.- Maximum discharge during year, 7,480 second-feet July 24 (gage height, 12.67 feet); minimum, 14 second-feet May 19 (gage height, 0.47 foot); minimum daily discharge, 18 second-feet Aug. 21, Sept. 10.
1922-38: Maximum discharge, 21,100 second-feet Sept. 19, 1928 (gage height, 25.44 feet), from rating curve extended above 7,000 second-feet; minimum, 6 second-feet several days in October and November 1931; minimum daily discharge, 6 second-feet Oct. 20, 21, 22, 1931.
Remarks.- Records good except those for period of missing gage heights, Jan. 17 to Mar. 16, which were computed on basis of precipitation records and records for stations near Randleman and at Moncure and are poor. Large diurnal fluctuation from operation of power plants upstream. Flow slightly regulated by High Point Reservoir and small power-plant reservoirs.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 7				Jan. 8 to Sept. 30	
0.5	20	2.5	650	0.5	16
.7	42	3.0	910	.7	24
1.0	93	4.0	1,460	1.0	79
1.3	162	5.0	2,020	1.3	151
1.6	255	6.0	2,620	1.6	252
2.0	420	7.0	3,250		

Note.- Same as preceding table above 1.8 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	158	155	170	260	160	159	38	102	182	299	105
2	69	130	144	537	240	150	151	133	88	100	704	152
3	40	124	111	527	200	160	193	116	907	408	376	98
4	104	114	67	297	180	240	203	50	519	935	313	48
5	97	112	90	243	120	140	184	108	196	374	234	112
6	117	24	164	194	160	180	152	49	168	232	728	59
7	107	45	150	2,890	200	180	464	44	148	137	260	44
8	105	137	138	1,020	160	160	1,120	42	130	131	188	53
9	21	119	122	483	160	180	1,610	55	116	75	171	53
10	45	106	105	361	130	2,600	641	118	117	690	328	18
11	126	102	63	359	170	1,000	380	95	45	220	184	19
12	125	305	80	519	140	550	297	81	77	180	123	72
13	101	589	144	405	160	400	243	50	146	120	60	67
14	107	270	141	311	190	300	214	79	141	119	49	87
15	89	222	127	253	160	260	201	56	89	82	117	76
16	35	159	101	215	170	900	140	98	70	41	107	52
17	38	139	84	220	120	430	135	58	76	66	94	64
18	102	122	49	200	140	291	179	70	49	156	91	35
19	93	103	85	180	120	226	196	31	569	1,010	72	63
20	816	24	152	170	130	198	194	51	855	577	19	69
21	321	48	145	160	170	235	162	41	618	490	18	108
22	180	171	100	120	150	202	164	66	271	681	29	42
23	100	151	138	200	190	191	101	301	278	615	66	39
24	89	103	496	280	380	170	122	363	183	5,110	97	31
25	160	51	309	380	460	130	164	225	131	1,800	64	26
26	137	90	228	360	260	126	157	1,230	52	2,490	81	22
27	441	130	217	260	180	110	128	570	237	849	599	32
28	621	318	316	200	200	167	126	199	1,290	444	140	96
29	248	256	317	140	-	160	104	129	460	340	120	47
30	120	173	209	180	-	138	30	149	220	319	109	44
31	128	-	189	220	-	144	-	115	-	264	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,910	816	21	158	0.457	0.53
November	4,597	589	24	153	.442	.49
December	4,936	496	49	159	.460	.53
Calendar year 1937	155,178	7,680	21	425	1.23	16.68
January	12,054	2,890	120	389	1.12	1.29
February	5,300	460	120	189	.546	.57
March	10,478	2,600	110	338	.977	1.13
April	8,314	1,610	30	277	.801	.89
May	4,810	1,230	31	155	.448	.52
June	8,367	1,290	45	279	.806	.90
July	19,237	5,110	41	621	1.79	2.06
August	5,934	728	18	191	.552	.64
September	1,633	152	18	61.1	.177	.20
Water year 1937-38	90,770	5,110	18	249	.720	9.75

Peak discharge.- Jan. 7 (7 a.m.) 4,290 sec.-ft.; July 24 (3 p.m.) 7,480 sec.-ft.

Deep River at Moncure, N. C.

Location.- Water-stage recorder, lat. 35°36'25", long. 79°05'10", 1½ miles northwest of Moncure, Chatham County. Zero of gage is 185.88 feet above mean sea level.

Drainage area.- 1,410 square miles.

Records available.- May 1898 to December 1899, July 1930 to September 1938.

Extremes.- Maximum discharge during year, 20,500 second-feet July 26 (gage height, 8.92 feet); minimum, 43 second-feet Oct. 9 (gage height, 0.78 foot); minimum daily discharge, 52 second-feet Oct. 9.
1898-99, 1930-38: Maximum discharge, 27,000 second-feet Apr. 7, 1933 (gage height, 10.47 feet); minimum, 13 second-feet Dec. 5, 1933 (gage height, 0.46 foot); minimum daily discharge, 13 second-feet Dec. 5, 1933.

Remarks.- Records good above 600 second-feet and fair below. Diurnal fluctuation from operation of power plants upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.8	45	2.5	1,120	7.0	13,080
1.0	87	3.0	1,820	8.0	16,980
1.3	194	4.0	3,740	9.0	20,900
1.6	351	5.0	6,040		
2.0	640	6.0	9,230		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	286	251	457	409	600	500	422	257	396	631	691	357
2	135	135	328	569	770	515	675	262	283	485	632	283
3	169	196	322	1,570	910	351	1,940	367	339	305	1,100	174
4	165	283	208	1,320	500	457	1,400	93	3,040	769	1,580	508
5	153	142	305	970	535	383	970	194	2,030	1,510	1,320	429
6	146	172	310	628	532	479	627	257	970	925	815	338
7	108	246	182	5,390	409	464	838	252	580	590	811	770
8	58	186	146	7,640	500	515	2,210	208	377	500	900	515
9	52	117	232	3,060	422	545	9,810	194	1,100	470	568	543
10	85	142	345	1,370	436	1,490	8,790	203	1,120	124	485	299
11	207	139	222	1,060	402	5,200	2,680	75	723	418	389	142
12	186	296	251	1,280	457	2,930	1,370	217	830	546	383	114
13	99	674	305	1,440	351	1,370	1,050	251	902	624	436	277
14	208	1,050	111	1,110	357	1,000	920	251	939	357	316	111
15	213	824	150	910	389	779	708	203	584	251	262	85
16	208	515	272	708	389	801	640	286	512	174	299	178
17	90	443	222	716	457	2,340	515	241	427	194	257	111
18	169	409	262	560	370	1,800	530	246	584	93	128	272
19	236	232	241	592	389	1,090	515	161	777	190	161	182
20	194	208	255	560	377	900	500	174	1,480	1,780	257	915
21	320	246	362	478	334	592	436	128	2,980	2,140	222	1,520
22	779	283	299	485	316	624	457	142	1,980	1,790	227	711
23	429	190	364	464	464	674	552	328	1,020	2,340	111	474
24	322	146	673	457	457	545	552	328	793	9,170	196	357
25	178	257	1,380	691	758	530	508	694	648	13,200	203	267
26	174	257	1,060	682	1,110	515	388	1,880	608	17,700	102	108
27	194	257	708	844	788	478	402	5,600	531	11,500	142	105
28	211	222	600	608	568	429	396	1,970	627	3,750	1,990	246
29	613	236	592	560	-	450	316	970	1,360	1,580	796	105
30	584	338	910	522	-	450	283	648	1,160	1,010	504	250
31	364	-	627	450	-	568	-	478	-	797	310	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,335	779	52	237	0.168	0.19
November	9,092	1,050	117	303	.215	.24
December	12,701	1,380	111	410	.291	.34
Calendar year 1937	523,613	14,300	45	1,435	1.02	13.81
January	38,103	7,640	409	1,229	.872	1.01
February	14,347	1,110	316	512	.363	.38
March	29,764	5,200	351	960	.681	.79
April	41,400	9,810	283	1,380	.979	1.09
May	17,558	5,600	75	566	.401	.46
June	29,700	3,040	283	990	.702	.78
July	75,913	17,700	93	2,449	1.74	2.01
August	16,593	1,990	111	535	.379	.44
September	10,746	1,520	85	358	.254	.28
Water year 1937-38	303,252	17,700	52	831	.589	8.01

Peak discharge.- Apr. 9 (1 p.m.) 12,300 sec.-ft.; July 26 (11:30 a.m.) 20,500 sec.-ft.

East Fork of Deep River near High Point, N. C.

Location.- Water-stage recorder, lat. 36°02'15", long. 79°56'45", at highway bridge a quarter of a mile upstream from High Point Reservoir and 6 miles northeast of High Point, Guilford County.

Drainage area.- 14.2 square miles (revised).

Records available.- July 1928 to September 1938.

Average discharge.- 10 years, 15.1 second-feet.

Extremes.- Maximum discharge during year, 1,820 second-feet July 23 (gage height, 4.37 feet); minimum, 2.2 second-feet Sept. 15 (gage height, 0.27 foot).
1928-38: Maximum discharge, 2,170 second-feet Jan. 19, 1936 (gage height, 5.14 feet); minimum, 1.3 second-feet Dec. 17, 1930 (gage height, 0.13 foot).

Remarks.- Records between 4 and 500 second-feet are good; others are poor.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	6.4	6.9	15	11	7.2	7.0	4.7	4.5	4.3	6.6	3.0
2	4.5	6.1	6.7	50	9.0	7.2	8.5	4.7	4.7	4.7	5.7	2.8
3	4.7	5.9	6.4	14	8.7	29	6.7	4.7	12	119	5.2	3.4
4	22	5.6	6.1	11	8.3	12	5.9	4.7	5.7	14	8.4	3.0
5	7.4	5.6	6.9	9.7	8.0	10	5.9	4.5	4.7	7.2	5.5	2.7
6	5.9	5.6	8.7	9.7	8.0	18	5.7	4.5	4.5	5.5	5.7	2.7
7	4.9	5.6	6.7	80	7.7	10	8.5	4.1	4.7	5.0	4.7	2.8
8	4.7	5.6	6.4	18	7.2	9.0	17	4.3	4.9	4.5	4.5	2.7
9	5.1	5.6	6.9	13	7.2	8.3	19	4.1	4.3	12	5.0	2.5
10	12	5.6	6.1	10	7.2	117	8.8	3.9	4.1	6.9	4.5	2.7
11	5.4	5.4	5.9	15	7.4	22	7.5	3.9	4.1	5.0	4.3	2.7
12	4.9	34	5.9	16	7.4	14	7.0	4.1	4.1	4.3	4.0	2.7
13	4.9	14	6.1	13	7.2	11	6.5	4.9	3.9	4.0	3.8	2.7
14	4.9	8.3	6.1	10	7.2	10	6.2	7.6	3.6	6.2	3.6	2.7
15	4.7	7.2	6.1	9.4	6.9	9.7	5.9	4.7	3.6	5.5	3.6	2.7
16	4.7	6.7	6.1	9.0	6.9	9.7	5.9	4.3	3.9	4.3	3.6	2.7
17	4.7	6.4	6.1	8.7	6.6	9.4	6.9	4.1	4.5	3.8	4.6	2.7
18	4.7	6.4	6.4	8.0	6.9	8.7	8.2	4.5	4.5	12	7.2	2.7
19	30	6.4	5.9	7.7	7.2	8.0	7.0	4.3	10	14	3.8	2.8
20	12	6.7	5.9	7.4	6.9	8.0	6.2	4.3	55	13	3.6	3.2
21	6.7	5.9	5.6	7.4	6.6	7.7	5.9	4.3	8.5	6.9	3.4	2.8
22	6.1	5.6	5.6	9.4	6.6	7.4	5.9	18	5.7	8.7	3.2	2.7
23	5.9	5.6	11	8.7	15	7.4	5.7	18	5.2	296	3.2	2.7
24	5.4	5.6	11	18	24	7.4	5.4	5.4	4.5	56	3.2	2.5
25	5.1	5.9	8.7	16	11	6.9	5.4	4.7	44	32	3.2	2.5
26	27	5.9	7.4	10	9.4	6.9	5.4	27	13	55	3.6	2.7
27	107	21	9.5	8.3	8.3	6.6	5.2	7.5	6.2	13	9.0	2.7
28	15	12	14	7.4	7.7	6.6	4.9	5.7	14	8.5	3.2	2.7
29	9.0	8.2	9.0	7.6	-	6.6	4.9	5.2	5.7	6.9	3.4	3.0
30	7.4	7.2	7.7	8.0	-	6.6	4.7	5.2	4.7	6.3	3.4	4.0
31	6.7	-	7.4	16	-	6.6	-	4.9	-	9.6	3.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	357.9	107	4.5	11.5	0.810	0.93
November	242.0	34	5.4	8.07	.568	.63
December	225.2	14	5.6	7.26	.511	.59
Calendar year 1937	5,926.8	466	3.5	16.2	1.14	*15.52
January	451.4	80	7.4	14.6	1.03	1.19
February	241.5	24	6.6	8.62	.607	.63
March	414.9	117	6.6	13.4	.944	1.09
April	213.7	19	4.7	7.12	.501	.56
May	196.8	27	3.9	6.35	.447	.52
June	262.8	55	3.6	8.76	.617	.69
July	754.1	296	3.8	24.3	1.71	1.97
August	139.9	9.0	3.2	4.51	.318	.37
September	84.2	4.0	2.5	2.81	.198	.22
Water year 1937-38	3,584.4	296	2.5	9.82	.692	9.39

*Computed on basis of revised figure of drainage area.

Muddy Creek near Archdale, N. C.

Location.- Water-stage recorder and modified Parshall flume, lat. 35°52'33" (revised), long. 79°52'45" (revised), 600 feet upstream from county highway bridge, 2 miles east of Glenola brick plant, 3 miles southwest of Coltrane's mill, and 7 miles southeast of Archdale, Randolph County.

Drainage area.- 16.2 square miles (revised).

Records available.- May 1934 to September 1938.

Extremes.- Maximum discharge during year, 2,180 second-feet June 28 (gage height, 10.46 feet); minimum, 0.49 second-foot Sept. 15, 25-29 (gage height, 0.27 foot).
1934-38: Maximum discharge, that of June 28, 1938; minimum, 0.04 second-foot July 16, 25, 1937 (gage height, 0.13 foot, result of temporary regulation).
No flow at times during 1930.

Remarks.- Records good. Discharge for period of missing gage heights computed on basis of records for stations on nearby streams.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Aug. 5, Aug. 27 to Sept. 30						Aug. 6-27			
0.2	0.23	1.0	15.2	4.0	303	0.3	0.61	1.3	27
.3	.63	1.5	35	4.5	353	.4	1.4	1.6	40
.4	1.5	2.0	66	5.0	415	.6	4.5	2.0	68
.6	4.6	3.0	168	6.0	598	.8	9.6	2.5	113
.8	9.5	3.5	244	7.0	880	1.0	15.5	3.0	168

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	5.6	6.8	9.5	14	6.0	7.0	2.3	1.3	9.5	13	0.96
2	1.2	5.1	6.0	36	10	6.0	12	2.1	1.5	7.8	7.8	.96
3	1.3	4.8	5.3	16	9.5	15	9.0	1.8	35	17	6.8	2.3
4	7.7	4.2	5.3	12	9.0	12	6.5	1.7	9.0	11	5.6	2.3
5	5.6	4.1	5.8	11	8.2	9.0	5.6	1.5	4.4	6.5	4.8	1.2
6	3.3	4.1	10	10	8.2	13	5.1	1.4	2.8	4.8	124	.96
7	2.2	3.7	6.0	155	8.5	8.8	22	1.3	2.1	4.2	12	.96
8	1.5	3.7	4.8	34	6.8	7.2	35	1.2	2.3	3.3	7.5	.80
9	1.3	3.5	7.0	21	6.8	6.8	76	1.0	2.2	34	27	.66
10	6.8	3.5	6.3	17	6.8	127	21	.87	1.8	32	26	.68
11	3.0	3.7	4.4	27	8.0	32	14	.80	1.6	9.5	7.5	.68
12	1.9	34	4.2	30	8.5	20	12	.87	4.6	4.8	6.2	.68
13	1.7	17	4.6	21	7.2	16	10	1.2	3.7	3.7	4.0	.73
14	1.6	9.5	4.8	16	7.0	13	8.8	5.4	1.7	7.5	3.2	1.4
15	1.6	7.2	4.6	14	6.5	12	7.8	2.6	1.3	6.9	2.9	.96
16	1.5	*6.5	4.8	12	6.5	13	6.8	1.5	1.2	3.9	2.4	.80
17	1.5	*5.8	4.8	12	6.0	13	6.0	1.2	1.4	2.8	2.1	.80
18	1.5	5.1	5.6	11	6.3	11	10	1.2	6.1	12	5.4	.87
19	29	4.8	4.6	9.8	6.8	9.2	8.5	1.3	23	18	2.5	.73
20	112	6.8	4.6	9.8	6.3	9.0	6.3	1.2	26	16	1.8	1.2
21	13	4.8	4.1	9.5	4.8	8.5	5.6	1.2	12	21	1.6	1.3
22	8.2	4.1	3.7	11	4.8	7.8	7.0	.96	14	21	1.5	.80
23	6.8	4.1	21	11	12	7.2	6.3	.80	26	391	1.3	.63
24	5.3	4.1	30	18	33	6.8	4.6	1.2	6.3	205	1.1	.63
25	4.4	4.1	14	27	12	6.0	4.2	.96	4.6	85	1.1	.54
26	4.2	4.2	10	13	9.5	5.8	3.9	12	4.8	122	1.2	.49
27	62	28	9.9	9.8	8.8	5.6	3.5	5.6	3.9	32	11	.49
28	18	18	31	8.4	7.2	5.1	3.2	2.3	540	18	2.2	.49
29	10	10	14	8.4	-	4.8	2.6	1.7	27	13	1.6	.49
30	8.0	7.5	11	9.2	-	11	2.3	1.7	14	10	1.5	2.5
31	6.5	-	9.8	17	-	8.0	-	1.6	-	9.2	1.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	353.9	112	1.2	11.4	0.704	0.81
November	231.6	34	3.5	7.72	.477	.53
December	269.0	31	3.7	8.68	.536	.62
Calendar year 1937	6,966.11	389	.28	19.1	1.18	†15.99
January	626.4	155	8.4	20.2	1.25	1.44
February	249.0	33	4.8	8.89	.549	.57
March	435.6	127	4.8	14.1	.870	1.00
April	332.8	76	2.3	11.1	.685	.76
May	62.46	12	.80	2.01	.124	.14
June	785.6	540	1.2	26.2	1.62	1.81
July	1,144.4	391	2.8	36.9	2.28	2.63
August	297.8	124	1.1	9.61	.593	.68
September	29.01	2.5	.49	.967	.060	.07
Water year 1937-38	4,817.57	540	.49	13.2	.815	11.06

*Gage height missing; discharge interpolated.
†Computed on basis of revised figure of drainage area.

Lower Little River at Linden, N. C.

Location.- Water-stage recorder, lat. 35°16'00", long. 78°46'40", at bridge on State Highway 21, 1¾ miles west of Linden, Cumberland County, 2 miles upstream from Stewart Creek, and 4½ miles upstream from mouth. Zero of gage is 71.37 feet above mean sea level (from levels by Corps of Engineers, U. S. Army).
Drainage area.- 460 square miles.
Records available.- November 1928 to September 1938.
Extremes.- Maximum discharge during year, about 2,500 second-feet July 26; maximum gage height, 11.47 feet July 27 (affected by backwater from Cape Fear River); minimum discharge, 56 second-feet July 16 (gage height, 2.35 feet).
1928-38: Maximum discharge, 10,300 second-feet Oct. 2, 1929, based on current-meter measurements during period of backwater from Cape Fear River; maximum gage height, 35.5 feet Oct. 4, 1929 (affected by backwater from Cape Fear River); minimum discharge, 33 second-feet Sept. 14, 1932.
Maximum stage known, 37.3 feet Sept. 21, 1928, during period of backwater from Cape Fear River (discharge, 13,000 second-feet, estimated).
Remarks.- Records good except those for periods of missing gage heights, Oct. 2 to Feb. 14, Feb. 24, 25 (computed on basis of recorded range in stage, weather records, and unpublished records for Little Lower River at Manchester and records for Cape Fear River at Lillington), and those for period of backwater from Cape Fear River, July 26-28 (computed on basis of unpublished records for Little Lower River at Manchester and records for Cape Fear River at Lillington and at Fayettsville), which are poor. Considerable diurnal fluctuation, except at high stages, from operation of power plant.

Rating tables, water year 1937-38 except period of backwater from Cape Fear River (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 25		Apr. 3 to Sept. 30		Dec. 26 to Apr. 2	
2.3	49	4.0	487	3.0	159
2.5	78	5.0	873	3.5	300
2.7	111	6.0	1,270	4.0	484
3.0	173	7.0	1,670	4.5	678
3.5	312			5.0	873

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	200	190	180	300	222	195	187	190	177	717	171
2	150	200	220	380	340	195	264	240	177	171	407	113
3	180	220	240	480	360	198	585	187	166	111	682	154
4	240	200	200	440	360	205	506	122	801	102	450	378
5	280	200	170	320	300	236	369	164	678	169	443	544
6	300	220	150	240	460	233	315	190	506	177	620	432
7	220	220	130	600	300	239	345	197	332	156	544	315
8	190	200	110	750	220	198	544	126	195	63	436	379
9	180	190	100	440	240	222	1,150	130	396	91	322	450
10	200	220	110	340	240	307	1,310	145	601	94	269	312
11	240	300	95	300	260	717	1,190	122	544	60	224	223
12	197	500	110	320	300	756	854	78	436	80	207	205
13	192	700	120	280	360	600	601	120	376	60	193	168
14	180	650	130	300	280	393	487	164	582	60	126	138
15	170	550	140	260	255	346	432	226	858	59	122	172
16	140	460	160	220	258	371	404	226	348	72	144	155
17	95	340	150	200	239	435	355	173	254	75	139	128
18	170	320	150	190	211	454	335	130	234	60	111	109
19	220	300	170	180	208	393	372	120	237	70	130	402
20	190	300	200	170	255	304	379	102	210	137	111	1,840
21	200	280	220	170	230	328	678	132	425	160	99	1,670
22	180	280	200	190	222	336	795	97	455	210	75	1,310
23	240	260	300	220	177	307	814	70	461	465	132	1,070
24	320	260	400	240	260	255	658	127	396	601	115	620
25	280	240	500	400	360	267	544	303	382	1,350	99	436
26	240	220	460	420	324	219	400	396	286	2,400	63	376
27	200	200	380	340	290	211	359	439	207	2,200	140	281
28	190	240	340	260	270	248	312	658	226	2,000	164	293
29	190	220	400	240	-	185	306	525	237	1,750	296	322
30	200	200	360	360	-	198	223	328	306	1,310	300	404
31	220	-	260	320	-	195	-	223	-	1,010	243	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,347	320	95	205	0.446	0.51
November	8,890	700	190	296	.643	.72
December	6,865	500	95	221	.480	.55
Calendar year 1937	243,879	5,030	95	667	1.45	19.69
January	9,750	750	170	315	.685	.79
February	7,879	460	177	281	.611	.64
March	9,772	756	185	315	.685	.79
April	16,059	1,310	195	535	1.16	1.29
May	6,445	658	70	208	.452	.52
June	11,032	678	166	368	.800	.89
July	15,491	2,400	59	500	1.09	1.23
August	8,023	717	63	259	.563	.65
September	13,564	1,840	109	452	.983	1.10
Water year 1937-38	120,117	2,400	59	329	.715	9.71

Yadkin River at Wilkesboro, N. C.

Location.- Water-stage recorder, lat. 36°09'00", long. 81°09'00", at highway bridge connecting North Wilkesboro and Wilkesboro, Wilkes County, just downstream from Reddies River.

Drainage area.- 493 square miles.

Records available.- October 1928 to September 1938. April 1903 to June 1909 (June 1907 to June 1909, gage heights only) and October 1920 to September 1928 at North Wilkesboro, 1 mile downstream. Records prior to June 1907 revised and published in Bulletin 34 of North Carolina Department of Conservation and Development.

Average discharge.- 18 years (1920-38), 764 second-feet.

Extremes.- Maximum discharge during year, 19,300 second-feet Oct. 19 (gage height, 21.0 feet, from floodmarks); minimum, 315 second-feet probably Sept. 28 (gage height, 2.00 feet, recorder clock stopped).

1903-9, 1920-38: Maximum discharge, about 23,000 second-feet Oct. 2, 1929 (gage height, 24.0 feet, from graph based on gage readings); minimum, 130 second-feet Jan. 31, 1934 (gage height, 1.55 feet).

Maximum stage observed, 34.5 feet July 1916.

Remarks.- Records good except those for period of missing gage heights, Sept. 16-30, which were computed on basis of recorded range in stage and records for stations on nearby streams and are fair. Slight diurnal fluctuation from operation of power plant on Reddies River 1 mile upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-19

2.1	385	6.0	3,140
2.3	510	8.0	4,860
2.6	705	10.0	6,800
3.0	965	12.0	8,850
4.0	1,660	15.0	12,100
5.0	2,365	18.0	15,700

Oct. 20 to Sept. 30

2.0	315	3.5	1,265
2.3	480	4.0	1,615
2.6	660	5.0	2,365
3.0	920		

Note.- Same as preceding table above 5.5 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	385	920	744	784	699	618	588	474	1,370	498	1,160	464
2	397	888	718	784	636	606	636	447	1,020	486	1,040	464
3	439	848	680	716	642	680	606	474	1,090	546	2,060	704
4	1,330	803	666	686	630	725	576	469	842	558	1,430	630
5	1,760	770	673	666	618	648	564	504	699	552	1,080	486
6	1,380	777	770	692	582	738	564	469	624	486	985	469
7	835	718	642	777	600	686	829	430	594	452	2,880	458
8	666	706	648	673	594	648	790	403	636	540	1,760	510
9	614	692	642	642	576	630	829	442	564	648	1,370	726
10	770	673	618	624	582	1,240	692	414	642	630	1,370	558
11	620	673	588	666	680	1,230	666	408	1,200	718	1,020	486
12	582	1,540	594	666	738	952	654	420	790	522	888	469
13	542	1,930	600	660	630	822	606	447	654	458	777	469
14	549	1,230	606	630	636	764	588	576	576	492	712	458
15	536	985	606	618	624	778	582	618	540	606	712	486
16	510	855	606	576	606	1,020	594	464	582	474	660	480
17	484	822	612	600	600	888	534	447	956	386	636	1,000
18	523	758	712	600	618	796	660	447	1,730	414	600	650
19	13,500	732	612	588	699	732	642	480	1,360	1,330	570	550
20	7,170	732	606	588	699	712	594	516	888	1,860	570	600
21	2,060	699	600	582	660	699	600	458	764	2,560	492	500
22	1,580	666	588	582	636	666	594	408	692	4,370	522	440
23	2,390	660	666	558	706	673	588	464	618	4,680	540	400
24	1,510	648	810	732	784	692	510	594	570	3,970	516	380
25	1,200	642	744	1,760	712	642	516	576	660	1,990	540	360
26	1,120	648	692	1,160	692	630	534	815	725	1,540	516	340
27	2,290	920	751	888	680	606	522	738	712	1,470	492	360
28	1,620	1,020	1,090	751	648	600	492	648	777	958	442	340
29	1,260	888	920	718	-	594	486	993	576	1,140	458	380
30	1,090	796	810	706	-	600	474	3,560	510	1,380	510	460
31	985	-	758	712	-	594	-	2,360	-	1,060	480	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	50,697	13,500	385	1,635	3.32	3.83
November	25,639	1,930	642	855	1.73	1.93
December	21,372	1,090	588	689	1.40	1.61
Calendar year 1937	351,448	13,500	310	963	1.95	26.53
January	22,387	1,760	558	722	1.46	1.68
February	18,207	784	576	650	1.32	1.38
March	22,909	1,240	594	739	1.50	1.73
April	18,110	829	474	604	1.23	1.37
May	20,965	3,560	403	676	1.37	1.58
June	24,011	1,730	510	800	1.62	1.81
July	37,788	4,680	386	1,218	2.47	2.85
August	27,788	2,880	442	896	1.82	2.10
September	15,077	1,000	340	503	1.02	1.14
Water year 1937-38	304,928	13,500	340	835	1.69	23.01

Peak discharge.- Oct. 19 (4:30 p.m.) 19,300 sec.-ft.; July 22 (9 a.m.) 5,520 sec.-ft.; July 23 (9 p.m.) 7,100 sec.-ft.

Yadkin River at Yadkin College, N. C.

Location.- Water-stage recorder, lat. 35°51'25", long. 80°23'25", at State highway bridge, 1½ miles south of Yadkin College, Davidson County.
Drainage area.- 2,280 square miles.
Records available.- July 1928 to September 1938.
Average discharge.- 10 years, 2,968 second-feet.
Extremes.- Maximum discharge during year, 58,400 second-feet Oct. 21 (gage height, 27.50 feet); minimum, 1,200 second-feet Sept. 28 (gage height, 1.25 feet).
1928-38: Maximum discharge, 67,800 second-feet Oct. 3, 1929 (gage height, 29.8 feet), from rating curve extended above 55,000 second-feet; minimum, 385 second-feet Sept. 20, 1932 (gage height, 0.05 foot).
Revision.- The figures of minimum discharge for the water years given below have been revised as follows:
1934-35: 1,100 second-feet Aug. 14.
1935-36: 843 second-feet Dec. 28.
1936-37: 951 second-feet Aug. 6.
Maximum stage known, 35.0 feet sometime in July 1916 from floodmarks (discharge not determined).
Remarks.- Records good except those for periods of missing gage heights Oct. 28 to Nov. 4, Aug. 15-17, which were computed on basis of recorded range in stage and records for station at Wilkesboro and are fair. Slight diurnal fluctuation caused by operation of small power plant about 10 miles upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-6, Jan. 27 to Sept. 30						Oct. 7 to Jan. 26	
1.3	1,250	6.0	6,050	14.0	18,300	2.0	1,775
2.0	1,950	7.0	7,270	17.0	23,990	3.0	2,770
3.0	2,950	8.0	8,580	20.0	31,190	4.0	3,820
4.0	3,950	10.0	11,500	23.0	40,790	5.0	4,910
5.0	4,950	12.0	14,800	26.0	52,250	6.0	6,050

Note.- Same as preceding table above 6.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,650	3,800	3,190	2,770	3,150	2,550	2,300	1,850	5,130	2,050	3,450	1,550
2	1,600	3,600	2,980	3,400	2,950	2,400	2,400	1,900	3,750	1,950	3,550	1,650
3	1,600	3,400	2,770	3,300	2,750	2,550	2,500	1,800	3,250	3,370	3,560	2,240
4	2,500	3,200	2,670	2,980	2,650	2,650	2,350	1,800	3,550	5,170	6,720	2,480
5	8,800	3,080	2,670	2,770	2,650	2,650	2,250	1,750	2,950	2,650	4,940	2,260
6	14,200	2,980	2,980	2,570	2,650	2,550	2,150	1,800	2,550	2,200	7,300	1,800
7	5,680	2,880	3,080	3,800	2,550	2,750	2,250	1,800	2,350	2,000	7,960	1,600
8	3,500	2,770	2,670	3,720	2,500	2,650	2,950	1,700	2,550	1,850	5,880	1,600
9	2,770	2,770	2,570	2,980	2,450	2,450	3,950	1,600	2,550	1,700	4,300	1,750
10	2,770	2,770	2,570	2,670	2,400	4,280	3,350	1,600	2,200	2,080	3,750	1,860
11	3,080	2,770	2,420	2,670	2,500	4,900	2,850	1,550	2,550	2,100	3,450	1,850
12	2,520	3,220	2,270	2,770	2,550	4,050	2,550	1,500	3,250	2,100	2,950	1,600
13	2,220	5,730	2,370	2,770	2,750	3,350	2,500	1,600	3,050	1,850	2,650	1,600
14	2,120	5,630	2,420	2,670	2,550	3,050	2,400	1,850	2,450	1,600	2,450	2,050
15	2,070	4,030	2,370	2,520	2,500	2,850	2,300	2,450	2,050	1,650	2,400	1,900
16	1,970	3,500	2,370	2,470	2,500	2,850	2,300	2,450	1,900	1,950	2,200	1,650
17	1,820	3,190	2,420	2,370	2,400	3,250	2,250	1,900	1,950	1,700	2,200	1,800
18	1,780	3,080	2,470	2,370	2,500	3,150	2,450	1,550	2,400	1,500	3,460	2,270
19	7,020	2,880	2,670	2,370	2,550	2,850	2,750	1,750	3,790	2,210	2,410	2,000
20	41,200	2,880	2,520	2,270	3,450	2,750	2,650	1,850	4,150	3,800	2,000	1,700
21	50,400	2,770	2,370	2,270	3,050	2,650	2,350	2,050	3,050	6,000	1,900	1,700
22	14,500	2,670	2,320	2,320	2,650	2,650	2,300	1,850	2,750	7,120	1,800	1,650
23	6,770	2,520	2,370	2,470	2,750	2,550	2,300	2,550	3,150	15,200	1,700	1,500
24	7,270	2,520	2,770	2,470	3,450	2,550	2,200	2,300	2,450	15,200	1,700	1,420
25	6,530	2,470	3,080	4,100	3,250	2,500	2,100	2,300	2,150	10,700	1,700	1,400
26	5,940	2,470	2,880	6,290	2,950	2,450	2,050	2,750	2,500	6,190	1,700	1,400
27	9,890	2,980	2,670	4,250	2,750	2,300	2,000	3,950	2,610	4,450	2,300	1,300
28	15,000	4,470	2,880	3,350	2,650	2,300	2,000	3,150	5,780	4,250	1,800	1,220
29	11,000	4,250	3,190	2,950	-	2,250	1,950	2,450	4,690	3,250	1,550	1,300
30	7,000	3,500	3,190	2,950	-	2,250	1,900	7,090	2,500	4,080	1,500	1,500
31	4,600	-	2,880	3,050	-	2,300	-	8,690	-	3,950	1,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	249,770	50,400	1,600	8,057	3.53	4.07
November	98,730	5,730	2,470	3,293	1.45	1.62
December	85,050	3,190	2,270	2,679	1.18	1.36
Calendar year 1937	1,508,100	50,400	1,290	4,132	1.81	24.61
January	92,680	6,290	2,270	2,990	1.31	1.51
February	76,450	3,450	2,400	2,730	1.20	1.25
March	87,280	4,900	2,250	2,815	1.23	1.42
April	72,600	3,950	1,900	2,420	1.06	1.18
May	75,280	8,690	1,500	2,428	1.06	1.22
June	90,000	5,780	1,900	3,000	1.32	1.47
July	125,870	15,200	1,500	4,060	1.78	2.05
August	96,830	7,960	1,500	3,124	1.37	1.58
September	51,690	2,480	1,220	1,723	.756	.84
Water year 1937-38	1,200,280	50,400	1,220	3,288	1.44	19.57

Peak discharge.- Oct. 6 (11 a.m.) 16,700 sec.-ft.; Oct. 21 (3 a.m.) 58,400 sec.-ft.; July 23 (3 p.m.) 16,900 sec.-ft.; July 24 (8 p.m.) 17,000 sec.-ft.

202922 O—40——8

Pee Dee River near Ansonville, N. C.

Location.- Water-stage recorder, lat. 35°05'25", long. 79°59'55", in bridge pier on State Highway 109, 1 mile downstream from Brown Creek, and 6 miles east of Ansonville, Anson County.

Drainage area.- 6,330 square miles.

Records available.- February to September 1938.

Extremes.- Maximum discharge during period, 38,500 second-feet July 25 (gage height, 20.95 feet); minimum, 126 second-feet Sept. 26 (gage height, 4.94 feet).

Remarks.- Records good above 10,000 second-feet and fair below except for periods of missing gage heights, which are poor. Large diurnal fluctuation caused by operation of power plant upstream. Considerable storage in several reservoirs on Pee Dee and Yadkin Rivers.

Rating table for period of record, February to September 1938 (gage height, in feet, and discharge, in second-feet)

5.0	150	7.0	1,460	15.0	17,900
5.3	200	8.0	2,820	17.0	23,500
5.6	440	9.0	4,580	19.0	30,500
6.0	700	11.0	8,380	21.0	38,500
6.5	1,060	13.0	12,980		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					-	7,130	*4,610	*1,770	4,350	5,180	5,010	4,960
2					-	6,160	*5,910	3,920	2,640	4,840	7,730	5,160
3					-	5,110	9,030	4,930	7,330	3,210	6,520	2,100
4					-	5,030	8,310	4,660	10,200	1,900	7,420	3,460
5					-	5,020	7,250	4,570	4,960	4,330	10,400	3,190
6					-	*1,790	8,420	6,380	4,400	3,460	8,060	5,160
7					-	5,110	7,430	5,390	4,740	4,790	10,200	5,630
8					-	7,720	*8,500	*1,160	7,340	3,400	12,600	3,940
9					-	5,820	*18,000	3,750	7,160	1,270	12,200	3,620
10					-	8,590	12,800	5,880	7,310	2,490	6,400	1,370
11					-	10,600	8,200	5,210	4,950	4,660	6,780	2,940
12					-	6,200	9,130	3,530	5,300	4,810	6,620	2,550
13					-	4,390	8,240	2,010	3,890	5,030	1,630	6,100
14					-	6,590	6,130	2,030	6,980	5,780	760	3,060
15					-	7,220	6,150	1,540	4,190	7,170	4,530	3,530
16					-	7,860	*4,000	3,460	2,850	2,180	6,430	5,610
17					-	7,860	*2,000	3,030	2,490	440	5,990	3,060
18					-	6,840	*4,800	3,470	4,300	2,830	3,980	3,920
19					*3,000	4,530	*6,000	2,110	2,290	5,640	1,980	5,950
20					*1,640	3,030	7,310	2,350	3,450	7,900	2,810	5,590
21					*3,860	5,910	*6,000	1,100	4,640	5,760	1,710	5,250
22					7,710	8,760	*4,600	1,200	5,220	7,080	1,680	5,010
23					6,770	6,770	*3,400	3,260	4,140	10,100	3,580	4,790
24					5,410	5,940	*3,200	3,970	2,910	31,300	1,980	1,980
25					4,840	5,570	*4,000	4,450	1,870	35,800	4,120	178
26					3,250	*2,750	*3,400	2,550	4,620	29,900	3,470	4,530
27					*1,120	*1,860	6,220	5,490	4,090	16,000	2,660	4,620
28					*3,540	6,860	4,990	2,880	6,760	12,600	2,680	5,130
29					-	6,460	3,620	335	5,150	10,100	4,930	5,230
30					-	7,100	2,440	1,690	4,850	8,150	5,670	3,670
31					-	5,580	-	6,780	-	3,310	4,480	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January	-	-	-	-	-	-
February 19-28	41,140	7,710	1,120	4,114	0.650	0.24
March	186,160	10,600	1,790	6,005	.949	1.09
April	194,090	18,000	2,000	6,470	1.02	1.14
May	102,855	6,780	335	3,318	.524	.60
June	145,370	10,200	1,670	4,846	.766	.85
July	251,416	35,800	446	8,110	1.28	1.48
August	166,010	12,600	760	5,355	.846	.98
September	121,488	6,100	178	4,050	.640	.71
Water year						

*Gage-height record for all or part of day missing; discharge based on partial record and comparison with record for station near Rockingham.

Pee Dee River near Rockingham, N. C.

Location.- Water-stage recorder, lat. 34°56'10", long. 79°51'10", at State highway bridge, 1 mile upstream from Falling Creek, 4 miles downstream from Blewett Falls hydroelectric plant, and 6 miles west of Rockingham, Richmond County. Zero of gage is 81.81 feet above mean sea level (Carolina Power & Light Co. datum).
Drainage area.- 6,870 square miles.
Records available.- September 1927 to September 1938.
Average discharge.- 11 years, 8,417 second-feet.
Extremes.- Maximum discharge during year, 52,800 second-feet Oct. 22 (gage height, 10.21 feet); minimum, 160 second-feet Dec. 20 (gage height, 0.50 foot); minimum daily discharge, 490 second-feet May 22.
1927-38: Maximum discharge, 212,000 second-feet Sept. 19, 1928 (gage height, 25.38 feet), from rating curve extended above 110,000 second-feet; minimum, that of Dec. 20, 1937; minimum daily discharge, 188 second-feet Oct. 13, 1935.
Maximum stage known, 31.28 feet sometime in 1908, from State Highway Department records (discharge not determined).
Remarks.- Records good except those below 1,000 second-feet, which are poor. Discharge for May 30 computed from partly estimated gage-height record. Flow partly regulated by several reservoirs. Large diurnal fluctuation caused by operation of power plant upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-22				Oct. 23 to Sept. 30			
2.4	2,180	5.0	14,150	1.5	640	5.5	15,830
2.7	3,100	6.0	20,410	2.0	1,440	7.0	25,300
3.0	4,200	7.0	27,120	2.5	2,740	8.5	36,300
3.5	6,260	8.0	34,250	3.0	4,400	10.0	49,800
4.0	8,680	9.0	42,200	4.0	8,300		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,450	6,500	7,640	7,710	7,430	5,670	7,220	2,980	5,040	5,140	4,120	5,540
2	6,310	7,220	7,220	1,580	7,430	7,740	6,440	3,940	4,360	5,780	4,350	5,480
3	2,420	7,430	7,220	6,540	7,300	6,880	8,940	4,670	6,140	3,130	8,570	5,540
4	4,630	6,120	7,010	9,030	6,430	6,120	9,200	4,600	11,100	3,340	8,080	1,800
5	5,810	6,760	2,950	7,220	5,510	4,370	8,890	4,990	8,240	3,670	8,890	3,320
6	6,140	6,050	5,660	8,140	4,550	2,750	8,200	6,040	5,840	4,580	9,430	6,200
7	5,770	1,680	7,220	10,000	6,340	5,640	9,200	5,140	3,920	6,080	9,720	6,140
8	5,550	4,680	8,450	17,100	7,430	6,690	8,980	2,420	8,980	3,300	11,800	5,310
9	3,760	6,800	7,730	12,300	7,430	7,710	17,800	3,890	9,220	3,280	13,300	4,170
10	3,950	7,010	7,220	8,750	6,750	7,910	19,900	4,940	9,200	2,340	10,400	2,100
11	4,480	7,010	6,920	9,220	7,430	11,200	10,300	5,850	8,300	4,200	8,720	1,800
12	5,140	8,300	2,700	9,190	5,980	8,350	9,200	5,480	6,880	5,030	7,000	4,670
13	5,050	7,860	3,780	8,670	3,160	4,260	9,200	1,980	4,220	5,820	3,890	5,010
14	5,630	5,790	6,480	8,510	3,750	6,000	8,840	2,500	6,050	6,900	1,280	5,430
15	4,900	4,410	7,210	6,620	7,220	8,040	7,450	4,520	5,460	6,010	2,800	3,380
16	3,890	7,370	7,620	5,330	7,010	8,720	6,080	990	4,720	5,860	5,900	4,600
17	2,780	7,580	7,690	6,370	7,500	8,830	2,230	4,420	3,300	548	6,080	6,400
18	4,790	7,220	5,660	7,430	5,080	7,300	5,390	3,000	3,920	4,280	6,830	1,820
19	6,870	6,980	754	8,680	4,570	6,660	6,590	2,880	5,200	4,840	4,980	5,130
20	7,420	3,690	4,990	8,980	2,880	3,700	6,980	2,780	4,210	6,000	660	7,220
21	7,450	4,610	7,220	8,290	4,740	6,200	7,610	3,640	3,680	9,430	560	7,220
22	40,600	5,430	7,640	5,910	5,680	7,740	6,940	490	5,320	9,200	4,010	5,870
23	21,400	6,320	7,970	2,300	8,590	8,840	5,640	3,000	5,380	9,200	3,620	4,740
24	10,900	6,110	7,040	4,510	7,220	6,920	3,960	4,420	5,090	29,900	3,750	1,670
25	7,680	3,900	6,330	5,070	6,020	6,780	5,310	4,700	2,050	45,500	2,620	905
26	7,010	7,080	5,600	6,100	4,090	5,680	3,800	7,430	2,980	40,800	3,720	4,390
27	8,980	6,530	7,200	7,930	1,520	1,420	4,520	4,470	5,420	21,100	2,710	5,040
28	19,500	4,450	8,750	7,430	4,810	5,480	6,930	4,160	6,410	14,500	3,730	5,060
29	19,000	4,740	10,400	6,630	-	7,220	4,240	498	8,680	12,200	4,060	5,170
30	14,400	6,510	9,870	5,740	-	7,060	2,740	536	5,260	10,400	6,850	5,210
31	9,910	-	9,420	5,210	-	6,980	-	4,740	-	7,320	6,180	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	267,570	40,600	2,420	8,631	1.26	1.45
November	182,140	8,300	1,680	6,071	.884	.99
December	209,564	10,400	754	6,760	.984	1.13
Calendar year 1937	3,661,758	78,000	464	10,030	1.46	19.83
January	232,490	17,100	1,580	7,500	1.09	1.26
February	163,850	8,590	1,520	8,852	.852	.89
March	204,860	11,200	1,420	6,608	.962	1.11
April	228,720	19,900	2,230	7,624	1.11	1.24
May	116,092	7,430	490	3,745	.545	.63
June	174,570	11,100	2,050	5,819	.847	.94
July	297,676	43,500	548	9,602	1.40	1.61
August	178,610	13,300	560	5,762	.839	.97
September	136,335	7,220	905	4,544	.661	.74
Water year 1937-38	2,392,477	43,500	490	6,555	.954	12.96

Peak discharge.- Oct. 22 (12:45 p.m.) 52,800 sec.-ft.

Fisher River near Copeland, N. C.

Location.- Water-stage recorder, lat. 36°19'55", long. 80°40'30", 300 feet upstream from highway bridge on State Highway 268, about half a mile upstream from Cody Creek, and 2 miles west of Copeland, Surrey County.

Drainage area.- 121 square miles.

Records available.- October 1931 to September 1938.

Extremes.- Maximum discharge during year, 10,500 second-feet Oct. 19 (gage height, 13.59 feet), from rating curve extended above 1,800 second-feet; minimum, 72 second-feet Sept. 28 (gage height, 2.07 feet).
1931-38: Maximum discharge, that of Oct. 19, 1937; minimum discharge observed, 21 second-feet Sept. 18, 1932 (gage height, 1.70 feet).

Remarks.- Records good.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-19				Oct. 19 to Sept. 30	
2.2	99	5.0	1,540	2.0	60
2.5	167	6.0	2,300	2.5	161
3.0	336	7.5	3,655	3.0	332
3.5	575	9.0	5,150	3.5	550
4.0	865	10.5	6,780	4.0	810
				5.0	1,440

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	258	200	180	191	147	133	115	233	103	239	88
2	101	244	194	188	183	149	142	111	210	163	191	95
3	103	230	188	172	183	154	135	107	269	164	585	99
4	603	216	183	169	180	149	128	107	207	130	269	99
5	2,320	204	188	164	177	147	126	118	174	117	213	86
6	572	191	207	164	174	174	128	105	156	103	232	81
7	304	185	174	204	169	151	200	99	178	99	262	84
8	226	183	177	177	161	144	206	99	178	97	183	84
9	209	180	174	164	159	144	210	103	139	99	182	82
10	278	177	169	161	159	227	169	95	135	118	174	84
11	198	174	166	172	172	188	156	97	235	97	139	82
12	181	404	177	174	174	169	149	99	151	93	130	82
13	167	425	166	172	166	161	144	101	133	84	119	130
14	164	273	164	164	161	159	142	160	117	90	115	115
15	157	236	166	159	156	159	139	142	113	101	113	93
16	146	219	174	156	159	191	137	113	115	86	109	95
17	141	216	174	156	154	177	135	105	128	82	107	151
18	144	200	191	154	156	161	161	109	122	103	103	107
19	6,280	194	172	151	177	154	151	115	124	99	93	97
20	1,120	188	164	149	172	151	137	124	124	201	91	103
21	469	177	159	154	156	149	139	107	117	310	90	95
22	389	174	156	166	154	144	139	102	115	557	88	84
23	564	172	194	169	174	144	137	97	109	776	82	84
24	361	172	210	224	177	142	130	146	119	540	81	81
25	300	172	204	607	166	135	130	122	105	254	81	74
26	318	180	188	304	161	139	126	250	143	210	84	75
27	729	280	188	233	159	137	124	166	230	337	86	77
28	412	296	204	210	149	133	119	126	199	161	79	75
29	332	236	183	216	-	133	115	1,010	122	311	81	77
30	300	210	177	197	-	137	111	1,190	109	300	82	90
31	277	-	172	207	-	135	-	352	-	257	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,966	6,280	101	580	4.79	5.52
November	6,666	425	172	222	1.83	2.04
December	5,603	210	156	181	1.50	1.73
Calendar year 1937	92,289	6,280	65	253	2.09	28.37
January	6,037	607	149	195	1.61	1.86
February	4,679	191	149	167	1.38	1.44
March	4,784	227	133	154	1.27	1.46
April	4,298	210	111	143	1.18	1.32
May	5,892	1,190	95	190	1.57	1.81
June	4,609	269	105	154	1.27	1.42
July	6,261	776	82	202	1.67	1.92
August	4,560	585	77	147	1.21	1.40
September	2,749	151	74	91.6	.757	.84
Water year 1937-38	74,104	6,280	74	203	1.68	22.76

Peak discharge.- Oct. 5 (1:45 p.m.) 4,840 sec.-ft.; Oct. 19 (8 p.m.) 10,500 sec.-ft.; May 29 (3:15 p.m.) 2,550 sec.-ft.; May 29 (9:15 p.m.) 2,640 sec.-ft.; May 30 (8:15 a.m.) 1,320 sec.-ft.

South Yadkin River at Cooleemee, N. C.

Location.- Water-stage recorder, lat. 35°48'30", long. 80°33'45", just downstream from tailrace of Erwin Cotton Mills at Cooleemee, Davie County.

Drainage area.- 569 square miles.

Records available.- June 1928 to September 1938.

Extremes.- Maximum discharge during year, 9,280 second-feet Oct. 21 (gage height, 22.50 feet); minimum, 29 second-feet Sept. 29 (gage height, 0.70 foot); minimum daily discharge, 110 second-feet Sept. 25.
1928-38: Maximum discharge, 24,800 second-feet (estimated) Oct. 3, 1929 (gage height, 32.25 feet); minimum, 10 second-feet Nov. 25, 1931 (gage height, 0.40 foot); minimum daily discharge, 46 second-feet Sept. 11, 1932.

Remarks.- Records good except those for periods of missing gage heights, July 16-29, Sept. 19-27 (computed on basis of recorded range in stage, weather records, and records for stations on nearby streams), and those above 3,000 second-feet, which are fair. Large diurnal fluctuation during low and medium stages caused by operation of Erwin Cotton Mills.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-20

1.5	226	8.0	2,700
2.0	428	10.0	3,460
2.5	648	12.0	4,240
3.0	878	15.0	5,480
4.0	1,290	18.0	6,900
6.0	1,987	21.0	8,450
7.0	2,332		

Oct. 21 to Sept. 30

1.0	73	2.5	636
1.3	146	3.0	858
1.7	282	4.0	1,264
2.0	405	6.0	1,986

Note.- Same as preceding table above 6.1 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	371	684	577	523	659	530	469	393	487	446	518	232
2	295	636	479	954	576	515	576	491	325	286	520	201
3	284	585	494	816	534	472	624	370	403	330	509	294
4	642	575	496	649	522	636	560	378	462	376	534	288
5	740	470	501	579	508	529	534	332	507	474	962	316
6	740	510	632	567	506	538	476	318	544	267	1,190	346
7	607	496	636	1,140	542	562	485	345	304	302	1,490	263
8	505	529	533	861	525	534	893	346	482	304	1,080	216
9	292	487	457	682	447	515	1,000	405	428	309	624	295
10	424	482	484	591	510	1,500	722	392	379	207	729	304
11	460	410	464	603	437	1,460	621	290	477	616	449	142
12	415	1,070	448	684	436	840	567	363	526	422	473	347
13	403	1,890	532	587	482	691	549	335	510	311	351	276
14	377	1,030	515	562	527	636	483	321	338	331	262	290
15	367	771	436	541	515	631	511	512	360	266	458	250
16	249	659	501	525	426	1,020	464	515	358	300	353	250
17	365	608	426	543	415	740	473	364	358	220	286	203
18	421	551	414	520	482	663	657	377	740	320	411	122
19	1,290	545	491	515	433	591	650	313	900	700	308	325
20	6,010	539	525	506	765	570	579	333	827	1,000	299	280
21	8,350	506	450	496	615	588	530	475	676	1,500	156	280
22	3,230	521	474	420	544	550	447	360	515	1,100	378	260
23	1,070	496	510	510	603	534	437	485	796	1,800	236	240
24	1,010	487	527	563	799	540	452	553	568	2,600	249	190
25	814	461	572	963	647	503	520	520	362	2,000	305	110
26	763	465	562	1,010	567	484	444	409	397	1,500	268	280
27	3,030	564	553	743	548	493	380	686	488	1,000	283	260
28	5,210	836	744	556	550	542	360	462	1,590	500	147	209
29	1,300	691	703	518	-	525	393	471	687	400	336	198
30	894	617	636	558	-	450	388	948	506	490	252	257
31	748	-	605	613	-	442	-	525	-	430	269	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	39,676	8,350	249	1,280	2.25	2.59
November	19,191	1,890	410	640	1.12	1.25
December	16,377	744	414	528	.928	1.07
Calendar year 1937	335,404	8,350	233	919	1.62	21.92
January	19,898	1,140	420	642	1.13	1.30
February	15,120	799	415	540	.949	.99
March	19,824	1,500	442	639	1.12	1.29
April	16,244	1,000	360	541	.951	1.06
May	13,387	948	290	432	.759	.88
June	16,300	1,590	304	543	.954	1.06
July	21,107	2,600	207	681	1.20	1.38
August	14,685	1,490	147	474	.833	.96
September	7,526	347	110	251	.441	.49
Water year 1937-38	219,335	8,350	110	601	1.06	14.32

Peak discharge.- Oct. 21 (3 a.m.) 9,280 sec.-ft.

Uharie River near Trinity, N. C.

Location.- Water-stage recorder and modified Parshall flume, lat. 35°52'00" (revised), long. 79°59'20" (revised), 500 feet downstream from county highway bridge, 2 miles south of Trinity, Randolph County.

Drainage area.- 11.3 square miles.

Records available.- May 1934 to September 1938.

Extremes.- Maximum discharge during year, 609 second-feet July 23 (gage height, 3.64 feet); minimum, 0.45 second-foot Sept. 26, 28 (gage height, 0.54 foot).
1934-38: Maximum discharge, 1,540 second-feet Oct. 8, 1936 (gage height, 5.7 feet); minimum, 0.17 second-foot July 29, 1936 (gage height, 0.46 foot).

Remarks.- Records good except those for period of missing gage heights, Jan. 9-12 (computed on basis of maximum and minimum range in stage and precipitation records) and those below 1 second-foot, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	2.9	3.7	5.6	6.6	3.9	4.1	2.2	2.8	3.5	6.8	0.85
2	1.4	2.9	3.4	17	5.6	3.9	5.3	2.0	3.5	3.4	4.4	.94
3	1.4	2.7	3.2	10	5.3	6.7	4.4	1.9	15	7.2	3.7	2.8
4	5.3	2.6	3.1	7.8	5.1	5.6	4.1	1.7	5.1	3.9	3.2	1.6
5	2.4	2.4	3.2	6.4	4.9	5.1	3.9	1.7	3.0	2.8	2.8	.94
6	2.0	2.4	3.9	6.4	4.9	6.3	3.7	1.6	2.5	2.3	61	.77
7	1.6	2.3	2.7	77	4.6	5.3	9.6	1.5	2.0	2.0	7.8	.85
8	1.2	2.1	2.7	18	4.1	4.9	20	1.5	2.0	1.7	5.4	.77
9	1.3	2.1	3.4	12	3.9	4.6	39	1.5	1.7	8.1	5.3	.62
10	4.2	2.1	2.7	9.2	3.9	82	13	1.2	1.7	4.5	4.2	.62
11	1.8	2.1	2.6	11	4.1	21	9.2	1.2	1.6	2.2	3.0	.62
12	1.6	14	2.6	12	4.1	13	7.8	1.2	1.9	1.9	2.5	.69
13	1.4	7.1	2.7	9.9	3.9	9.9	6.4	1.6	1.6	1.5	2.2	.77
14	1.4	4.9	2.7	8.5	3.9	8.5	5.6	5.1	1.1	7.2	2.0	1.9
15	1.4	3.7	2.7	7.3	3.6	7.3	4.9	2.2	1.0	2.8	1.9	1.2
16	1.4	3.4	2.7	6.3	3.6	7.3	4.7	1.5	1.6	1.7	1.7	1.8
17	1.4	3.2	2.7	6.3	3.6	6.6	4.4	1.4	1.6	1.4	7.1	1.4
18	1.4	2.9	2.9	5.6	3.6	5.8	5.4	1.5	1.1	12	6.1	.94
19	17	2.9	2.6	5.1	3.6	5.3	4.4	1.6	8.6	5.2	2.2	.85
20	19	3.1	2.6	5.1	3.4	5.3	3.9	1.4	4.4	3.4	1.7	1.50
21	3.9	2.6	2.4	4.9	3.2	5.1	3.7	1.5	2.5	5.3	1.5	1.0
22	3.1	2.4	2.4	5.1	3.2	4.4	3.9	1.1	5.6	6.3	1.2	.69
23	2.7	2.4	9.3	4.9	5.4	4.4	3.5	1.1	3.2	108	1.1	.69
24	2.4	2.4	15	7.5	9.9	4.1	3.2	1.2	1.9	60	1.1	.62
25	2.3	2.4	8.5	11	6.6	3.9	3.0	1.1	1.6	36	1.1	.50
26	2.3	2.6	6.1	7.3	5.6	3.9	2.8	7.9	2.3	47	1.7	.50
27	35	9.9	7.2	5.8	5.1	3.7	2.7	2.8	12	14	8.1	.56
28	7.5	7.8	13.5	4.9	4.4	3.6	2.5	1.7	84	8.8	1.5	.50
29	4.9	5.4	8.8	5.1	-	3.6	2.2	1.6	8.1	6.1	1.4	.69
30	3.9	4.4	7.1	5.1	-	5.3	2.2	1.7	4.9	4.9	1.4	2.3
31	3.2	-	5.9	7.6	-	4.1	-	1.6	-	16	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	141.0	35	1.2	4.55	0.403	0.46
November	114.1	14	2.1	3.80	.336	.37
December	145.0	15	2.4	4.68	.414	.48
Calendar year 1937	4,266.18	304	.40	11.7	1.04	14.03
January	315.7	77	4.9	10.2	.903	1.04
February	129.7	9.9	3.2	4.63	.410	.43
March	264.4	82	3.6	8.53	.755	.87
April	193.5	39	2.2	6.45	.571	.64
May	58.8	7.9	1.1	1.90	.168	.19
June	189.9	84	1.0	6.33	.560	.62
July	391.1	108	1.4	12.6	1.12	1.29
August	156.1	61	1.0	5.04	.446	.51
September	30.48	2.8	.50	1.02	.090	.10
Water year 1937-38	2,129.78	108	.50	5.84	.517	7.00

Rocky River near Norwood, N. C.

Location.- Water-stage recorder, lat. 35°08'40", long. 80°10'45", at Hyatts Ford, 1,000 feet downstream from Lanes Creek and 6 miles southwest of Norwood, Stanley County.

Drainage area.- 1,370 square miles.

Records available.- October 1929 to September 1938.

Extremes.- Maximum discharge during water year 1936-37, 42,600 second-feet Oct. 9 (gage height, 27.30 feet), from rating curve extended above 29,000 second-feet; minimum, 56 second-feet Sept. 23 (gage height, 0.28 foot).
Maximum discharge, during water year 1937-38, 16,800 second-feet July 26 (gage height, 13.53 feet); minimum, 42 second-feet Sept. 26, 27 (gage height, 0.21 foot).
1929-38: Maximum discharge, 52,800 second-feet Apr. 7, 1936 (gage height, about 32.0 feet, from floodmarks); minimum, 19 second-feet Oct. 28, 1931, Nov. 13, 1933.
Maximum stage known, about 35 feet sometime in August 1908 (discharge, 60,000 second-feet, estimated), from present rating curve extended above 29,000 second-feet.

Remarks.- Records for water year 1936-37 are good above 1,000 second-feet and fair below; those for water year 1937-38 are good. Slight diurnal fluctuation during low stages.

Revisions.- Figures of discharge for the water year 1936-37, superseding those published in Water-Supply Paper 822, are given herein.

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,900	260	200	7,960	9,640	1,880	653	1,500	220	729	303	1,480
2	2,210	235	204	8,220	5,690	2,700	612	1,100	442	284	264	613
3	633	227	239	12,800	2,880	2,020	565	925	568	210	182	381
4	396	227	546	12,000	2,140	1,500	539	818	1,530	165	193	291
5	278	231	520	4,880	1,750	1,320	1,570	760	2,810	231	179	257
6	236	248	367	8,100	1,550	1,140	9,490	871	855	525	156	381
7	199	252	3,200	7,770	1,360	997	3,790	818	412	250	146	1,190
8	13,200	204	6,870	3,920	1,320	1,030	2,080	605	497	240	998	798
9	37,000	208	2,090	2,820	2,940	1,400	4,580	533	965	466	475	733
10	13,200	220	1,220	2,580	9,180	1,060	3,280	477	490	264	296	446
11	3,370	208	3,560	2,190	3,980	863	1,450	434	325	261	1,360	276
12	1,860	320	5,000	1,650	2,140	781	1,270	383	378	220	1,070	250
13	1,360	1,350	2,490	1,450	1,600	716	1,700	372	306	159	2,280	214
14	1,010	856	1,450	1,320	1,500	695	2,080	980	216	490	1,240	206
15	826	458	1,340	1,220	1,550	1,070	1,700	3,400	196	802	874	159
16	8,120	341	7,740	1,360	1,270	4,400	1,860	1,770	867	402	333	133
17	14,800	282	9,020	3,040	1,080	2,020	1,240	774	1,370	311	196	122
18	4,130	252	3,160	7,590	941	1,270	826	578	1,190	404	152	120
19	1,500	248	2,000	5,280	886	1,270	702	458	840	474	125	109
20	933	239	6,130	8,320	856	1,140	646	400	1,140	196	109	99
21	724	235	3,930	10,900	5,330	1,320	902	346	761	127	95	109
22	592	235	1,800	4,900	8,050	1,090	811	306	372	125	304	95
23	489	235	1,320	2,940	3,430	863	702	287	243	117	2,940	79
24	429	231	1,080	2,240	2,020	937	1,110	298	223	109	1,740	92
25	367	231	949	2,300	1,500	3,880	18,100	346	193	109	933	90
26	341	341	848	13,900	1,180	2,020	19,400	296	3,060	133	1,690	90
27	316	269	789	5,450	1,020	1,180	8,680	260	2,720	555	5,200	75
28	296	235	760	5,100	1,050	941	2,280	900	386	280	2,320	77
29	292	208	796	15,100	-	826	1,860	452	231	159	6,380	234
30	235	200	1,050	6,180	-	731	2,240	311	228	136	4,890	193
31	260	-	1,830	3,270	-	674	-	265	-	345	3,020	-

Discharge, in second-feet, of Rocky River near Norwood, N. C., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	206	349	658	390	295	686	214	284	324	610	81
2	109	186	295	1,780	441	264	3,600	203	260	235	2,030	527
3	97	179	253	2,010	363	257	5,460	193	5,840	228	1,320	745
4	88	169	235	1,110	328	420	1,700	189	3,670	476	860	1,480
5	114	162	210	790	324	503	992	176	1,000	303	871	528
6	200	149	206	637	307	386	730	162	572	210	2,370	224
7	186	152	253	7,160	303	395	715	169	395	172	999	231
8	149	149	257	4,960	299	372	2,210	159	3,080	152	469	152
9	112	143	206	1,820	284	307	12,600	140	3,080	143	320	176
10	112	149	210	1,120	264	4,940	4,480	133	1,630	127	276	328
11	130	149	210	1,040	268	5,960	1,660	133	2,540	120	235	189
12	196	264	179	1,200	264	1,980	1,120	127	1,460	152	214	125
13	140	1,510	152	1,040	264	1,080	888	114	1,120	127	193	107
14	109	833	203	835	253	812	738	122	1,020	112	176	104
15	107	457	189	686	257	693	624	224	469	104	146	127
16	99	315	182	598	257	1,070	546	264	345	152	159	114
17	97	276	179	546	246	1,680	480	169	390	152	146	88
18	92	246	182	522	246	1,320	441	130	420	109	152	73
19	97	217	189	475	242	1,200	534	125	354	773	136	58
20	237	206	189	431	264	760	492	109	288	2,270	143	86
21	896	203	176	405	253	850	540	133	744	2,280	140	77
22	328	203	172	395	238	775	624	156	651	2,570	127	90
23	206	182	196	390	217	617	700	242	349	5,250	109	88
24	162	162	2,150	386	423	553	534	311	299	10,900	102	83
25	149	169	1,640	405	805	503	400	299	280	10.700	109	86
26	140	159	869	446	503	431	336	284	4,350	11,800	104	64
27	462	200	572	386	367	750	303	469	1,620	2,920	133	48
28	1,840	698	3,580	320	328	1,010	276	303	4,900	1,280	220	56
29	738	889	3,140	272	-	540	253	220	1,040	925	149	54
30	332	496	1,280	272	-	431	231	744	503	635	127	62
31	250	-	850	324	-	395	-	680	-	1,280	102	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1936	117,502	37,000	199	3,790	2.77	3.19
November	9,286	1,350	200	310	.226	.25
December	72,498	9,020	200	2,339	1.71	1.97
Calendar year 1936	985,682	51,500	58	2,693	1.97	26.81
January 1937	176,750	15,100	1,220	5,702	4.16	4.80
February	77,833	9,640	856	2,780	2.03	2.11
March	43,734	4,400	674	1,411	1.03	1.19
April	96,718	19,400	539	3,224	2.35	2.62
May	22,023	3,400	260	710	.518	.60
June	24,034	3,060	193	801	.585	.65
July	9,278	802	109	299	.218	.25
August	40,443	6,380	95	1,305	.953	1.10
September	9,392	1,480	75	313	.228	.25
Water year 1936-37	699,491	37,000	75	1,916	1.40	18.98
October 1937	8,096	1,840	88	261	.191	.22
November	9,478	1,500	143	316	.231	.26
December	18,953	3,580	152	611	.446	.51
Calendar year 1937	536,732	19,400	75	1,470	1.07	14.56
January 1938	33,419	7,160	272	1,078	.787	.91
February	8,998	805	217	321	.234	.24
March	31,549	5,960	257	1,018	.743	.86
April	44,893	12,600	231	1,496	1.09	1.22
May	7,096	744	109	229	.167	.19
June	42,953	5,840	260	1,432	1.05	1.17
July	56,911	11,800	104	1,836	1.34	1.54
August	13,247	2,370	102	427	.312	.36
September	6,251	1,480	48	208	.152	.17
Water year 1937-38	281,844	12,600	48	772	.564	7.65

Peak discharge 1938.- Apr. 9 (9 a.m.) 14,900 sec.-ft.; July 26 (1:45 a.m.) 16,800 sec.-ft.

Brown Creek near Polkton, N. C.

Location.- Water-stage recorder and concrete control, lat. 35°02'15", long. 80°08'45", at Medley's mill, just downstream from bridge on State Highway 742, 4 miles northeast of Polkton, Anson County.

Drainage area.- 110 square miles.

Records available.- October 1937 to September 1938.

Extremes.- Maximum discharge during year, 1,530 second-feet July 27 (gage height, 10.63 feet); minimum, 0.05 second-foot Sept. 28, 29, 30.

Remarks.- Records fair except those for periods of missing or faulty gage heights Oct. 1-15, Mar. 30 to Apr. 4, June 9, 10, July 15-20, 31, Aug. 1-3, 6-23 (computed on basis of one discharge measurement, partial gage-height record, weather records, engineer's and observer's notes, and records for stations on nearby streams), those for periods of leaking control, Oct. 7-15, July 15-23, July 28 to Aug. 9, those for periods of backwater from repair work on control, Aug. 24 to Sept. 3, Sept. 13-30, and those above 1,000 second-feet, all of which are poor. Gage-height record collected in cooperation with U. S. Soil Conservation Service.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.53	6.5	45	16	8.0	12	8.0	1.8	5.0	18	0.60
2	.4	.40	5.5	37	16	6.5	100	6.5	1.6	3.0	10	.79
3	.4	.46	4.4	35	15	6.5	300	5.5	73	2.4	73	20
4	.6	.60	3.6	32	14	8.0	240	5.0	77	55	125	44
5	.6	.53	3.2	25	12	9.0	222	4.1	53	24	177	73
6	.8	.46	3.0	22	12	9.0	73	3.3	24	9.0	42	42
7	1.4	.46	3.0	369	12	9.0	92	2.9	13	4.5	18	18
8	.8	.46	3.0	327	10	7.0	206	2.6	133	2.6	8	8.0
9	.6	.46	2.9	306	9.0	7.0	712	2.3	80	1.6	5	4.9
10	.4	.46	2.9	325	9.0	96	705	2.0	120	1.2	4	8.5
11	.4	.40	2.8	122	8.0	109	662	1.8	106	.92	3	13
12	.4	12	2.6	83	8.0	97	404	1.5	58	55	3	6.0
13	.4	18	2.3	66	8.0	53	104	1.3	112	10	2	3.2
14	.4	22	2.1	61	7.5	34	86	1.5	105	2.3	2	2.1
15	.4	14	2.1	39	7.0	27	40	1.8	38	1.0	18	1.5
16	.46	7.5	2.1	32	6.5	25	32	1.8	17	.8	9	1.3
17	.34	5.0	2.1	27	6.5	33	28	1.5	12	.8	4	1.0
18	.34	3.5	2.0	25	6.0	37	22	1.4	9.0	.8	3	.92
19	.53	2.9	2.0	22	6.0	30	21	1.4	9.0	20	2	.92
20	1.5	2.6	2.0	20	6.0	27	19	1.3	17	40	1	.96
21	1.8	2.3	2.0	18	6.0	30	22	1.2	22	179	1	.79
22	1.0	2.2	1.9	18	5.5	23	191	1.3	17	267	1	.72
23	.72	2.0	8.0	17	6.0	20	143	1.1	9.0	182	.6	.53
24	.60	1.7	58	17	12	16	181	7.0	6.0	326	.66	.40
25	.53	1.6	67	24	17	13	67	3.0	4.2	495	.60	.28
26	.60	1.5	55	22	14	11	33	56	5.5	1,320	.86	.22
27	.92	1.6	33	20	12	11	24	26	3.6	1,340	1.2	.16
28	.79	6.0	113	16	9.5	11	17	9.5	40	720	1.1	.10
29	.72	7.0	114	12	-	11	12	6.5	15	309	.72	.05
30	.72	8.0	157	11	-	10	9.5	3.6	9.5	80	.60	.16
31	.60	-	84	12	-	9.0	-	2.5	-	40	.53	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20.57	1.8	0.34	0.664	0.0060	0.007
November	126.62	22	.40	4.22	.038	.04
December	753.0	157	1.9	24.3	.221	.25
Calendar year						
January	2,207	369	11	71.2	.647	.75
February	276.5	17	5.5	9.88	.090	.09
March	803.0	109	6.5	25.9	.235	.27
April	4,749.5	712	9.5	158	1.44	1.61
May	175.2	56	1.1	5.65	.051	.06
June	1,191.2	133	1.6	39.7	.361	.40
July	5,497.92	1,340	.8	177	1.61	1.86
August	535.87	177	.53	17.3	.157	.18
September	254.10	73	.05	8.47	.077	.09
Water year 1937-38	16,590.48	1,340	.05	45.5	.414	5.61

Little Brown Creek near Polkton, N. C.

Location.- Water-stage recorder, lat. 34°58'45", long. 80°11'20", 1 mile southwest of State convict camp on U. S. Highway 74, 1½ miles upstream from confluence with Brown Creek, and 2 miles southeast of Polkton, Anson County.

Drainage area.- 13.5 square miles.

Records available.- March 1935 to September 1938.

Extremes.- Maximum discharge during year, 1,000 second-feet July 25 (gage height, 4.58 feet), from rating curve extended above 410 second-feet; no flow Sept. 18-30.
1935-38: Maximum discharge, 1,500 second-feet (revised) Mar. 26, 1936 (gage height, 5.58 feet), from rating curve extended above 410 second-feet; no flow June 4, July 11-15, Aug. 21 to Sept. 2, Sept. 19, 1938, Aug. 20, 1937, Sept. 18-30, 1938.

Remarks.- Records good except those for periods of missing gage heights, May 10-13, 15, 24, June 29 to July 22 (computed on basis of weather records and records for North Fork of Jones Creek near Wadesboro), and those below 0.5 second-foot, which are poor. Gage-height record collected in cooperation with U. S. Soil Conservation Service.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 12 to Feb. 21)

0.03	0.01	0.5	2.7	2.0	57
.1	.05	.7	5.9	2.5	140
.2	.25	1.0	10.9	3.0	304
.3	.60	1.3	16	3.5	510
.4	1.5	1.6	23	4.0	735

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.02	0.06	0.35	3.3	1.9	0.50	4.7	1.0	0.32	0.60	2.3	0.02
2	.02	.05	.26	5.9	1.3	.46	85	.73	.32	.46	5.3	.02
3	.02	.05	.23	4.5	1.2	.66	29	.66	53	4.0	7.6	8.0
4	.04	.05	.23	2.9	1.1	1.6	9.5	.55	16	1.9	1.6	9.5
5	.09	.04	.23	2.3	.90	1.1	5.4	.38	4.5	.80	1.1	.73
6	.10	.04	.26	5.2	.90	1.1	3.5	.32	1.8	.67	1.0	.26
7	.09	.04	.29	162	1.2	.81	28	.32	1.7	.47	.60	.14
8	.06	.04	.23	26	.90	.55	124	.26	28	.25	.50	.07
9	.04	.04	.23	11	.73	.46	208	.23	15	.20	.38	.05
10	.04	.04	.23	7.8	.73	36	22	.20	25	.15	.29	.04
11	.04	.04	.21	11	.73	13	10	.17	6.4	.13	.23	.03
12	.04	5.5	.16	9.9	.73	6.4	7.3	.12	10	8.5	.16	.02
13	.04	1.3	.16	7.0	.73	3.7	5.6	.26	34	2.0	.12	.02
14	.04	.42	.16	5.1	.73	2.6	4.1	.38	4.4	1.0	.12	.02
15	.04	.21	.18	4.1	.60	2.0	3.0	.26	1.5	.65	.12	.02
16	.04	.18	.18	3.2	.50	3.7	2.4	.20	.81	.40	2.0	.01
17	.04	.16	.18	3.2	.46	6.2	1.9	.15	3.4	.35	.32	.01
18	.04	.14	.21	2.7	.46	3.7	1.7	.20	1.2	4.2	.14	0
19	.04	.16	.23	2.3	.55	2.3	1.9	.28	1.3	5.5	.07	0
20	.04	.16	.23	2.0	.66	2.4	1.7	.14	10	13	.06	0
21	.05	.16	.21	1.9	.55	2.7	13	.20	2.6	12	.05	0
22	.06	.14	.18	1.9	.46	1.9	142	.15	1.4	65	.03	0
23	.05	.14	9.6	1.8	.60	1.6	18	6.5	.73	29	.04	0
24	.05	.12	14	2.2	3.3	1.3	8.0	3.2	.38	76	.04	0
25	.04	.12	6.7	4.1	2.0	1.0	5.3	.38	.23	418	.62	0
26	.04	.14	3.5	2.0	1.2	.90	3.7	22	.18	80	.10	0
27	.07	1.3	4.8	1.4	1.1	1.3	2.4	8.4	.14	14	.06	0
28	.09	1.7	40	1.0	.81	1.2	1.9	1.8	10	24	.05	0
29	.12	.90	10	.90	-	.90	1.5	.81	1.9	25	.04	0
30	.09	.46	5.9	1.0	-	.81	1.1	.46	.90	6.3	.03	0
31	.07	-	4.0	1.4	-	.73	-	.42	-	5.2	.02	0

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1.65	0.12	0.02	0.053	0.004	0.005
November	13.90	5.5	.04	.463	.034	.04
December	103.33	40	.16	3.33	.247	.28
Calendar year 1937	4,663.35	221	.01	12.84	.948	12.84
January	301.00	162	.90	9.71	.719	.83
February	27.03	3.3	.46	.965	.071	.07
March	103.58	36	.46	3.34	.247	.28
April	755.60	208	1.1	25.2	1.87	2.09
May	51.13	22	.12	1.65	.122	.14
June	237.11	53	.14	7.90	.585	.65
July	799.56	418	.10	25.8	1.91	2.20
August	25.09	7.6	.02	.809	.060	.07
September	18.96	9.5	0	.632	.047	.05
Water year 1937-38	2,437.94	418	0	6.70	.495	6.70

Peak discharge.- Jan. 7 (7 a.m.) 264 sec.-ft.; Apr. 9 (1 a.m.) 537 sec.-ft.; July 25 (7:30 p.m.) 1,000 sec.-ft.

North Fork of Jones Creek near Wadesboro, N. C.

Location.- Water-stage recorder, lat. 34°55'20", long. 80°04'05", 300 feet downstream from county highway bridge, 3½ miles south of Wadesboro, Anson County and 5½ miles upstream from confluence with Jones Creek.

Drainage area.- 10.0 square miles.

Records available.- March 1935 to September 1938.

Extremes.- Maximum discharge during year, 860 second-feet July 25 (gage height, 3.48 feet), from rating curve extended above 320 second-feet; minimum, 0.3 second-foot July 18.

1935-38: Maximum discharge, 2,290 second-feet June 4, 1937 (gage height, 6.39 feet), from rating curve extended above 320 second-feet; minimum, 0.3 second-foot Aug. 26, 27, 1935, July 18, 1938.

Remarks.- Records good except those above 50 and below 5 second-feet, which are fair, and those for periods of missing gage heights Oct. 13, Oct. 22 to Nov. 2, Feb. 13-21, July 22 to Aug. 1, which were computed on basis of weather records, recorded range in stage, and records for Little Brown Creek near Polkton and are poor. Gage-height record collected in cooperation with U. S. Soil Conservation Service.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.2	0.3	0.5	2.4	1.0	10	2.0	120
.3	.6	.6	3.6	1.3	18	2.5	340
.4	1.3	.8	6.4	1.6	29	3.0	590

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	1.6	2.8	4.5	4.2	3.0	7.9	4.1	2.2	1.0	3.0	0.4
2	2.0	1.6	2.6	5.0	4.0	2.9	30	3.9	7.4	.9	4.4	.5
3	2.3	1.6	2.5	4.1	4.0	3.5	9.8	3.5	32	2.3	4.9	28
4	3.0	1.4	2.4	4.0	4.0	3.5	7.6	3.2	7.1	1.7	3.7	24
5	2.9	1.4	2.6	3.6	3.9	3.2	6.0	2.9	4.5	1.0	3.2	1.7
6	2.5	1.5	3.1	8.2	3.9	3.4	5.5	2.9	3.6	.8	3.1	2.0
7	2.0	1.3	2.4	74	3.7	3.0	17	2.5	3.1	.7	3.7	2.1
8	1.6	1.3	2.3	16	3.1	2.9	52	2.6	5.3	.5	3.0	1.2
9	1.7	1.3	2.8	11	2.9	2.6	69	2.5	3.2	.5	2.4	1.1
10	3.0	1.3	2.3	9.0	3.0	11	18	2.1	4.0	.5	2.1	1.0
11	2.0	1.4	2.4	10	3.1	5.2	13	2.0	3.0	.5	1.7	1.0
12	1.8	21	2.0	8.3	3.0	4.2	10	1.8	7.5	.5	1.5	1.0
13	1.7	3.7	2.4	7.1	2.8	3.7	8.7	2.6	4.8	.5	1.3	.8
14	2.6	2.9	2.4	6.4	3.0	3.6	7.4	3.6	2.4	1.6	1.2	.7
15	2.0	2.3	2.4	6.1	3.0	3.5	6.7	2.2	2.1	.9	1.6	.5
16	1.7	2.5	2.3	5.8	3.0	5.2	6.0	1.6	5.2	.5	1.2	.5
17	1.7	3.1	2.3	5.8	2.8	4.2	5.5	1.5	3.2	.4	1.0	.6
18	1.7	2.3	2.3	5.6	3.0	3.5	5.4	1.8	2.5	1.5	.8	.5
19	2.1	2.5	2.2	5.4	3.2	3.2	5.0	2.0	2.5	2.8	.7	3.7
20	2.1	2.5	2.2	5.4	3.2	3.5	14	1.4	3.2	6.8	.7	1.7
21	1.5	2.3	2.2	5.2	3.0	3.2	49	1.6	2.4	6.6	.6	1.0
22	1.5	2.2	2.2	4.9	2.9	3.2	66	1.5	2.2	26	.5	.7
23	2.1	2.1	14	4.6	4.2	3.0	14	4.2	1.7	18	.5	.6
24	1.8	2.3	7.2	5.5	5.0	2.9	9.4	4.2	1.3	28	2.4	.5
25	1.8	2.4	4.9	5.4	3.5	2.3	7.6	2.2	1.2	230	1.1	.5
26	1.7	3.0	4.2	4.5	3.2	2.9	6.6	46	1.2	28	.6	.5
27	2.0	5.2	4.6	4.2	3.2	3.4	5.8	5.5	2.5	12	2.2	.6
28	3.5	3.6	14	4.0	3.2	2.6	5.2	3.6	2.4	14	.7	.6
29	2.0	3.1	6.1	4.0	-	2.3	4.6	3.2	1.3	12	.7	.8
30	1.8	2.9	5.0	4.1	-	2.3	4.2	2.9	1.1	5.0	.7	1.5
31	1.7	-	4.8	5.0	-	2.2	-	2.6	-	4.0	.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	63.8	36	1.5	2.06	0.206	0.24
November	87.6	21	1.3	2.92	.292	.33
December	117.9	14	2.0	3.80	.380	.44
Calendar year 1937	4,499.3	166	1.3	12.3	1.23	16.75
January	256.7	74	3.6	8.28	.828	.95
February	95.0	5.0	2.8	3.39	.339	.35
March	109.1	11	2.2	3.52	.352	.41
April	476.9	69	4.2	15.9	1.59	1.77
May	128.0	46	1.4	4.13	.413	.48
June	126.1	32	1.1	4.20	.420	.47
July	409.9	230	.4	13.2	1.32	1.52
August	55.7	4.9	.5	1.80	.180	.21
September	80.3	28	.4	2.68	.268	.30
Water year 1937-38	2,007.0	230	.4	5.50	.550	7.47

Lynches River at Effingham, S. C.

Location.- Water-stage recorder, lat. 34°03', long. 79°45', at steel bridge on U. S. Highway 52, 75 feet upstream from Atlantic Coast Line Railroad bridge and 1 mile south of Effingham, Florence County. Zero of gage is 58.70 feet above mean sea level (unadjusted).

Drainage area.- 1,070 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum discharge during year, 4,880 second-feet Aug. 2 (gage height, 13.72 feet); minimum, 222 second-feet Sept. 6.
1929-38: Maximum discharge observed, 15,200 second-feet Oct. 7, 1929 (gage height, 19.25 feet); minimum, 116 second-feet July 1, 1935.
Maximum stage known, 20.0 feet Aug. 30, 1908 (discharge, 18,000 second-feet, estimated).

Remarks.- Records good. Discharge for period of missing gage heights, Aug. 30 to Sept. 14, computed from graph drawn on basis of partial recorder record and daily gage readings. Gage-height record collected in cooperation with the U. S. Weather Bureau.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	313	444	572	1,400	612	572	612	1,040	1,160	838	4,480	234
2	313	444	612	1,360	592	533	817	721	792	1,000	4,680	228
3	313	403	633	1,240	592	514	1,420	592	1,130	1,120	3,750	222
4	313	372	612	1,180	612	478	1,420	533	1,180	1,120	2,840	240
5	320	356	552	1,340	633	461	1,460	496	976	948	2,260	240
6	342	356	514	1,220	633	461	1,560	478	868	698	1,740	228
7	379	342	496	1,160	633	461	1,800	461	842	533	1,180	240
8	427	342	478	842	633	478	1,940	395	921	461	1,040	349
9	496	342	496	792	612	478	2,610	379	1,000	379	1,040	364
10	572	349	496	817	612	478	3,500	372	894	330	976	395
11	552	356	514	792	612	496	4,480	364	572	292	817	478
12	444	387	496	921	572	478	4,480	356	514	279	654	533
13	372	427	496	1,100	552	461	3,840	349	533	272	514	572
14	372	444	496	1,120	552	514	3,120	334	552	266	461	533
15	372	496	478	1,300	533	612	2,980	320	533	253	411	411
16	364	592	478	1,340	533	698	3,420	313	444	246	372	342
17	356	676	461	1,340	514	676	3,340	306	395	246	342	320
18	372	768	478	1,160	514	572	2,720	313	364	240	327	292
19	387	842	461	976	533	514	2,300	313	327	240	320	299
20	387	894	461	842	514	496	1,940	292	334	240	349	342
21	372	744	461	792	496	514	1,520	279	403	246	342	411
22	356	612	461	721	496	533	1,180	272	572	279	306	411
23	372	592	496	698	496	496	1,420	272	976	356	286	444
24	411	572	792	721	496	461	1,460	279	948	444	272	533
25	444	533	921	698	496	444	1,340	292	817	572	266	612
26	411	514	744	676	496	427	1,300	449	721	1,130	253	496
27	379	514	976	654	514	411	1,240	702	533	2,080	246	411
28	364	514	1,120	654	552	411	1,340	921	552	2,330	246	342
29	356	533	1,220	654	-	411	1,360	1,000	792	2,260	240	356
30	379	552	1,280	676	-	444	1,280	1,460	842	2,220	240	444
31	403	-	1,340	654	-	514	-	1,490	-	2,720	240	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,013	572	313	388	0.363	0.42
November	15,312	894	342	510	.477	.53
December	20,091	1,340	461	648	.606	.70
Calendar year 1937	412,368	5,090	313	1,130	1.06	14.34
January	29,840	1,400	654	963	.900	1.04
February	15,635	633	496	558	.521	.54
March	15,497	698	411	500	.467	.54
April	63,199	4,480	612	2,107	1.97	2.20
May	16,143	1,490	272	521	.487	.56
June	21,487	1,180	327	716	.669	.75
July	24,658	2,720	240	795	.743	.86
August	31,490	4,680	240	1,016	.950	1.10
September	11,322	612	222	377	.352	.39
Water year 1937-38	276,687	4,680	222	758	.708	9.63

Lumber River at Boardman, N. C.

Location.- Wire-weight gage, lat. 34°26'40", long. 78°56'35", at State highway bridge, 1 mile downstream from Atlantic Coast Line Railroad bridge at Boardman, Columbus County, and 1½ miles downstream from Big Swamp.

Drainage area.- 1,240 square miles.

Records available.- September 1929 to September 1938.

Extremes.- Maximum discharge observed during year, 5,920 second-feet July 30 (gage height, 8.72 feet); minimum, 268 second-feet May 24 (gage height, 1.62 feet).
1929-38: Maximum discharge observed, 10,800 second-feet Apr. 13, 1936 (gage height, 10.09 feet); minimum, 132 second-feet (estimated) Oct. 12, 1930.

Remarks.- Records good.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 20

1.6	285	3.5	650
1.8	317	4.0	750
2.0	352	4.5	860
2.5	450	5.0	1,030
3.0	550		

Jan. 21 to Sept. 30

1.6	268	3.0	520	7.0	2,640
1.8	300	4.0	720	8.0	4,340
2.0	334	5.0	985	9.0	6,780
2.5	425	6.0	1,560		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	430	670	990	805	540	600	1,170	700	1,480	5,180	600
2	300	410	690	1,030	805	540	785	1,120	700	1,480	4,640	560
3	300	390	690	1,030	805	540	1,120	1,020	760	1,410	4,160	520
4	317	410	670	1,030	780	540	1,350	915	915	1,290	3,980	501
5	317	410	670	1,030	760	560	1,640	830	1,230	1,170	3,620	501
6	317	390	690	990	760	560	1,640	740	1,480	1,070	3,440	600
7	317	390	690	990	760	540	1,640	680	1,640	985	3,120	720
8	317	370	710	990	760	520	1,640	600	1,640	885	2,640	805
9	334	370	710	955	760	520	2,120	560	1,640	805	2,120	855
10	334	352	690	920	760	520	2,960	520	1,640	720	1,820	885
11	334	352	690	920	760	520	4,540	482	1,730	640	1,560	915
12	352	430	670	920	740	520	4,960	444	1,820	580	1,290	985
13	352	510	670	920	720	540	4,960	388	1,730	482	1,170	1,170
14	352	550	650	920	700	560	4,740	370	1,640	444	1,070	1,350
15	352	570	630	920	680	560	4,740	370	1,640	425	985	1,410
16	352	610	630	955	660	640	4,340	352	1,730	370	855	1,350
17	370	650	610	990	640	660	3,800	334	1,820	406	780	1,170
18	370	670	610	990	620	700	3,280	334	1,820	444	740	1,070
19	370	690	590	1,030	620	740	2,960	334	1,820	463	680	985
20	370	710	590	1,030	600	760	2,640	334	1,920	540	680	1,020
21	370	750	570	985	600	780	2,240	317	1,920	660	660	1,070
22	370	770	570	950	580	780	2,020	300	1,920	720	640	1,730
23	390	790	610	885	560	760	2,020	284	2,020	720	660	2,960
24	390	835	750	855	560	720	1,920	268	2,120	740	680	3,280
25	390	835	790	855	540	680	1,920	284	2,240	885	680	2,960
26	410	810	810	830	540	660	1,730	455	2,120	1,480	620	2,500
27	430	770	860	805	540	680	1,560	640	2,020	2,360	640	2,360
28	430	750	920	830	540	700	1,410	660	1,730	4,160	680	2,640
29	470	730	920	805	-	700	1,350	680	1,560	5,420	720	3,120
30	470	690	955	805	-	700	1,290	700	1,480	5,920	700	3,280
31	450	-	955	805	-	640	-	700	-	5,660	640	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,297	470	300	364	0.294	0.34
November	17,394	835	352	580	.468	.52
December	21,930	955	570	707	.570	.66
Calendar year 1937	524,074	5,920	270	1,436	1.16	15.70
January	28,960	1,030	805	934	.753	.87
February	18,955	805	540	677	.546	.57
March	19,380	780	520	625	.504	.58
April	73,915	4,960	600	2,464	1.99	2.22
May	17,185	1,170	268	554	.447	.52
June	49,145	2,240	700	1,638	1.32	1.47
July	44,814	5,920	370	1,446	1.17	1.35
August	51,750	5,180	620	1,669	1.35	1.56
September	43,872	3,280	501	1,462	1.18	1.32
Water year 1937-38	398,597	5,920	268	1,092	.881	11.98

Black River at Kingstree, S. C.

Location.- Water-stage recorder, lat. 33°40', long. 79°50', at highway bridge at Kingstree, Williamsburg County, a quarter of a mile downstream from Broad Swamp. Zero of gage is 25.86 feet above mean sea level (unadjusted).

Drainage area.- 1,240 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum discharge during year, 6,730 second-feet Apr. 14 (gage height, 12.00 feet); minimum, 13 second-feet Sept. 17.
1929-38: Maximum discharge, 9,910 second-feet Apr. 13, 1936 (gage height, 13.07 feet); minimum, 4 second-feet June 30, July 1, 4, 5, 1935.
Maximum stage known, 18.0 feet Sept. 21, 1928 (discharge, 26,300 second-feet, estimated).

Remarks.- Records good. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	193	167	638	1,090	596	358	215	1,050	279	765	1,360	21
2	162	152	638	1,240	557	351	227	1,050	298	636	1,410	20
3	133	133	598	1,380	538	351	277	987	379	538	1,320	19
4	113	124	560	1,430	520	344	323	871	489	596	1,170	21
5	101	113	542	1,500	502	344	366	746	598	781	1,010	28
6	96	104	542	1,460	502	344	380	618	700	883	908	25
7	95	98	524	1,460	502	344	419	489	819	934	811	24
8	100	94	506	1,410	502	330	538	394	927	958	678	21
9	128	91	506	1,320	502	323	939	330	987	859	596	21
10	162	89	506	1,240	485	316	1,400	279	1,040	678	576	20
11	193	90	506	1,200	485	316	2,030	243	984	557	520	19
12	193	124	506	1,140	485	310	3,390	198	859	451	451	18
13	172	172	489	1,100	485	310	5,690	167	743	338	380	17
14	147	220	472	1,070	485	303	6,730	142	596	330	344	16
15	133	267	456	1,040	485	303	6,200	120	520	270	316	15
16	133	292	440	984	485	330	5,200	106	485	221	284	14
17	147	298	424	958	468	373	4,340	95	468	227	233	14
18	177	304	409	908	468	373	3,470	85	451	209	169	14
19	220	318	409	883	468	358	2,870	76	435	169	114	14
20	255	351	394	859	451	344	2,510	69	388	132	81	21
21	279	409	394	835	451	337	2,110	62	451	109	61	25
22	292	456	379	811	435	330	1,860	54	557	106	50	34
23	292	489	409	811	419	323	1,860	48	576	116	43	55
24	279	524	560	788	419	310	1,720	41	576	147	38	77
25	261	560	679	788	403	296	1,480	39	785	234	34	85
26	249	579	746	765	388	284	1,280	69	908	570	30	84
27	243	598	769	743	388	277	1,120	94	933	611	28	76
28	226	618	794	699	373	264	1,050	108	933	738	27	68
29	215	638	644	678	-	258	1,020	152	908	735	25	127
30	198	658	898	636	-	245	1,020	215	859	859	25	341
31	182	-	956	616	-	233	-	255	-	1,100	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,769	292	95	186	0.150	0.17
November	9,130	658	89	304	.245	.27
December	17,493	956	379	564	.455	.52
Calendar year 1937	325,382	5,440	20	891	.719	9.75
January	31,842	1,500	616	1,027	.828	.95
February	13,247	596	373	473	.381	.40
March	9,882	373	233	319	.257	.30
April	62,034	6,730	215	2,068	1.67	1.86
May	9,252	1,050	39	298	.240	.28
June	19,911	1,040	279	664	.535	.60
July	16,177	1,100	106	522	.421	.49
August	13,115	1,410	23	423	.341	.39
September	1,354	341	14	45.1	.036	.04
Water year 1937-38	209,206	6,730	14	573	.462	6.27

Catawba River at Catawba, N. C.

Location.- Water-stage recorder, lat. 35°42'50", long. 81°04'10", just downstream from bridge on U. S. Highway 70, a quarter of a mile upstream from Lyle Creek, half a mile upstream from Southern Railway bridge, and 1 mile northeast of Catawba, Catawba County.

Drainage area.- 1,540 square miles (including that of Lyle Creek).

Records available.- July 1896 to April 1902, November 1934 to September 1938.

Extremes.- Maximum discharge during year, 28,200 second-feet Oct. 20 (gage height, 20.05 feet), from rating curve extended above 17,700 second-feet; minimum, 139 second-feet Oct. 18 (gage height, 2.28 feet).

1896-1902, 1934-38: Maximum discharge observed, 81,500 second-feet May 22, 1901 (gage height, 29.0 feet, former site and datum), from rating curve extended above 10,000 second-feet; minimum observed, 124 second-feet Aug. 1, 1937 (gage height, 2.23 feet).

Maximum stage known, 44.1 feet sometime in July 1916 (from levels of State Bridge Department).

Remarks.- Records good except those below 500 second-feet, which are fair. Records include those of Lyle Creek. Large diurnal fluctuation from operation of power plant upstream. Flow largely regulated by several reservoirs. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-19						Oct. 20 to Sept. 30					
2.3	145	4.0	1,610	10.0	11,250	2.3	145	4.0	1,700		
2.6	270	5.0	3,040	12.0	14,650	2.6	268	5.0	3,160		
3.0	520	6.0	4,610	14.0	18,050	3.0	540	7.0	6,320		
3.5	1,010	8.0	7,910	16.0	21,450	3.5	1,070				

Note.- Same as preceding table above 8.2 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,140	4,410	3,820	1,730	4,180	3,570	1,350	260	2,280	2,160	2,050	1,170
2	730	4,860	3,690	654	4,040	3,870	840	2,360	1,990	783	2,380	1,230
3	152	3,960	3,680	3,110	3,790	3,470	176	2,540	2,300	180	2,900	475
4	2,190	3,900	1,190	3,970	3,620	2,820	3,040	2,470	1,010	630	3,750	156
5	1,850	3,360	288	4,170	1,160	1,160	3,770	2,570	170	1,330	3,400	986
6	2,540	1,410	3,170	4,170	173	192	3,510	1,700	2,260	1,410	2,150	1,320
7	2,480	232	4,120	3,100	3,090	2,310	2,340	1,100	3,020	1,780	392	1,330
8	2,500	3,380	4,180	1,120	4,160	2,690	1,530	184	2,420	1,560	3,010	1,040
9	956	3,670	4,060	188	3,990	3,100	691	2,140	2,410	976	4,380	1,450
10	148	3,760	3,800	3,030	3,760	2,870	200	2,410	2,450	213	4,450	634
11	2,170	3,840	1,100	4,110	3,160	1,760	2,840	2,240	930	1,460	4,230	156
12	2,300	3,300	418	4,170	978	835	2,930	1,910	221	1,440	4,060	1,240
13	2,400	1,090	3,280	3,710	190	200	2,480	1,810	1,780	1,140	2,960	1,290
14	2,400	204	4,130	3,030	3,300	2,410	2,460	914	1,850	1,560	235	1,080
15	2,320	3,170	4,080	1,260	4,260	2,610	2,410	156	2,290	1,120	2,960	955
16	1,240	3,520	4,050	190	4,320	2,610	746	2,080	2,440	616	4,320	1,020
17	152	3,810	4,040	2,410	4,250	2,550	176	1,910	2,340	159	4,120	977
18	2,320	3,260	3,290	3,880	3,160	1,510	1,930	2,000	971	1,610	4,200	159
19	11,100	2,580	640	3,870	1,520	760	2,430	1,460	551	2,460	2,400	1,160
20	19,300	938	3,170	3,860	166	204	3,360	2,340	2,380	1,470	951	1,540
21	6,800	176	4,100	3,820	3,260	2,360	2,720	1,280	2,240	1,150	170	1,470
22	4,630	2,940	3,800	743	3,950	2,850	2,580	314	2,070	1,290	1,680	1,410
23	2,880	3,920	2,260	173	4,100	2,590	935	2,400	2,440	1,310	2,060	1,410
24	3,350	3,690	942	2,780	3,260	2,070	166	2,850	1,650	804	2,360	1,080
25	5,540	2,690	398	4,160	2,200	1,440	2,380	1,970	1,350	2,540	1,580	330
26	5,110	2,310	530	3,830	664	1,200	2,640	1,790	211	2,070	1,110	1,580
27	5,930	1,200	2,450	3,490	202	254	3,220	1,580	1,620	1,760	716	1,620
28	6,040	544	2,540	2,130	3,150	2,340	2,680	622	2,050	2,390	159	1,420
29	4,370	3,200	2,920	1,180	-	2,710	2,530	196	1,890	2,460	1,290	2,060
30	2,940	3,810	3,230	320	-	3,370	1,230	1,900	2,330	1,430	1,460	1,470
31	1,560	-	2,690	3,180	-	2,400	-	2,300	-	500	1,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	111,538	19,300	148	3,598	2.34	2.70
November	83,124	4,860	176	2,771	1.80	2.01
December	86,056	4,180	288	2,776	1.80	2.08
Calendar year 1937	1,058,581	19,300	136	2,900	1.88	25.58
January	81,518	4,170	173	2,630	1.71	1.97
February	76,053	4,320	166	2,788	1.81	1.88
March	65,085	3,870	192	2,100	1.36	1.57
April	60,290	3,770	166	2,010	1.31	1.46
May	51,756	2,850	156	1,670	1.08	1.24
June	53,914	3,020	170	1,797	1.17	1.30
July	41,761	2,540	159	1,347	.875	1.01
August	73,263	4,250	159	2,363	1.53	1.76
September	33,218	2,060	156	1,107	.719	.80
Water year 1937-38	819,576	19,300	148	2,245	1.46	19.78

Peak discharge.- Oct. 20 (6 a.m.) 28,200 sec.-ft.

Wateree River near Camden, S. C.

Location.- Water-stage recorder, lat. 34°14'50", long. 80°39'20", at steel highway bridge, 5,000 feet upstream from Seaboard Railway bridge, 3 miles southwest of Camden, Kershaw County, and 7 miles downstream from Wateree Dam. Zero of gage 119.73 feet above mean sea level.

Drainage area.- 5,010 square miles.

Records available.- January 1903 to June 1910, October 1929 to September 1938.

Extremes.- Maximum discharge during year, 13,300 second-feet Apr. 9 (gage height, 14.92 feet); minimum, 203 second-feet Sept. 26 (gage height, 1.63 feet), caused by shut-down of power plant; minimum daily discharge, 365 second-feet July 17.

1904-10: Maximum discharge, 198,000 (estimated) Aug. 26, 1908 (gage height, 39.7 feet, from records of U. S. Weather Bureau at site 1½ miles downstream); minimum daily discharge, 690 second-feet Oct. 21, 1907.

1929-38: Maximum discharge, 168,000 second-feet Apr. 7, 1936 (gage height, 36.63 feet); minimum, about 153 second-feet Oct. 3, 1932, Dec. 25, 1933 (gage height, 1.49 feet); minimum daily discharge, 202 second-feet Dec. 10, 1933.

Maximum stage known, 40.4 feet July 18, 1916, at site 1½ miles downstream, from records of U. S. Weather Bureau (discharge 207,000 second-feet, estimated).

Remarks.- Records fair. Large diurnal fluctuation caused by operation of power plant at Wateree Reservoir (capacity, about 7,000,000,000 cubic feet). Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 1				Nov. 2 to Sept. 30			
2.5	480	6.5	3,675	2.1	357	5.0	2,550
3.0	705	8.0	5,530	2.4	480	6.0	3,790
3.6	1,040	10.0	7,540	2.8	680	8.0	6,090
4.5	1,670	12.0	9,740	3.4	1,055	11.0	9,090
5.5	2,550			4.0	1,545	14.0	12,140

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,220	8,740	8,180	3,940	8,170	8,580	4,600	1,360	2,280	7,280	5,930	3,530
2	2,510	11,200	6,600	2,750	8,210	8,250	3,600	5,620	3,100	3,080	6,990	3,270
3	682	10,500	4,940	6,060	5,230	5,600	1,750	6,220	4,770	*535	7,660	1,840
4	4,310	10,300	2,600	8,280	3,080	4,260	5,260	6,170	2,130	1,510	6,560	*465
5	4,730	8,370	2,460	9,150	3,430	2,820	7,060	8,540	595	2,500	8,470	2,590
6	4,880	6,950	6,410	6,860	1,230	555	6,830	7,000	4,930	2,620	4,700	2,080
7	5,310	1,200	7,810	5,820	5,470	4,540	9,000	2,700	7,990	3,100	946	1,870
8	4,250	5,440	7,910	4,520	8,370	5,220	7,750	676	7,840	2,880	5,150	1,850
9	2,270	9,340	6,220	3,290	8,490	5,440	12,000	5,130	6,820	1,830	8,120	2,290
10	731	9,690	4,280	7,320	5,730	4,700	7,720	7,690	6,340	*572	8,560	1,480
11	3,940	9,820	4,980	10,200	3,810	4,320	9,740	7,220	3,480	3,230	8,360	510
12	4,940	8,620	1,350	10,600	4,280	930	11,800	6,660	685	2,820	6,430	1,820
13	5,420	7,830	5,180	7,880	1,010	*471	11,200	5,600	4,080	3,430	6,040	2,060
14	5,670	2,160	7,630	6,210	6,390	4,420	11,000	3,520	4,510	3,410	1,300	1,920
15	4,800	5,300	8,350	6,140	8,590	4,510	7,740	718	5,060	2,450	5,700	2,540
16	1,920	9,410	7,270	4,770	8,480	3,860	5,900	3,590	5,340	930	9,380	2,130
17	520	10,000	6,110	7,190	6,250	3,060	4,400	3,790	5,580	*335	9,730	2,570
18	4,660	8,910	5,960	9,740	4,150	3,120	7,860	3,310	3,820	2,910	9,560	580
19	6,520	6,980	2,290	8,840	3,760	2,100	9,480	3,740	698	4,210	8,750	2,690
20	7,920	5,970	5,530	8,280	786	642	10,000	3,710	3,760	2,200	4,440	2,010
21	6,870	1,360	7,540	5,910	6,490	3,350	9,780	1,090	5,310	2,330	618	1,890
22	6,610	6,510	7,650	5,990	8,530	4,210	8,900	*400	5,290	2,930	4,300	3,280
23	1,330	10,000	5,810	2,960	8,340	5,240	6,880	3,640	4,070	1,230	3,910	3,030
24	488	10,400	4,800	6,430	5,500	4,810	6,720	4,220	5,700	*438	3,880	5,200
25	5,260	7,740	2,470	8,130	4,200	4,340	8,250	4,100	2,600	4,530	4,540	858
26	6,750	4,180	2,080	6,280	3,410	1,470	9,540	3,310	570	5,540	3,680	3,140
27	6,870	4,990	6,230	6,130	958	*472	8,230	3,390	3,660	6,530	2,450	4,100
28	6,930	1,040	8,300	4,690	5,930	4,100	8,150	1,470	3,470	7,410	*500	3,950
29	9,100	5,620	7,880	4,190	-	5,510	7,350	*380	3,410	7,230	3,790	4,110
30	4,830	7,920	7,020	769	-	4,810	5,660	2,700	5,950	3,950	3,670	3,480
31	7,050	-	5,860	5,810	-	4,480	-	2,800	-	719	3,270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	142,291	9,100	488	4,590	0.916	1.06
November	218,490	11,200	1,040	7,283	1.45	1.62
December	177,700	8,350	1,350	5,732	1.14	1.31
Calendar year 1937	2,726,566	44,300	488	7,470	1.49	20.23
January	197,129	10,600	769	6,359	1.27	1.46
February	148,274	8,590	786	5,296	1.06	1.10
March	120,210	8,580	471	3,878	.774	.89
April	235,170	12,000	1,750	7,839	1.56	1.74
May	124,664	8,540	380	4,021	.803	.93
June	123,838	7,990	570	4,128	.824	.92
July	94,859	7,410	365	3,060	.611	.70
August	171,574	9,730	600	5,535	1.10	1.27
September	73,133	6,200	465	2,438	.487	.54
Water year 1937-38	1,827,332	12,000	365	5,006	.999	13.54

*Gage height missing; discharge computed from graph drawn on basis of partial record and records for preceding and following days.

Santee River at Ferguson, S. C.

Location.- Water-stage recorder, lat. 33°26'15", long. 80°16'20", at Ferguson, Orangeburg County, 4 miles downstream from Eutaw Creek. Zero of gage is 42.81 feet above mean sea level.

Drainage area.- 14,800 square miles.

Records available.- December 1907 to September 1938.

Average discharge.- 30 years, 19,020 second-feet.

Extremes.- Maximum discharge during year, 38,000 second-feet Oct. 27 (gage height, 13.54 feet); minimum, 4,470 second-feet Sept. 28 (gage height, 2.46 feet).
1907-38: Maximum discharge observed, 368,000 second-feet July 22, 1916 (gage height, 24.5 feet); minimum, 2,570 second-feet Sept. 2, 1925 (gage height, -0.75 foot, caused by regulation of reservoirs upstream).

Remarks.- Records good. No daily fluctuation but very distinct weekly fluctuation during medium and low-water periods caused by operation of power plants at Wateree Reservoir, on Wateree River (capacity, about 7,000,000,000 cubic feet), and Lake Murray, on Saluda River (capacity, about 92,000,000,000 cubic feet). Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.0	4,920	10.0	14,520	12.9	26,000
4.0	5,960	11.0	16,720	13.2	30,500
6.0	8,400	12.0	20,030	13.5	38,000
8.0	11,180	12.5	22,600		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18,500	30,500	14,100	20,000	11,900	8,400	10,900	17,200	*8,790	15,600	35,000	10,400
2	18,800	30,500	16,700	20,000	13,100	9,320	11,000	15,600	14,000	16,200	28,800	10,900
3	19,200	28,800	17,800	18,100	15,600	11,800	12,400	11,800	16,000	15,300	25,000	10,700
4	16,500	27,200	17,500	15,600	16,200	12,700	16,200	11,600	16,500	12,100	22,000	10,600
5	12,700	26,000	15,800	17,000	15,600	12,300	18,100	14,100	17,200	8,140	20,900	9,600
6	16,200	26,000	12,700	18,800	13,200	11,000	19,200	15,100	17,800	5,630	19,600	11,800
7	18,800	25,000	10,700	19,600	11,300	9,460	20,000	14,900	15,800	7,620	18,100	13,800
8	20,500	23,300	13,400	19,600	9,180	7,620	21,400	14,500	15,300	9,460	15,800	13,800
9	22,000	18,800	16,200	19,200	9,600	8,140	23,300	12,400	16,700	9,880	12,600	12,300
10	23,300	18,800	17,200	19,200	12,300	10,300	25,000	9,600	17,800	9,740	13,100	11,200
11	25,000	20,500	16,700	18,100	13,400	10,900	27,200	10,700	*18,100	8,010	14,900	11,000
12	23,300	22,600	15,100	18,500	13,600	10,900	30,500	13,600	*17,800	5,960	15,800	9,050
13	21,400	23,300	13,200	19,200	10,700	12,600	32,500	14,300	*16,000	6,780	16,000	6,540
14	21,400	24,100	10,200	20,000	9,880	12,700	35,000	14,300	*12,900	8,920	15,800	7,880
15	20,900	24,100	13,100	20,000	8,400	10,400	35,000	13,600	*13,200	9,600	14,000	9,740
16	20,900	22,000	16,200	19,600	9,460	10,400	30,500	11,300	*14,500	10,200	10,200	10,200
17	20,500	22,000	17,500	18,500	11,800	11,300	28,800	8,270	*14,700	10,000	10,000	10,400
18	17,500	22,600	17,800	16,500	12,700	11,500	24,100	8,400	14,900	7,750	12,700	9,180
19	12,400	23,300	17,200	17,200	12,400	11,300	20,000	11,300	14,700	5,120	14,000	7,380
20	12,900	24,100	16,000	18,100	11,300	11,600	19,200	11,800	13,800	5,220	14,100	5,850
21	15,300	24,100	12,600	19,600	10,000	10,700	19,200	10,900	11,000	7,880	14,000	5,520
22	18,100	22,000	13,400	20,000	7,880	8,790	20,000	*10,900	*12,400	9,600	12,600	6,900
23	20,000	17,200	15,100	19,200	9,050	8,790	20,500	*9,320	*14,300	13,200	9,050	7,020
24	21,400	17,800	15,600	17,200	11,900	10,000	20,900	*6,660	*14,900	14,900	10,700	7,020
25	25,000	19,600	16,200	14,300	13,100	10,900	20,000	*8,400	14,700	15,800	12,300	7,500
26	32,500	20,000	16,500	15,300	13,100	11,000	18,500	*12,300	14,500	17,200	11,800	7,750
27	38,000	19,200	15,300	17,200	12,100	10,700	18,500	*13,600	12,900	18,800	12,100	5,850
28	36,000	17,000	13,200	18,100	10,600	9,740	19,200	*13,800	10,600	20,500	11,900	5,020
29	35,000	14,700	14,700	17,800	-	7,880	19,200	*12,600	*12,600	22,000	9,600	7,620
30	32,500	11,900	17,500	16,200	-	9,600	18,100	*11,000	14,700	25,000	6,180	8,400
31	30,500	-	19,200	14,100	-	11,000	-	*9,050	-	30,500	7,020	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	689,000	38,000	12,400	22,230	1.50	1.73
November	667,000	30,500	11,900	22,230	1.50	1.67
December	474,400	19,200	10,200	15,300	1.03	1.19
Calendar year 1937	8,924,980	59,000	8,140	24,450	1.65	22.42
January	561,800	20,000	14,100	18,120	1.22	1.41
February	329,350	16,200	7,880	11,760	.795	.83
March	323,740	12,700	7,620	10,440	.705	.81
April	654,400	35,000	10,900	21,810	1.47	1.64
May	372,900	17,200	6,660	12,030	.813	.94
June	439,090	18,100	8,790	14,640	.989	1.10
July	382,610	30,500	5,120	12,340	.834	.96
August	465,650	35,000	6,180	15,020	1.01	1.16
September	270,920	13,800	5,020	9,031	.610	.68
Water year 1937-38	5,630,860	38,000	5,020	15,430	1.04	14.12

*Gage height missing; discharge computed from graph drawn on basis of partial recorder record, daily gage readings, and weather records.

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Linville River at Branch, N. C.

Location.- Water-stage recorder, lat. 35°47'50", long. 81°53'20", at steel highway bridge at Branch, Burke County, a quarter of a mile upstream from Lake James.

Drainage area.- 65 square miles.

Records available.- June 1922 to September 1938.

Average discharge.- 16 years, 139 second-feet.

Extremes.- Maximum discharge during year, 3,660 second-feet Oct. 19 (gage height, 5.92 feet), from rating curve extended above 2,000 second-feet: minimum, 27 second-feet Sept. 24, 26 (gage height, 1.64 feet).

1922-38: Maximum discharge, 16,800 second-feet Aug. 15, 1928 (gage height, about 12.0 feet, from floodmarks), from rating curve extended above 2,000 second-feet; minimum, 7 second-feet Sept. 8, 1925 (gage height, 1.28 feet).

Remarks.- Records good except those for periods when recorder clock was not running, which are fair. Discharge for days of ice effect, Dec. 11, Jan. 28, based on gage heights, weather records, and comparison with records of other streams in the vicinity.

Rating table, water year 1937-38 except days of ice effect (gage height, in feet, and discharge, in second-feet)

1.7	36	3.0	545
1.8	53	3.5	910
2.0	93	4.0	1,370
2.3	175	5.0	2,480
2.6	306		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	179	125	156	139	122	103	75	197	68	396	64
2	46	163	117	169	125	115	112	74	175	64	370	62
3	99	150	112	130	117	153	103	70	197	70	450	62
4	*373	139	107	128	112	205	95	68	156	*161	276	74
5	*329	†130	107	122	110	179	87	66	122	125	208	64
6	266	†130	107	117	105	156	80	66	112	87	206	59
7	153	†120	98	130	103	160	122	64	93	76	475	64
8	133	†120	105	122	95	147	125	62	107	72	564	72
9	115	†110	98	112	93	144	133	61	95	*129	526	62
10	192	†110	76	105	91	414	122	59	91	*230	333	59
11	107	107	85	107	143	349	115	57	*137	150	306	59
12	100	340	89	105	216	256	107	57	103	112	190	55
13	98	*544	95	105	166	201	93	61	91	93	182	53
14	95	281	93	98	147	197	93	57	80	87	163	53
15	93	230	98	98	144	175	93	93	74	95	144	61
16	74	169	98	93	141	197	91	76	70	89	133	53
17	80	182	98	93	153	156	95	64	76	76	122	59
18	124	141	125	98	141	166	112	62	134	78	117	51
19	2,180	139	117	95	156	141	105	64	122	221	105	44
20	697	133	105	93	179	144	103	62	100	247	95	46
21	336	120	98	91	150	144	105	62	95	878	91	44
22	306	107	93	93	141	133	110	62	87	1,300	85	46
23	360	105	105	98	163	144	91	72	78	1,040	80	43
24	225	110	136	155	179	144	87	91	72	630	76	36
25	212	107	136	296	144	128	85	103	82	474	85	38
26	*201	107	128	194	144	125	82	107	*162	338	85	36
27	*450	147	128	163	139	117	80	117	115	262	72	38
28	378	139	*304	150	133	112	78	112	93	205	66	36
29	296	153	234	144	-	107	76	112	76	205	66	39
30	230	133	194	133	-	107	74	229	72	427	66	50
31	190	-	169	136	-	103	-	317	-	332	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	8,595	2,180	46	277	4.26	4.91
November	4,845	544	105	162	2.49	2.78
December	3,780	304	76	122	1.88	2.17
Calendar year 1937	57,756	2,180	31	158	2.43	33.08
January	3,929	296	91	127	1.95	2.25
February	3,859	216	91	139	2.14	2.23
March	5,171	414	103	167	2.57	2.96
April	2,957	133	74	98.6	1.52	1.70
May	2,735	317	57	88.2	1.36	1.57
June	3,264	197	70	109	1.68	1.87
July	8,611	1,300	64	278	4.28	4.93
August	6,203	564	66	200	3.08	3.55
September	1,582	74	36	52.7	.811	.90
Water year 1937-38	55,561	2,180	36	152	2.34	31.82

Peak discharge.- Oct. 19 (8:30 a.m.) 3,660 sec.-ft.; July 21 (9:30 p.m.) 2,360 sec.-ft.; July 22 (3 a.m.) 2,240 sec.-ft.; July 23 (7:30 p.m.) 1,370 sec.-ft.

*Recorder clock stopped; discharge computed from gage-height graph drawn on basis of partial record, maximum and minimum range in stage, and twice daily readings.

†Recorder clock stopped; discharge based on precipitation records and maximum and minimum range in stage during period of missing record.

Little Sugar Creek near Charlotte, N. C.

Location.- Water-stage recorder and concrete control, lat. 35°09'15", long. 80°51'10", just upstream from sewage-disposal plant of city of Charlotte, a quarter of a mile downstream from Brier Creek and 5 miles south of Charlotte, Mecklenburg County. Zero of gage is 571.6 feet above mean sea level (city of Charlotte, N. C., datum).

Drainage area.- 41.4 square miles.

Records available.- July 1924 to September 1938.

Average discharge.- 14 years, 45.9 second-feet.

Extremes.- Maximum discharge during year, 1,020 second-feet July 24 (gage height, 6.43 feet); minimum, 3.7 second-feet July 18 (gage height, 1.60 feet).
1924-38: Maximum discharge, 8,370 second-feet Apr. 6, 1936 (gage height, 16.2 feet, from floodmarks), from rating curve extended above 2,000 second-feet; minimum, 1.6 second-feet July 30, Aug. 1, 1925.

Remarks.- Records good above 50 second-feet and fair below except those for periods of missing gage heights, Dec. 20-22, Jan. 7-15, which were computed on basis of weather records and records for Little Brown Creek near Polkton and North Fork of Jones Creek near Wadesboro and are poor.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 27

1.7	7.5	2.6	147	3.7	368
1.8	13	2.8	195	4.0	426
2.0	30	3.0	239	4.5	528
2.2	60	3.2	277		
2.4	100	3.4	313		

Dec. 28 to Sept. 30

1.6	3.7
1.8	13.3
2.0	31

Note.- Same as preceding table above 2.2 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	14	15	22	27	16	33	12	7.6	11	31	22
2	9.2	14	14	68	24	15	171	11	142	10	21	27
3	9.2	14	12	30	23	22	57	11	300	9.9	9.3	55
4	11	14	12	23	22	19	32	10	31	9.9	8.2	14
5	11	14	17	20	21	16	26	13	19	9.3	7.6	9.9
6	12	14	18	19	21	27	24	12	14	8.7	8.7	9.9
7	45	13	12	170	20	18	36	9.9	20	8.2	8.8	9.3
8	14	13	11	40	20	16	91	9.9	60	7.6	8.7	8.7
9	12	12	12	28	19	16	163	10	16	7.6	11	8.2
10	11	12	11	22	19	276	44	8.7	23	9.3	10	8.2
11	11	12	9.7	26	19	52	31	8.7	20	8.2	9.9	7.6
12	11	98	9.7	24	19	34	27	8.7	13	7.2	9.3	9.3
13	10	48	11	22	18	26	24	14	12	6.8	7.6	8.7
14	9.7	22	9.7	20	18	23	22	26	11	9.3	8.2	7.6
15	9.2	18	9.7	20	17	23	20	11	9.9	5.6	13	7.2
16	9.2	16	9.7	22	17	48	19	9.9	23	5.3	18	6.8
17	9.2	16	10	23	16	32	26	9.9	13	4.5	9.6	6.8
18	9.7	14	12	24	17	45	36	10	9.3	5.6	67	6.4
19	50	13	11	26	17	26	26	9.9	87	7.2	12	6.0
20	63	16	11	27	16	30	32	8.7	42	24	9.3	6.8
21	18	12	11	27	16	26	23	47	15	19	9.3	6.4
22	14	11	12	28	15	22	21	13	12	13	9.3	6.8
23	15	11	147	27	28	21	19	48	12	104	8.2	6.8
24	13	11	84	31	39	24	16	29	16	210	33	6.4
25	12	11	29	34	21	22	15	14	61	154	33	6.0
26	23	11	20	28	18	24	14	34	258	39	9.3	7.6
27	210	65	67	25	17	41	13	12	71	16	25	7.2
28	30	27	190	22	18	24	13	9.3	21	15	9.3	7.6
29	19	19	38	22	-	21	13	25	16	13	55	7.6
30	16	16	28	23	-	21	12	10	12	12	24	38
31	14	-	24	35	-	19	-	8.7	-	9.3	7.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	720.1	210	9.2	23.2	0.560	0.65
November	601	98	11	20.0	.483	.54
December	887.5	190	9.7	28.6	.691	.80
Calendar year 1937	16,989.7	1,040	6.7	46.5	1.12	15.28
January	978.0	170	19	31.5	.761	.88
February	560	39	15	20.0	.483	.50
March	1,045	276	15	33.7	.814	.94
April	1,099	171	12	36.6	.884	.99
May	474.3	47	8.7	15.3	.370	.43
June	1,366.8	300	7.6	45.6	1.10	1.23
July	779.5	210	4.5	25.1	.606	.70
August	509.2	67	6.8	16.4	.396	.46
September	345.8	55	6.0	11.5	.278	.31
Water year 1937-38	9,366.2	300	4.5	25.7	.621	8.43

Peak discharge.- June 3 (5 a.m.) 660 sec.-ft.; June 26 (1:15 a.m.) 785 sec.-ft.; July 24 (1:45 p.m.) 1,020 sec.-ft.

Broad River near Chimney Rock, N. C.

Location.- Water-stage recorder, lat. 35°25'35", long. 82°10'45", 1,000 feet downstream from Lake Lure Dam and 3 miles east of Chimney Rock, Rutherford County.

Drainage area.- 97 square miles.

Records available.- March 1927 to September 1938. May 1907 to June 1909 at Ure, 1 1/8 miles downstream.

Average discharge.- 11 years (1927-38), 176 second-feet.

Extremes.- Maximum discharge during year, 7,120 second-feet Oct. 19 (gage height, 6.30 feet), from rating curve extended above 4,140 second-feet on basis of computation of approximate discharge over Lake Lure Dam; minimum, 1.4 second-feet Mar. 12, 13 (gage height, 0.39 foot); minimum daily discharge, 1.5 second-feet Mar. 13.
1907-9, 1927-38: Maximum discharge, about 20,500 second-feet Aug. 15, 1928 (gage height, 15.0 feet), from computation of approximate discharge over Lake Lure Dam; minimum, 0.7 second-foot Sept. 13, 1928 (gage height, 0.26 foot); minimum daily discharge, 0.8 second-foot Sept. 13, 14, 1928.

Remarks.- Records good except those below 5 second-feet, which are fair, and those above 5,000 second-feet, which are poor. Large diurnal fluctuation caused by operation of power plant at dam. Flow below 500 second-feet regulated by storage in Lake Lure.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.4	1.5	1.3	134	3.0	1,170
.6	6.8	1.6	250	3.5	1,670
.8	20	2.0	460	4.0	2,330
1.0	48	2.5	780	5.0	4,450

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	18	147	155	238	244	231	2.2	82	85	157	80
2	172	242	232	6.8	241	154	125	145	237	126	239	81
3	3.3	321	241	240	237	77	2.2	147	231	174	237	85
4	164	333	154	238	234	77	249	81	121	167	155	80
5	263	245	2.8	239	134	163	235	82	164	2.9	152	147
6	166	202	233	232	2.4	2.9	242	148	85	2.8	87	103
7	163	3.4	242	231	244	238	104	80	65	77	173	249
8	163	152	145	158	253	233	209	2.4	84	82	309	315
9	3.6	155	159	6.8	248	273	82	158	83	124	150	147
10	3.6	157	150	234	250	358	2.6	147	148	164	148	162
11	3.3	151	159	240	247	329	231	150	123	82	148	80
12	156	281	4.0	146	131	1.9	241	85	154	2.6	231	152
13	84	295	148	148	2.2	1.5	80	85	22	85	202	151
14	153	3.3	152	150	156	78	79	251	147	3.1	2.4	148
15	156	3.1	145	160	248	82	237	2.6	143	156	232	149
16	159	234	26	6.4	245	82	84	148	80	87	147	151
17	4.0	237	238	234	248	254	2.8	83	80	3.1	150	155
18	343	233	79	152	241	248	233	83	132	86	84	2.6
19	2,330	240	2.2	147	173	86	231	84	160	335	81	151
20	676	245	240	144	1.9	1.9	236	83	83	437	89	82
21	566	4.0	141	145	245	157	228	124	84	181	2.4	83
22	508	242	146	76	239	156	148	80	226	181	147	82
23	356	150	144	2.9	242	154	81	129	240	284	84	81
24	335	240	146	235	240	241	5.1	82	154	460	80	45
25	335	86	153	239	196	241	237	84	114	240	80	2.2
26	315	150	6.4	237	133	79	145	151	170	240	148	81
27	422	82	210	237	2.2	1.9	148	83	126	238	79	83
28	349	3.1	237	153	238	237	146	115	148	156	3.7	84
29	318	150	146	84	-	232	82	107	149	86	143	83
30	243	152	144	2.6	-	236	44	274	150	248	86	156
31	13	-	148	233	-	229	-	286	-	82	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,010.8	2,330	3.3	291	3.00	3.46
November	5,009.9	333	3.1	167	1.72	1.92
December	4,520.4	242	2.2	146	1.50	1.73
Calendar year 1937	79,136.7	2,330	2.2	217	2.24	30.41
January	4,912.5	240	2.6	158	1.63	1.88
February	5,309.7	253	1.9	190	1.96	2.04
March	4,948.1	358	1.5	160	1.65	1.90
April	4,400.7	249	2.2	147	1.52	1.70
May	3,562.2	286	2.2	115	1.19	1.37
June	3,985	240	22	133	1.37	1.53
July	4,681.5	460	26	151	1.56	1.80
August	4,106.5	309	2.4	132	1.36	1.57
September	3,450.8	315	2.2	115	1.19	1.33
Water year 1937-38	57,898.1	2,330	1.5	159	1.64	22.26

Peak discharge.- Oct. 19 (6 a.m.) 7,120 sec.-ft.

Broad River near Boiling Springs, N. C.

Location.- Water-stage recorder, lat. 35°12'35", long. 81°41'55", half a mile upstream from Sandy Run Creek and 3½ miles southwest of Boiling Springs, Cleveland County.

Drainage area.- 815 square miles.

Records available.- June 1925 to September 1938.

Average discharge.- 13 years, 1,446 second-feet.

Extremes.- Maximum discharge during year, 23,500 second-feet Oct. 20 (gage height, 13.94 feet); minimum, 312 second-feet Sept. 26 (gage height, 1.64 feet); minimum daily discharge, 416 second-feet Sept. 26.

1925-38: Maximum discharge, 56,800 second-feet Aug. 16, 1928 (gage height, 24.3 feet, present datum), from rating curve extended above 28,000 second-feet; minimum, 186 second-feet Sept. 21, 22, 1925; minimum daily discharge, 232 second-feet Sept. 20, 1925.

Remarks.- Records good. Considerable diurnal fluctuation caused by operation of power plant upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	942	1,520	1,310	1,390	1,420	1,260	1,400	678	1,590	894	1,190	816
2	903	1,400	1,280	1,280	1,460	1,360	1,520	656	1,640	800	1,760	776
3	772	1,600	1,360	1,110	1,380	1,250	1,460	965	1,780	546	1,560	1,370
4	1,690	1,610	1,280	1,480	1,350	1,530	964	1,020	1,480	672	1,550	1,470
5	2,100	1,580	1,270	1,500	1,370	1,160	1,440	929	1,230	691	1,720	1,000
6	1,640	1,500	962	1,540	1,260	1,170	1,360	913	952	730	1,560	988
7	1,320	1,260	1,310	1,600	886	860	1,420	975	1,220	737	2,980	1,210
8	1,280	889	1,410	1,540	1,260	1,230	1,440	692	1,910	752	2,360	1,530
9	1,170	1,240	1,330	1,140	1,340	1,300	1,560	669	1,130	638	2,220	1,210
10	976	1,350	1,270	1,000	1,300	2,800	1,190	904	994	650	2,060	1,020
11	766	1,250	1,190	1,470	1,360	2,600	932	983	996	742	1,770	650
12	992	1,280	938	1,570	1,140	1,560	1,420	998	1,100	874	1,420	613
13	1,140	1,530	852	1,450	938	1,100	1,360	854	1,100	754	1,280	1,150
14	1,100	1,140	1,160	1,380	852	1,050	1,150	1,320	948	804	1,280	888
15	1,140	859	1,220	1,340	1,200	1,560	1,190	1,150	1,050	858	793	903
16	1,100	1,020	1,210	1,090	1,280	1,720	1,280	766	1,110	652	1,180	821
17	836	1,220	1,040	930	1,280	1,970	1,150	1,020	959	436	1,210	830
18	750	1,250	1,040	1,320	1,270	1,640	910	1,050	996	514	1,100	500
19	15,100	1,190	899	1,300	1,380	1,510	1,580	1,020	888	2,040	1,010	465
20	17,300	1,300	844	1,190	1,190	1,080	1,320	924	1,140	4,830	1,010	814
21	4,230	1,070	1,260	1,090	903	1,040	1,290	730	1,770	3,690	806	824
22	2,880	892	1,230	1,130	1,280	1,670	1,280	706	1,370	3,340	616	818
23	3,000	1,270	1,340	915	1,470	1,520	1,200	725	1,200	4,540	940	873
24	2,340	1,260	1,480	976	1,470	1,500	844	1,010	1,190	3,490	937	838
25	2,100	1,290	1,390	2,280	1,130	1,470	766	1,010	1,180	2,740	1,020	657
26	2,260	946	1,080	1,860	1,030	1,430	1,160	1,090	721	2,410	958	416
27	4,320	1,350	952	1,540	968	1,040	1,120	1,160	962	2,140	916	696
28	2,840	1,490	1,810	1,450	832	930	1,030	978	1,440	1,910	560	721
29	2,220	1,020	1,740	1,370	-	1,640	1,040	903	1,010	1,400	562	777
30	2,040	1,320	1,580	1,160	-	1,430	779	5,800	990	2,050	886	916
31	1,800	-	1,420	957	-	1,370	-	2,270	-	1,990	802	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	83,047	17,300	750	2,679	3.29	3.79
November	37,896	1,610	859	1,263	1.55	1.73
December	38,457	1,810	844	1,241	1.52	1.75
Calendar year 1937	702,899	17,300	534	1,926	2.36	32.08
January	41,348	2,280	915	1,334	1.64	1.89
February	33,999	1,470	832	1,214	1.49	1.55
March	44,750	2,800	860	1,444	1.77	2.04
April	36,555	1,580	766	1,218	1.49	1.66
May	34,868	5,800	656	1,125	1.38	1.59
June	36,046	1,910	721	1,202	1.47	1.64
July	49,314	4,830	436	1,591	1.95	2.25
August	40,016	2,980	560	1,291	1.58	1.82
September	26,580	1,530	416	886	1.09	1.22
Water year 1937-38	502,876	17,300	416	1,378	1.69	22.93

Peak discharge.- Oct. 20 (6:45 a.m.) 23,500 sec.-ft.; May 30 (9:30 a.m.) 10,400 sec.-ft.

Broad River at Richtex, S. C.

Location.- Water-stage recorder, lat. 34°11', long. 81°12', 1 mile upstream from Little River and Richtex. Fairfield County. Zero of gage is 164.84 feet (revised) above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 4,800 square miles.

Records available.- November 1925 to September 1938.

Average discharge.- 10 years (1928-27, 1929-38), 6,186 second-feet.

Extremes.- Maximum discharge during year, 55,800 second-feet Oct. 21 (gage height, 13.53 feet); minimum, 169 second-feet Aug. 22 (gage height, 0.32 foot); minimum daily discharge, 610 second-feet Sept. 25.
1925-38: Maximum discharge, 228,000 second-feet Oct. 3, 1929 (gage height, 30.7 feet), from rating curve extended above 90,000 second-feet; minimum, about 113 second-feet Sept. 21, 1931 (gage height, 0.23 foot); minimum daily discharge, about 149 second-feet Oct. 13, 1935.

Remarks.- Records good. Diurnal fluctuation caused by operation of Parr Shoals hydroelectric plant 11 miles upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.8	615	2.0	2,900	8.0	24,650
1.0	895	3.0	5,650	10.0	35,050
1.2	1,225	4.0	8,680	13.0	52,800
1.6	2,000	6.0	16,050		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,400	6,320	4,720	6,140	4,780	4,140	4,820	1,040	13,400	3,290	6,680	2,150
2	3,210	6,520	3,960	3,770	4,920	4,260	11,100	2,780	7,920	1,900	5,960	2,480
3	1,340	5,940	4,070	7,620	4,680	4,000	16,800	2,760	12,000	1,340	6,360	4,500
4	5,400	5,360	4,200	7,100	4,240	3,820	10,300	4,370	12,200	1,250	5,060	10,900
5	21,800	5,010	3,170	6,420	3,870	3,680	7,100	2,500	6,240	2,340	4,980	12,200
6	19,300	4,780	3,100	5,540	2,800	3,160	5,650	3,400	5,190	2,540	4,560	7,250
7	11,700	3,180	5,000	6,130	3,280	3,470	7,370	3,180	4,300	3,290	3,780	4,200
8	6,600	4,460	4,190	11,400	4,700	4,410	9,630	2,250	4,600	2,560	7,350	3,840
9	5,070	4,920	4,260	6,900	4,950	4,350	20,200	2,600	4,540	2,040	7,040	4,400
10	2,720	4,780	4,080	6,860	4,200	4,700	13,000	3,260	6,480	1,020	6,830	4,120
11	3,670	4,640	4,330	5,940	3,020	8,280	7,800	3,180	6,160	1,690	6,280	2,260
12	4,640	5,070	1,400	6,660	4,020	8,660	6,340	3,160	4,170	1,980	5,480	2,410
13	4,220	4,980	3,320	5,660	3,230	6,340	5,800	2,290	4,810	2,850	4,160	2,920
14	3,560	3,660	4,280	5,650	3,380	6,230	5,740	2,840	4,290	4,400	2,060	2,700
15	3,190	4,460	3,840	6,010	3,870	5,500	5,130	2,120	4,200	4,120	2,710	2,870
16	3,510	5,200	4,060	4,300	4,230	5,480	3,370	3,380	3,380	2,520	3,580	2,800
17	1,500	4,500	3,810	3,180	4,180	6,100	3,460	4,210	3,560	845	3,680	2,610
18	2,390	4,920	3,560	3,640	3,960	7,440	4,620	3,320	3,970	2,440	3,260	1,240
19	4,310	4,380	1,810	5,650	3,550	6,190	4,460	3,050	2,840	3,020	2,660	1,660
20	27,900	4,020	3,390	4,360	2,580	4,540	5,260	2,810	3,210	4,830	3,210	2,780
21	52,800	2,560	4,160	4,120	3,240	5,200	4,580	2,770	4,220	12,200	835	2,720
22	34,500	4,360	3,840	4,540	4,650	5,050	5,200	1,290	4,490	11,800	1,980	2,000
23	16,400	4,140	5,080	2,300	4,300	5,020	3,820	2,160	4,500	8,630	2,480	2,240
24	9,020	4,050	6,920	3,590	5,120	5,360	3,220	2,700	3,680	23,600	2,020	2,280
25	8,020	4,170	6,210	4,780	5,100	4,900	4,160	3,420	2,730	26,100	2,300	610
26	7,700	3,920	5,060	5,200	4,300	5,200	3,940	4,270	2,770	36,200	2,430	1,660
27	12,200	3,600	4,960	5,160	3,020	3,940	4,120	3,220	5,460	20,700	2,640	2,440
28	21,800	2,540	9,980	4,520	3,570	6,960	3,840	2,360	4,600	9,490	1,190	1,680
29	13,400	5,330	11,400	4,290	-	4,880	3,450	2,600	5,760	7,400	1,390	2,630
30	8,950	5,360	8,100	4,320	-	4,780	3,780	4,870	4,880	5,830	2,260	1,980
31	4,710	-	6,600	3,350	-	5,560	-	11,400	-	3,430	2,280	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	328,930	52,800	1,340	10,610	2.21	2.55
November	137,130	6,520	2,540	4,571	.952	1.06
December	146,880	11,400	1,400	4,738	.987	1.14
Calendar year 1937	2,916,180	60,000	1,300	7,990	1.66	22.59
January	165,000	11,400	2,300	5,323	1.11	1.28
February	111,740	5,120	2,580	3,991	.831	.87
March	161,600	8,660	3,160	5,213	1.09	1.26
April	198,060	20,200	3,220	6,602	1.38	1.54
May	99,560	11,400	1,040	3,212	.669	.77
June	160,550	13,400	2,730	5,352	1.12	1.25
July	215,685	36,200	845	6,958	1.45	1.67
August	117,485	7,350	835	3,790	.790	.91
September	100,530	12,200	610	3,351	.698	.78
Water year 1937-38	1,943,150	52,800	610	5,324	1.11	15.08

Peak discharge.- Oct. 5 (1 p.m.) 24,200 sec.-ft.; Oct. 28 (9 a.m.) 24,600 sec.-ft.

Second Broad River at Cliffside, N. C.

Location.- Water-stage recorder, lat. 35°14'15", long. 81°46'25", at Cliffside, Rutherford County, 2 miles upstream from mouth.

Drainage area.- 230 square miles.

Records available.- June 1925 to September 1938.

Average discharge.- 13 years, 308 second-feet.

Extremes.- Maximum discharge during year, 7,950 second-feet Oct. 20 (gage height, 9.5 feet); minimum, 13 second-feet Aug. 26 (gage height, 0.50 foot); minimum daily discharge, 38 second-feet Sept. 25.
1925-38: Maximum discharge, 15,000 second-feet Aug. 16, 1928 (gage height, 17.26 feet), from rating curve extended above 9,100 second-feet; minimum, 8 second-feet July 26, 1934; minimum daily discharge, 11 second-feet Oct. 4, 1931.

Remarks.- Records good. Discharge for day of partial gage-height record, Jan. 14, computed on basis of partial record and records for Broad River near Bolling Springs. Large diurnal fluctuation caused by operation of Cliffside Mills, a quarter of a mile upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.7	25	2.5	770	5.0	3,500
.8	35	3.0	1,120	5.5	4,000
1.0	67	3.5	1,590	6.0	4,500
1.3	148	4.0	2,240	7.0	5,500
1.6	275	4.5	2,940	8.0	6,500
2.0	475				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	257	357	246	227	293	234	236	166	343	115	406	133
2	88	244	217	284	308	287	296	210	308	127	294	140
3	93	269	254	329	209	204	313	156	444	104	248	111
4	566	233	161	302	200	290	299	151	313	154	304	273
5	497	235	222	265	211	167	239	173	266	200	213	218
6	317	221	285	363	211	241	232	138	275	162	251	157
7	220	226	196	226	265	289	238	125	247	139	891	134
8	236	263	216	272	188	217	309	138	507	130	843	137
9	113	220	186	273	215	215	326	239	231	100	455	148
10	182	232	192	313	176	682	294	152	186	170	526	159
11	219	179	163	273	211	717	302	135	183	236	334	104
12	181	241	187	263	220	459	243	151	220	156	282	169
13	161	310	252	254	206	370	243	153	237	125	165	144
14	150	262	187	240	263	384	186	373	171	149	209	128
15	166	320	201	235	209	298	216	263	155	122	232	119
16	121	214	184	176	207	355	212	257	223	150	188	134
17	145	213	180	288	145	374	217	162	98	56	242	144
18	216	238	191	229	222	348	278	165	149	235	128	45
19	2,860	184	208	216	242	307	232	152	206	670	129	170
20	6,020	108	237	212	257	311	240	150	290	928	108	135
21	1,000	203	199	200	282	388	184	146	204	823	143	128
22	535	269	189	170	213	263	191	120	190	673	192	112
23	560	208	220	205	263	314	202	199	159	1,230	142	136
24	475	201	234	281	244	287	191	144	149	1,050	146	104
25	444	149	260	617	258	286	244	226	157	696	211	38
26	415	211	238	429	244	266	177	228	104	551	100	139
27	1,150	268	259	279	242	269	182	237	250	587	111	124
28	681	314	446	253	252	293	151	136	357	328	93	130
29	462	287	404	268	-	246	148	215	177	249	203	125
30	378	297	435	263	-	239	151	1,750	149	694	139	107
31	337	-	280	312	-	209	-	612	-	542	130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	19,345	6,020	88	624	2.71	3.12
November	7,176	357	108	239	1.04	1.16
December	7,329	446	161	236	1.03	1.19
Calendar year 1937	146,650	6,020	59	402	1.75	23.71
January	8,517	617	170	275	1.20	1.38
February	6,456	308	145	231	1.00	1.04
March	9,809	717	167	316	1.37	1.58
April	6,972	326	148	232	1.01	1.13
May	7,652	1,750	120	247	1.07	1.23
June	6,948	507	98	232	1.01	1.13
July	11,651	1,230	56	376	1.63	1.88
August	8,058	891	93	260	1.13	1.30
September	4,065	273	38	136	.591	.66
Water year 1937-38	103,978	6,020	38	285	1.24	16.80

Peak discharge.- Oct. 20 (7:15 a.m.) 7,950 sec.-ft.; May 30 (7 a.m.) 4,800 sec.-ft.

North Pacolet River at Fingerville, S. C.

Location.- Water-stage recorder, lat. 35°07', long 81°59', at McMillin mill, about 400 feet downstream from Obed Creek and 1 mile south of Fingerville, Spartanburg County. Zero of gage is 715.56 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 116 square miles.

Records available.- November 1929 to September 1938.

Extremes.- Maximum discharge during year, 5,400 second-feet Oct. 19 (gage height, 17.48 feet), from rating curve extended above 1,050 second-feet;minimum, 42 second-feet Aug. 29; minimum daily discharge, 84 second-feet July 8.
1929-38: Maximum discharge, 7,290 second-feet Oct. 17, 1936 (gage height, 21.23 feet), from rating curve extended above 1,050 second-feet; minimum, about 13 second-feet several times in October 1931; minimum daily discharge, about 34 second-feet Oct. 1, 2, 1931.

Remarks.- Records fair. Diurnal fluctuation caused by operation of mills upstream. Discharge computed by use of shifting-control adjustments, which were determined on basis of 15 discharge measurements and records of discharge for Pacolet River near Fingerville less discharge from power plant on South Pacolet River near Firgerville.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	233	167	187	194	161	202	128	258	86	143	125
2	133	233	161	276	180	151	250	128	250	84	174	103
3	155	225	154	250	174	180	225	119	286	101	202	140
4	440	217	149	209	174	194	202	114	233	114	251	240
5	425	202	149	194	174	180	194	111	194	129	214	141
6	306	194	161	187	174	167	194	128	174	95	246	121
7	202	194	148	267	167	161	241	110	161	95	433	361
8	161	187	144	217	161	153	253	109	167	84	332	194
9	155	180	150	202	161	155	276	110	174	93	276	209
10	148	180	144	187	161	522	209	96	162	109	304	180
11	143	187	139	209	161	405	194	97	142	91	271	164
12	140	241	134	202	161	300	187	96	144	100	263	133
13	135	241	139	180	155	211	180	120	167	86	187	121
14	136	202	144	174	155	241	180	332	135	90	151	117
15	134	194	142	167	154	225	167	198	134	120	161	118
16	117	187	145	161	155	347	166	150	136	95	153	114
17	113	160	145	161	155	361	150	138	318	91	140	122
18	133	167	167	161	180	286	174	135	260	96	126	121
19	3,170	161	155	161	180	250	161	130	187	220	119	103
20	3,100	161	144	161	180	233	155	128	272	820	116	106
21	990	151	134	161	167	225	167	128	795	1,140	111	99
22	534	148	134	161	161	203	155	123	248	1,080	112	100
23	491	144	166	161	190	267	149	129	167	1,090	104	104
24	385	142	225	250	212	314	145	124	142	1,090	99	105
25	343	140	187	333	180	241	145	130	119	526	103	101
26	343	140	167	233	174	223	141	140	112	371	112	98
27	701	210	178	209	174	209	140	134	111	430	110	96
28	506	209	258	194	167	202	138	122	108	276	108	97
29	378	187	209	187	-	194	134	184	93	280	91	101
30	268	174	194	180	-	217	126	746	91	238	99	122
31	250	-	187	194	-	202	-	474	-	156	124	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,767	3,170	113	476	4.10	4.73
November	5,611	241	140	187	1.61	1.80
December	5,020	258	134	162	1.40	1.61
Calendar year 1937	114,995	3,170	104	315	2.72	36.88
January	6,176	333	161	199	1.72	1.98
February	4,781	212	154	171	1.47	1.53
March	7,380	522	151	238	2.05	2.36
April	5,400	276	126	180	1.55	1.73
May	5,111	746	96	165	1.42	1.64
June	5,940	795	91	198	1.71	1.91
July	9,476	1,140	84	306	2.64	3.04
August	5,435	433	91	175	1.51	1.74
September	4,056	361	96	135	1.16	1.29
Water year 1937-38	79,153	3,170	84	217	1.87	25.36

Peak discharge.- Oct. 19 (10:45 p.m.) 5,400 sec.-ft.; May 30 (6:15 a.m.) 1,400 sec.-ft.; June 21 (12:15 a.m.) 1,440 sec.-ft.; July 23 (3:30 a.m.) 1,400 sec.-ft.; July 23 (9:00 p.m.) 1,320 sec.-ft.; July 24 (9:45 a.m.) 1,400 sec.-ft..

Pacolet River near Fingerville, S. C.

Location.- Water-stage recorder, lat. 35°07', long. 81°58', 100 feet upstream from new county highway bridge, a quarter of a mile downstream from confluence of North and South Pacolet Rivers, and 2½ miles southeast of Fingerville, Spartanburg County. Zero of gage is 706.33 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 212 square miles.

Records available.- November 1929 to September 1938.

Extremes.- Maximum discharge during year, 10,300 second-feet Oct. 19 (gage height, 12.73 feet); minimum, 67 second-feet Sept. 19; minimum daily discharge, 123 second-feet Sept. 25.
1929-38: Maximum discharge, 11,300 second-feet Oct. 17, 1936 (gage heights, 13.63 feet); minimum, about 28 second-feet Oct. 19, 1931; minimum daily discharge, 38 second-feet Oct. 4, 1931.

Remarks.- Records good except those for period of missing gage heights, Feb. 18-25, which were computed on basis of weather records and records for North Pacolet River at Fingerville and are fair. Diurnal fluctuation caused by operation of power plant on South Pacolet River and mills on North Pacolet River. About 5,000,000 gallons a day diverted above station for Spartanburg water supply.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	258	375	283	323	319	274	367	187	504	158	336	205
2	262	392	276	328	301	245	374	193	474	155	368	189
3	211	420	272	370	301	308	267	190	527	168	325	203
4	555	386	278	335	297	319	331	190	477	181	403	304
5	733	316	203	312	294	301	323	191	261	197	408	198
6	485	312	276	308	217	215	319	196	297	162	443	182
7	323	240	265	394	286	282	352	179	268	162	516	422
8	283	308	262	338	286	257	375	179	290	153	746	263
9	279	304	229	318	269	261	399	179	293	162	518	255
10	213	304	213	343	226	646	261	172	279	178	542	238
11	272	294	210	446	229	534	316	174	252	159	470	224
12	265	335	187	437	229	421	308	179	213	168	392	180
13	258	354	210	342	208	267	304	201	288	158	312	201
14	262	276	199	301	222	445	297	406	255	162	230	201
15	252	312	210	258	219	419	290	264	255	190	286	202
16	238	308	213	219	222	538	286	219	232	179	279	197
17	178	308	248	258	251	593	212	204	390	164	226	191
18	255	301	286	290	300	518	294	201	330	164	204	186
19	5,480	286	222	286	300	370	283	201	255	296	187	159
20	4,790	275	262	283	240	277	259	199	343	902	187	182
21	1,110	202	255	255	280	350	290	200	918	1,260	182	172
22	660	262	258	292	280	322	276	199	366	1,500	185	166
23	612	262	290	244	320	380	246	204	286	1,680	176	174
24	453	258	346	348	320	428	185	193	251	1,720	185	124
25	468	258	304	458	280	366	267	204	228	920	190	123
26	456	262	210	354	260	330	229	213	186	597	187	166
27	815	327	305	331	224	261	199	207	178	636	181	164
28	636	258	380	319	301	411	196	193	208	573	192	144
29	555	294	350	288	-	403	193	257	162	486	178	141
30	505	290	331	248	-	335	185	1,020	160	439	177	165
31	308	-	323	316	-	320	-	764	-	233	203	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	22,430	5,480	178	724	3.42	3.94
November	9,079	420	202	303	1.43	1.60
December	8,156	380	187	263	1.24	1.43
Calendar year 1937	181,093	5,480	172	496	2.34	31.78
January	9,942	458	219	321	1.51	1.74
February	7,481	320	208	267	1.26	1.31
March	11,396	646	215	368	1.74	2.01
April	8,483	399	185	283	1.33	1.48
May	7,758	1,020	172	250	1.18	1.36
June	9,426	918	160	314	1.48	1.65
July	14,262	1,720	153	460	2.17	2.50
August	9,414	746	176	304	1.43	1.65
September	5,921	422	123	197	.929	1.04
Water year 1937-38	123,748	5,480	123	339	1.60	21.71

Peak discharge.- Oct. 5 (4 p.m.) 1,020 sec.-ft.; Oct. 19 (6:30 p.m.) 10,300 sec.-ft.; May 30 (6 a.m.) 1,640 sec.-ft.; June 20 (12 p.m.) 1,580 sec.-ft.; July 23 (3:15 a.m.) 2,090 sec.-ft.; July 24 (11:15 a.m.) 2,160 sec.-ft.

South Pacolet River reservoir near Fingerville, S. C.

Location.- Water-stage recorder, lat. 35°07', long. 81°59', at highway bridge across South Pacolet River reservoir, 1 mile upstream from dam and 1¾ miles south of Fingerville, Spartanburg County. Zero of gage is 760 feet above mean sea level.

Drainage area.- 92 square miles.

Records available.- March 1930 to September 1938.

Extremes.- Maximum gage height during year, 17.68 feet Oct. 19; minimum, 4.32 feet Sept. 29.
1930-38: Maximum gage height, that of Oct. 19, 1937; minimum, 2.76 feet Oct. 8, 1930.

Remarks.- Records excellent. City of Spartanburg diverts about 5,000,000 gallons from the reservoir daily for its water supply and also uses water to generate power. Elevation of crest of concrete spillway is 772 feet. About 3 feet of flashboards are used to provide storage above crest of spillway. Capacity of reservoir, 117,500,000 cubic feet at gage height 15 feet.

Gage height, in feet, 1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.92	12.04	9.81	11.27	10.85	11.56	12.06	10.91	14.73	11.65	14.17	9.24
2	9.43	11.72	9.55	12.00	10.65	11.48	11.66	10.92	13.95	11.55	13.71	8.87
3	9.38	10.94	9.29	12.58	10.41	11.37	12.39	10.96	14.27	11.44	13.81	8.58
4	10.70	10.07	8.94	12.57	10.16	11.23	12.56	10.96	14.30	11.45	13.97	8.83
5	14.70	9.75	9.08	12.50	9.88	10.94	12.38	10.85	14.02	11.39	13.91	8.91
6	15.40	9.66	9.37	12.39	9.92	11.17	12.15	10.88	14.00	11.25	13.72	8.78
7	15.20	9.96	9.10	12.68	10.08	11.25	12.12	10.91	13.66	11.07	14.78	8.97
8	15.03	10.14	8.79	12.99	9.70	11.03	12.25	10.91	13.43	10.89	15.44	9.08
9	14.90	10.03	8.67	13.04	9.34	10.90	12.50	10.91	13.09	10.67	14.82	9.08
10	14.88	9.91	8.95	12.95	9.39	11.55	12.85	10.82	12.73	10.59	14.02	9.10
11	14.83	9.72	9.21	12.21	9.64	13.07	13.02	10.70	12.40	10.40	13.12	8.99
12	14.55	9.85	9.50	11.19	9.94	13.43	12.82	10.57	12.31	10.26	12.88	8.99
13	14.24	10.32	9.93	10.28	10.27	13.81	12.62	10.42	12.19	10.20	12.67	8.85
14	13.97	10.67	10.27	10.07	10.57	13.75	12.37	11.24	11.67	10.02	12.57	8.60
15	13.68	10.81	10.59	9.99	10.77	12.91	12.11	12.25	11.09	10.48	12.44	8.33
16	13.40	10.66	10.85	10.34	10.96	12.84	11.83	12.39	10.55	10.40	12.00	8.00
17	13.37	10.50	10.90	10.69	11.11	12.89	11.83	12.41	10.99	10.10	11.60	7.67
18	13.32	10.30	10.77	10.49	11.03	12.30	11.88	12.42	11.63	9.80	11.50	7.36
19	15.85	10.09	10.80	10.24	11.00	11.95	11.62	12.40	11.67	10.13	11.44	7.17
20	15.67	9.88	10.80	9.97	11.18	12.32	11.39	12.37	11.86	11.75	11.40	6.81
21	14.43	10.05	10.50	9.76	11.19	12.57	11.33	12.30	12.70	13.64	11.33	6.33
22	13.69	10.08	10.15	9.65	10.89	12.47	11.10	12.19	13.00	15.57	11.25	5.83
23	13.45	9.64	9.97	9.60	10.70	12.65	10.86	12.03	12.66	15.72	11.16	5.28
24	13.30	9.57	10.43	9.86	11.05	13.10	11.07	11.98	12.23	15.88	10.98	5.04
25	12.95	9.31	10.55	10.86	11.18	13.24	11.02	11.88	11.80	15.54	10.73	5.71
26	12.58	9.08	10.89	11.05	11.29	13.22	10.64	11.94	11.56	15.33	10.60	5.41
27	13.50	9.16	11.15	10.93	11.69	13.57	10.67	12.02	11.49	15.33	10.48	4.96
28	13.70	9.92	11.41	10.73	11.77	13.59	10.75	11.99	11.87	15.42	10.37	4.52
29	13.04	10.20	11.54	10.58	-	12.66	10.81	12.07	11.82	14.94	10.08	4.50
30	12.01	10.05	11.50	10.74	-	12.32	10.86	14.68	11.75	14.56	9.82	4.76
31	11.94	-	11.40	10.88	-	12.23	-	15.41	-	14.42	9.54	-

North Tyger River near Moore, S. C.

Location.- Water-stage recorder and concrete control, lat. 34°48', long. 81°58', at Ott Shoals, 1½ miles upstream from Wards Creek, 2½ miles southeast of Moore, Spartanburg County, and 3 7/8 miles upstream from confluence of North and South Tyger Rivers. Zero of gage is 564.79 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 162 square miles.

Records available.- April 1934 to September 1938.

Extremes.- Maximum discharge during year, 6,680 second-feet Oct. 20 (gage height, 5.54 feet); minimum, 20 second-feet Sept. 26; minimum daily discharge, 35 second-feet Sept. 25.

1934-38: Maximum discharge, 8,640 second-feet Apr. 7, 1936 (gage height, 6.15 feet); minimum 9.2 second-feet, (estimated) Dec. 29, 1936; minimum daily 29 second-feet Dec. 29, 1935.

Remarks.- Records excellent except those for period of missing gage heights, Aug. 1, 2, which were computed from graph drawn on basis of partial recorder record and records for South Tyger and Tyger Rivers near Woodruff and are good. Diurnal fluctuation caused by operation of power plants upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	237	180	150	238	204	198	68	204	113	176	86
2	134	252	163	232	173	173	262	126	194	75	176	63
3	79	214	172	270	142	168	242	157	291	46	171	409
4	605	204	177	260	192	161	225	130	236	48	197	528
5	2,320	204	102	186	148	102	225	149	177	106	307	204
6	1,150	183	205	198	124	136	192	103	184	106	366	139
7	380	129	214	361	202	182	180	119	163	96	265	103
8	278	214	180	269	224	204	261	76	135	91	344	100
9	168	218	163	237	167	148	286	142	157	61	297	119
10	222	196	159	246	159	250	230	144	160	43	190	100
11	211	170	112	259	144	306	230	138	156	96	253	47
12	206	187	125	187	99	239	237	129	64	109	172	117
13	191	198	195	200	163	200	188	103	177	69	108	109
14	162	164	192	179	190	217	140	126	172	83	110	107
15	156	213	164	123	218	228	190	144	102	149	146	89
16	132	227	159	165	160	265	167	168	90	74	159	122
17	96	205	152	201	120	309	86	155	141	48	115	83
18	169	196	128	224	182	279	198	91	90	86	91	40
19	1,020	175	162	163	128	212	187	130	62	99	100	81
20	5,060	173	188	142	161	209	159	91	140	277	79	93
21	1,410	95	205	157	183	223	178	138	150	235	38	81
22	556	190	175	116	203	228	193	66	96	353	100	79
23	430	223	194	165	204	162	172	117	82	659	100	73
24	352	188	209	218	211	215	76	124	101	618	99	63
25	288	163	216	297	173	228	169	62	86	572	92	35
26	320	140	192	247	169	196	165	132	96	334	80	58
27	1,000	187	192	204	139	251	150	119	135	288	66	80
28	648	169	265	186	190	219	153	136	133	374	36	75
29	387	201	252	157	-	224	107	169	83	235	94	93
30	260	209	246	134	-	187	151	511	74	121	106	106
31	230	-	204	211	-	130	-	434	-	109	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,764	5,060	79	605	3.73	4.30
November	5,744	252	95	191	1.18	1.32
December	5,662	265	102	183	1.13	1.30
Calendar year 1937	127,903	5,060	61	350	2.16	29.37
January	6,344	361	116	205	1.27	1.46
February	4,806	238	99	172	1.06	1.10
March	6,457	309	102	208	1.28	1.48
April	5,599	266	78	187	1.15	1.28
May	4,519	511	66	146	.901	1.04
June	4,131	291	62	138	.852	.95
July	5,773	659	43	186	1.15	1.33
August	4,730	366	36	153	.944	1.09
September	3,504	526	35	117	.722	.81
Water year 1937-38	76,033	5,060	35	208	1.28	17.46

Peak discharge.- Oct. 20 (10 a.m.) 6,680 sec.-ft.

Tyger River near Woodruff, S. C.

Location.- Water-stage recorder, lat. 34°45', long. 81°55', at Nesbitts Bridge, half a mile downstream from confluence of North and South Tyger Rivers and 6½ miles east of Woodruff, Spartanburg County. Zero of gage is 489.44 feet above mean sea level (southeastern supplementary adjustment of 1936).
Drainage area.- 351 square miles.
Records available.- October 1929 to September 1938.
Extremes.- Maximum discharge during year, 10,600 second-feet Oct. 20 (gage height, 9.30 feet); minimum, 74 second-feet Sept. 25 (gage height, 1.79 feet); minimum daily discharge, 103 second-feet Sept. 25.
1929-38: Maximum discharge, 17,100 second-feet Apr. 6, 1936 (gage height, 13.16 feet); minimum, 50 second-feet Sept. 19, 1932 (gage height, 1.63 feet); minimum daily discharge, 61 second-feet Sept. 19, 1932.
Maximum stage known, about 20.0 feet sometime during flood of August 1928 (discharge not determined). Flood of September 1929 reached a stage of 14.65 feet (discharge, 19,600 second-feet).
Remarks.- Records good. Diurnal fluctuation caused by operation of power plants upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 20, Dec. 28 to Jan. 2, Jan. 10-12, Mar. 7-9, May 18-21)

Oct. 1-3, Feb. 24 to Mar. 20, May 30 to June 3

2.2	195	3.0	654
2.4	278	3.3	910
2.7	441		

Oct. 4 to Feb. 23, Mar. 21 to May 29, June 4 to Sept. 30

1.9	100	2.8	527	4.7	2,690
2.1	160	3.1	790	6.0	4,740
2.3	236	3.7	1,410	8.0	8,610
2.5	332				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	256	437	416	286	551	423	384	182	413	200	268	150
2	243	567	410	387	462	435	530	212	359	168	312	156
3	218	450	367	462	373	429	410	286	461	122	317	1,060
4	1,480	422	338	591	338	338	378	279	515	125	365	1,040
5	3,220	442	280	505	291	252	484	338	306	174	507	350
6	2,340	448	378	448	240	260	575	390	296	213	608	328
7	1,040	300	455	824	333	307	538	306	361	174	403	275
8	724	349	422	510	429	423	550	189	278	151	534	236
9	480	455	422	429	396	370	580	250	367	168	830	249
10	442	442	317	446	378	555	410	296	296	131	524	286
11	378	403	268	677	296	523	426	232	372	220	513	164
12	403	416	268	594	245	405	616	238	182	218	450	200
13	344	422	306	455	281	343	575	156	260	145	360	276
14	301	312	296	378	317	400	373	254	349	148	192	266
15	237	367	384	301	416	601	349	224	263	240	236	185
16	296	442	344	312	378	686	301	263	241	180	306	190
17	228	416	306	364	312	694	212	390	281	151	260	180
18	301	410	232	436	355	487	383	323	222	157	230	117
19	2,260	396	237	396	291	381	448	364	160	200	226	154
20	8,290	390	328	346	281	429	450	258	232	707	218	190
21	3,580	260	416	344	312	498	416	270	292	442	141	172
22	1,290	340	416	272	455	651	432	154	270	634	172	166
23	1,040	442	492	317	498	575	379	192	208	1,720	238	154
24	621	416	468	388	466	543	216	250	200	995	230	154
25	498	361	373	575	343	422	348	175	202	1,110	228	103
26	634	228	349	599	338	355	418	306	164	800	189	134
27	1,930	296	338	498	260	410	310	248	222	622	171	172
28	1,280	332	619	373	317	392	342	278	275	673	134	154
29	915	349	612	332	-	575	218	352	212	476	163	156
30	520	429	513	272	-	599	275	863	166	864	217	189
31	403	-	455	386	-	448	-	672	-	192	188	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	36,192	8,290	218	1,167	3.32	3.83
November	11,739	567	228	391	1.11	1.24
December	11,825	619	232	381	1.09	1.26
Calendar year 1937	261,968	8,290	134	718	2.05	27.76
January	13,503	824	272	436	1.24	1.43
February	9,952	551	240	355	1.01	1.05
March	14,209	694	252	458	1.30	1.50
April	12,326	616	212	411	1.17	1.30
May	9,190	863	154	296	.843	.97
June	8,425	515	160	281	.801	.89
July	11,500	1,320	122	371	1.06	1.22
August	9,700	830	134	313	.892	1.03
September	7,606	1,060	103	254	.724	.81
Water year 1937-38	156,167	8,290	103	428	1.22	16.53

Peak discharge.- Oct. 5 (7 a.m.) 3,670 sec.-ft.; Oct. 20 (12 m.) 10,600 sec.-ft.; Oct. 27 (1 p.m.) 2,340 sec.-ft.

Middle Tyger River at Lyman, S. C.

Location.- Water-stage recorder and artificial control, lat. 34°56'35", long. 82°08'00", at Lyman, Spartanburg County, 200 feet upstream from bridge on U. S. Highway 29, 600 feet downstream from Southern Railway bridge, and three-quarters of a mile northeast of Duncan.

Drainage area.- 68.3 square miles.

Records available.- January to September 1938.

Extremes.- Maximum discharge during period, 469 second-feet July 24 (gage height, 3.62 feet); minimum, about 2.3 second-feet Sept. 21; minimum daily discharge, 28 second-feet Sept. 22, 28.

Remarks.- Records good. Slight diurnal fluctuation caused by operation of steam power plant upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge in second-feet)
(Shifting-control method used June 14 to July 2)

Jan. 21 to Mar 10, July 25 to Sept. 30

1.2	25	2.1	124
1.4	38	2.6	218
1.6	56	3.2	356
1.8	78		

Mar. 11 to July 24

1.1	28	2.2	147
1.3	39	2.6	225
1.6	63	3.2	363
1.9	99		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	89	65	90	58	69	31	63	37
2				-	85	65	119	56	89	36	100	38
3				-	82	73	103	55	162	38	95	55
4				-	78	73	88	53	88	42	153	69
5				-	77	66	84	56	74	40	338	45
6				-	77	70	79	63	68	36	158	44
7				-	70	62	106	54	58	36	195	63
8				-	72	63	110	52	93	35	249	48
9				-	70	61	121	55	73	32	108	45
10				-	71	175	96	49	60	38	198	46
11				-	77	201	88	48	58	32	125	46
12				-	74	113	86	48	68	36	81	40
13				-	71	99	79	52	101	39	71	43
14				-	64	89	78	125	50	38	65	62
15				-	70	92	68	92	45	63	64	44
16				-	67	172	74	62	44	42	62	41
17				-	66	201	71	58	45	37	58	40
18				-	84	133	73	51	42	32	57	39
19				-	79	107	73	54	39	46	52	31
20				-	76	107	75	52	43	100	46	34
21				79	65	100	93	51	48	190	47	31
22				77	67	83	78	47	43	261	44	28
23				72	94	139	69	51	40	270	42	29
24				110	116	147	66	51	37	346	44	33
25				186	85	110	64	46	38	151	46	34
26				105	78	102	63	54	40	142	44	28
27				92	73	102	61	57	38	272	44	34
28				85	68	95	59	50	39	129	45	31
29				82	-	88	58	57	51	82	36	34
30				86	-	88	58	125	35	71	45	39
31				85	-	88	-	91	-	65	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January 21-31	1,059	186	72	96.3	1.41	0.58
February	2,145	116	64	76.6	1.12	1.17
March	3,229	201	61	104	1.52	1.75
April	2,430	121	58	81.0	1.19	1.33
May	1,873	125	46	60.4	.884	1.02
June	1,758	162	31	58.6	.858	.96
July	2,808	346	31	90.6	1.33	1.53
August	2,814	338	36	90.8	1.33	1.53
September	1,231	69	28	41.0	.600	.67
Water year						

Peak discharge.- July 24 (5 a.m.) 469 sec.-ft.; July 27 (6 p.m.) 410 sec.-ft.; Aug. 5 (1 p.m.) 438 sec.-ft.

South Tyger River near Reidville, S. C.

Location.- Water-stage recorder, lat. 34°52'35", long. 82°05'10", about a quarter of a mile upstream from county highway bridge, 1½ miles downstream from Berry Shoals, and 1¾ miles northeast of Reidville, Spartanburg County. Zero of gage is 626.28 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 106 square miles.

Records available.- April 1934 to September 1938.

Extremes.- Maximum discharge during year, 4,330 second-feet Oct. 19 (gage height, 10.77 feet); minimum, 5.7 second-feet Sept. 29 (gage height, 0.63 foot) caused by shut-down of power plants upstream; minimum daily discharge, 12 second-feet Oct. 14, Nov. 26. 1934-38: Maximum discharge, 6,080 second-feet Apr. 6, 1936 (gage height, 13.66 feet); minimum, that of Sept. 29, 1938; minimum daily discharge, 8.5 second-feet Oct. 28, 1934.

Remarks.- Records excellent. Large diurnal fluctuation caused by operation of power plants above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	202	177	41	226	190	37	61	125	51	62	54
2	64	232	177	76	207	235	54	53	131	57	111	61
3	81	136	70	177	115	134	62	111	173	58	85	100
4	507	143	127	243	66	83	132	99	112	60	111	72
5	934	181	93	205	68	67	287	242	65	88	270	112
6	554	131	170	139	64	64	234	184	133	63	87	145
7	350	49	173	104	133	128	119	65	111	34	67	100
8	307	128	206	83	166	141	88	61	136	76	351	67
9	178	155	121	78	175	164	76	96	133	77	393	105
10	84	155	93	236	125	219	68	78	86	54	222	118
11	140	164	93	372	86	81	214	50	132	75	232	63
12	103	139	83	226	74	76	346	32	68	25	262	133
13	79	96	31	128	62	79	203	51	122	64	61	148
14	12	83	115	97	135	253	126	62	114	66	50	72
15	86	144	155	82	133	327	40	58	131	68	113	50
16	86	141	78	74	143	313	54	99	124	73	101	42
17	84	156	42	130	118	191	60	238	41	57	115	34
18	80	157	20	143	85	100	180	210	68	68	112	57
19	2,080	164	67	149	71	106	176	147	60	82	100	75
20	2,310	113	133	113	65	164	230	80	114	90	72	68
21	660	90	176	97	135	280	104	54	113	147	62	63
22	407	155	170	82	230	336	207	58	113	308	104	60
23	286	161	213	72	189	261	75	74	80	269	109	55
24	66	151	93	153	118	212	67	67	77	238	113	31
25	171	44	83	260	102	104	219	116	46	365	87	57
26	403	12	79	249	74	72	116	120	60	338	64	74
27	444	53	65	165	67	69	124	89	110	275	74	56
28	406	63	377	92	147	216	63	62	93	234	60	27
29	272	139	190	76	-	364	53	64	98	100	80	39
30	97	148	219	70	-	263	55	85	65	52	41	51
31	88	-	82	198	-	220	-	180	-	58	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,497	2,310	12	371	3.50	4.04
November	3,907	232	12	130	1.23	1.37
December	3,971	377	20	128	1.21	1.40
Calendar year 1937	64,790	2,880	11	232	2.19	29.79
January	4,410	372	41	142	1.34	1.54
February	3,381	230	62	121	1.14	1.19
March	5,512	364	64	178	1.68	1.94
April	3,869	346	37	129	1.22	1.36
May	3,046	242	32	98.3	.927	1.07
June	3,034	173	41	101	.953	1.06
July	3,667	365	25	118	1.11	1.28
August	3,811	393	40	123	1.16	1.34
September	2,229	148	27	74.3	.701	.78
Water year 1937-38	52,334	2,310	12	143	1.35	18.37

Peak discharge.- Oct. 5 (4 p.m.) 1,280 sec.-ft.; Oct. 19 (5 p.m.) 4,330 sec.-ft.

South Tyger River near Woodruff, S. C.

Location.- Water-stage recorder and concrete control, lat. 34°45', long. 81°56', at Chesnee Shoals, three-eighths of a mile upstream from confluence of North and South Tyger Rivers and 5⅘ miles east of Woodruff, Spartanburg County. Zero of gage is 508.35 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 174 square miles.

Records available.- March 1934 to September 1938.

Extremes.- Maximum discharge during year, 3,660 second-feet Oct. 20 (gage height, 5.85 feet); minimum, 34 second-feet Sept. 1 (gage height, 1.58 feet); minimum daily discharge, 55 second-feet, Sept. 29.
1934-38: Maximum discharge, 9,510 second-feet Apr. 6, 1936 (gage height, 9.78 feet); minimum, 32 second-feet Oct. 14, 1935 (gage height, 1.59 feet); minimum daily discharge, 33 second-feet Oct. 13, 1935.

Remarks.- Records excellent except those for period of missing gage heights, Sept. 19-24, which were computed on basis of records for stations on North Tyger River near Moore and Tyger River near Woodruff and are good. Diurnal fluctuation caused by operation of power plants upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	195	212	126	289	214	198	103	179	67	100	56
2	81	287	232	170	258	254	215	112	155	67	121	71
3	126	223	192	163	222	250	156	105	197	72	131	467
4	676	190	142	309	139	151	154	151	240	78	168	376
5	924	219	168	278	125	132	241	172	109	84	223	139
6	1,010	227	181	256	125	132	342	291	121	105	224	179
7	548	161	226	369	144	137	299	165	159	68	128	160
8	398	129	226	210	199	193	255	111	154	63	199	128
9	278	205	244	173	227	193	232	124	166	90	443	113
10	215	208	146	206	216	336	156	126	151	84	318	163
11	165	208	138	408	144	198	188	111	172	91	256	97
12	185	205	140	371	139	137	347	75	110	66	272	97
13	146	188	115	254	123	131	347	72	112	60	220	161
14	108	139	95	173	141	195	208	108	141	80	69	151
15	73	155	194	157	187	360	162	95	144	88	99	88
16	148	194	165	139	190	417	103	102	159	80	132	69
17	131	200	133	160	196	378	114	215	125	78	126	59
18	128	208	85	193	154	189	203	227	114	74	131	64
19	1,230	215	78	199	133	151	213	198	94	96	128	80
20	3,110	190	141	199	120	211	284	165	108	363	110	85
21	2,040	148	197	159	138	259	188	105	137	179	87	85
22	651	157	222	151	226	378	242	83	146	280	91	80
23	545	198	299	136	276	360	164	97	132	512	121	80
24	240	202	217	176	234	317	124	100	98	327	126	75
25	204	176	154	258	167	182	195	107	88	413	121	60
26	335	78	140	314	139	147	201	156	76	437	98	77
27	909	91	138	260	124	137	160	148	100	348	69	80
28	569	135	331	174	147	174	149	113	128	316	84	74
29	462	151	337	141	-	335	112	124	116	227	89	55
30	222	196	267	132	-	382	93	200	112	118	96	78
31	164	-	236	168	-	289	-	197	-	90	58	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16,149	3,110	73	521	2.99	3.45
November	5,478	287	78	183	1.05	1.17
December	5,793	337	78	187	1.07	1.23
Calendar year 1937	124,862	3,810	55	342	1.97	26.69
January	6,602	408	126	213	1.22	1.41
February	4,924	289	120	176	1.01	1.05
March	7,319	417	131	236	1.36	1.57
April	6,045	347	93	202	1.16	1.29
May	4,256	291	72	137	.787	.91
June	4,041	240	76	135	.776	.87
July	5,141	512	60	166	.954	1.10
August	4,676	443	58	151	.868	1.00
September	3,547	467	55	118	.678	.76
Water year 1937-38	73,973	3,110	55	203	1.17	15.81

Peak discharge.- Oct. 6 (10 a.m.) 1,200 sec.-ft.; Oct. 20 (1 p.m.) 3,660 sec.-ft.; Oct. 27 (8 a.m.) 1,180 sec.-ft.

Enoree River near Enoree, S. C.

Location.- Water-stage recorder, lat. 34°36', long. 81°54', half a mile upstream from Yarboroughs Bridge, three-quarters of a mile upstream from Warrior Creek, and 4 miles southeast of Enoree, Spartanburg County. Zero of gage is 448.07 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 307 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum discharge during year, 8,960 second-feet Oct. 20 (gage height, 5.86 feet); minimum, 64 second-feet June 30, July 1, Aug. 20; minimum daily discharge, 70 second-feet Sept. 26.

1929-38: Maximum discharge, about 30,000 second-feet Oct. 2, 1929 (gage height, 10.5 feet); minimum, about 4 second-feet Oct. 20, 1935, caused by shut-down of power plants upstream; minimum daily discharge, 50 second-feet July 24, 1932.

Remarks.- Records good except those for periods of missing gage heights, Nov. 17-19, Dec. 7-13, May 26-28, which were computed on basis of partial recorder record, rainfall records, and records for Saluda River near Pelzer and are fair. Diurnal fluctuation caused by operation of power plants upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge in second-feet)

Oct. 1 to Apr. 7				Apr. 8 to Sept. 30			
2.0	160	2.9	1,170	1.7	53	2.2	324
2.1	228	3.2	1,695	1.8	80	2.4	520
2.2	308	3.6	2,500	1.9	121	2.6	763
2.4	498	4.2	3,880	2.0	176	2.9	1,210
2.6	735	5.0	6,120	2.1	244		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	194	408	268	301	347	260	400	175	364	142	216	122
2	198	353	268	516	317	260	848	259	398	127	300	119
3	195	346	254	468	298	292	588	216	390	96	218	561
4	892	324	260	389	216	268	428	215	366	117	215	716
5	1,680	333	268	350	248	242	389	290	274	124	336	398
6	994	286	294	312	276	268	334	232	262	114	384	197
7	448	300	300	888	280	282	553	264	272	110	271	155
8	371	308	260	610	269	244	759	223	242	136	306	140
9	252	292	260	468	250	252	813	229	225	110	340	168
10	323	292	260	418	268	380	510	178	265	105	202	152
11	301	292	240	398	260	478	437	258	227	272	199	170
12	266	317	240	389	252	371	398	178	270	150	174	129
13	240	326	240	335	268	326	361	225	242	116	136	126
14	252	326	252	335	266	308	348	208	193	128	148	130
15	244	300	260	326	252	326	361	212	182	122	170	144
16	220	292	236	326	260	582	303	250	152	136	128	131
17	220	300	252	318	252	710	290	223	192	126	124	133
18	225	260	284	296	292	532	351	160	238	114	131	109
19	1,710	300	284	300	269	398	425	191	212	134	132	76
20	6,190	278	260	308	292	389	316	182	182	529	118	125
21	4,100	284	244	317	284	376	336	163	194	690	113	107
22	862	268	256	266	268	340	374	160	154	363	120	92
23	710	260	298	300	342	333	304	181	166	954	124	98
24	565	276	448	320	380	390	268	198	162	658	112	102
25	488	232	389	420	371	371	279	133	248	1,150	104	132
26	478	268	335	408	268	335	294	220	168	620	92	70
27	1,450	326	335	321	284	344	236	200	240	733	138	125
28	1,130	353	478	276	274	362	228	240	166	387	120	104
29	640	311	428	292	-	311	262	304	136	260	110	92
30	484	284	371	292	-	303	244	638	118	158	102	126
31	418	-	332	312	-	265	-	406	-	210	121	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	26,740	6,190	194	863	2.81	3.24
November	9,095	408	232	303	.987	1.10
December	9,154	478	236	295	.961	1.11
Calendar year 1937	208,162	6,960	103	570	1.86	25.23
January	11,575	888	266	373	1.21	1.40
February	7,903	380	216	282	.919	.96
March	10,898	710	242	352	1.15	1.33
April	12,037	848	228	401	1.31	1.46
May	7,211	638	133	233	.759	.88
June	6,900	398	118	230	.749	.84
July	9,191	1,150	96	296	.964	1.11
August	5,504	384	92	178	.580	.67
September	5,049	716	70	168	.547	.61
Water year 1937-38	121,257	6,190	70	332	1.08	14.71

Peak discharge.- Oct. 20 (6 p.m.) 8,960 sec.-ft.

Saluda River near Pelzer, S. C.

Location.- Water-stage recorder, lat. 34°40', long. 82°28', half a mile downstream from Hurricane Creek and 2 miles north of Pelzer, Anderson County. Zero of gage is 727.75 feet above mean sea level (from partly adjusted network of levels).

Drainage area.- 411 square miles.

Records available.- September 1929 to September 1938.

Extremes.- Maximum discharge during year, 10,200 second-feet Oct. 19 (gage height, 8.54 feet); minimum, 67 second-feet July 6; minimum daily discharge, 242 second-feet July 6.

1929-38: Maximum discharge, 13,300 second-feet Apr. 7, 1936 (gage height, 10.26 feet); minimum, 27 second-feet Oct. 20, 1930 (gage height, about 0.32 foot); minimum daily discharge, 62 second-feet Oct. 25, 1931.

Remarks.- Records good except those for period of missing gage heights, Apr. 30 to May 11, which were computed on basis of partial recorder record, weather records, and records for station at Chappells and stations in nearby drainage basins and are fair. Diurnal fluctuation caused by operation of power plants at Piedmont and near Greenville.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-20, May 31 to Sept. 30				Oct. 21 to May 30			
1.4	205	3.2	1,810	1.8	413	3.2	1,720
1.6	304	4.0	2,990	1.9	477	4.0	2,860
1.9	490	5.5	5,240	2.2	699	5.0	4,440
2.2	718	7.0	7,690	2.6	1,055	6.0	6,040
2.6	1,096						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	452	924	698	626	684	582	938	500	841	293	738	408
2	398	852	664	812	654	563	942	600	673	359	848	523
3	463	826	661	826	657	564	960	550	904	372	856	1,170
4	1,370	782	561	824	610	578	944	500	1,080	327	931	720
5	2,000	784	598	638	610	624	726	480	802	412	1,510	801
6	1,610	724	691	691	636	605	762	650	716	242	1,040	458
7	938	732	662	998	599	594	855	550	704	318	1,020	482
8	760	757	584	878	589	594	1,320	500	732	422	1,140	546
9	550	778	575	816	582	560	1,100	550	658	377	1,320	523
10	694	702	576	714	558	746	1,060	500	606	384	1,410	397
11	518	672	561	754	522	1,310	942	480	514	354	1,180	466
12	545	682	546	632	500	887	872	482	565	332	936	444
13	584	843	524	652	583	852	814	454	713	397	798	408
14	559	724	556	636	569	724	790	548	482	403	805	412
15	522	727	504	605	512	756	748	876	453	483	710	388
16	497	642	539	628	516	1,430	740	743	438	439	600	383
17	483	687	598	630	472	2,170	732	506	503	342	620	416
18	503	592	605	559	585	1,640	737	508	456	313	538	392
19	6,950	635	699	566	529	1,080	708	471	416	316	420	392
20	7,010	636	694	572	683	951	741	460	470	794	500	368
21	5,420	590	588	590	584	920	791	450	557	1,770	518	276
22	2,170	645	522	532	544	881	768	437	612	2,110	483	250
23	1,560	589	656	568	631	1,040	710	474	617	3,200	411	252
24	1,280	570	828	652	676	1,180	667	442	458	2,340	418	360
25	1,130	568	750	1,020	888	1,120	673	462	448	1,650	431	284
26	1,210	613	714	1,020	688	1,000	560	482	433	1,290	392	334
27	1,780	667	692	822	620	988	593	459	480	1,220	380	354
28	1,660	843	841	678	606	928	570	637	480	924	470	342
29	1,320	843	840	605	-	796	585	958	414	750	394	410
30	1,150	824	678	675	-	798	550	701	412	694	412	398
31	896	-	750	696	-	722	-	1,110	-	805	380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	46,982	7,010	398	1,516	3.69	4.25
November	21,503	924	568	717	1.74	1.94
December	19,953	841	504	644	1.57	1.81
Calendar year 1937	399,256	8,710	361	1,094	2.66	36.12
January	21,915	1,020	532	707	1.72	1.98
February	17,087	888	472	610	1.48	1.54
March	28,203	2,170	560	910	2.21	2.55
April	23,898	1,320	550	797	1.94	2.16
May	17,520	1,110	437	565	1.37	1.58
June	17,637	1,080	412	588	1.43	1.60
July	24,439	3,200	242	788	1.92	2.21
August	22,509	1,510	380	729	1.77	2.04
September	13,357	1,170	250	445	1.08	1.20
Water year 1937-38	275,103	7,010	242	754	1.83	24.86

Peak discharge.- Oct. 19 (5 p.m.) 10,200 sec.-ft.; Mar. 17 (7 a.m.) 2,480 sec.-ft.

30022 O—40—10

Saluda River at Chappells, S. C.

Location.- Water-stage recorder, lat. 34°11', long. 81°52', 300 feet below highway bridge on State Highway 39 at Chappells, Newberry County, and 8½ miles upstream from Little River. Zero of gage is 363.89 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 1,290 square miles.

Records available.- May 1927 to September 1938.

Average discharge.- 11 years, 2,249 second-feet.

Extremes.- Maximum discharge during year, 18,000 second-feet Oct. 22 (gage height, 20.91 feet); minimum, 277 second-feet Sept. 25 (gage height, 1.25 feet); minimum daily discharge, 358 second-feet July 5.

1927-38: Maximum discharge, 63,700 second-feet Oct. 2, 1929 (gage height, 31.5 feet), from rating curve extended above 27,000 second-feet; minimum, 184 second-feet Oct. 20, 1931 (gage height, 0.88 foot); minimum daily discharge, 222 second-feet Oct. 3, 1927.

Maximum stage known, 35.7 feet (Geological Survey and present Weather Bureau datum) Aug. 26, 1908, from U. S. Weather Bureau records.

Remarks.- Records good. Some regulation caused by operation of Ware Shoals power plant.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.6	358	8.0	2,840	18.0	10,800
2.0	462	11.0	4,360	19.0	12,910
3.0	762	14.0	6,480	21.0	18,270
5.0	1,510	17.0	9,460		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	932	1,720	1,630	1,590	1,850	1,790	1,620	1,160	1,630	864	1,080	666
2	1,270	2,300	1,430	1,590	1,670	1,510	5,970	968	1,630	662	1,960	896
3	862	1,670	1,390	2,030	1,630	1,470	8,400	1,390	1,510	576	1,900	932
4	5,890	1,720	1,390	2,260	1,080	1,010	4,580	1,390	1,850	421	1,630	1,190
5	8,920	1,760	1,080	1,980	896	862	2,750	1,310	1,590	358	1,390	1,630
6	4,570	1,590	1,080	1,760	1,120	1,040	2,210	1,010	1,390	683	1,930	1,470
7	2,930	1,120	1,720	2,100	1,160	1,270	4,070	894	1,590	730	1,940	1,470
8	2,300	1,230	1,390	3,220	1,720	1,720	4,070	*2,120	1,550	636	1,720	1,160
9	1,800	1,940	1,470	2,440	1,470	1,510	5,680	*1,310	1,670	698	2,080	1,080
10	1,080	1,590	1,510	2,030	1,470	1,760	4,060	*1,670	1,160	546	1,800	1,040
11	1,010	1,510	1,160	2,260	1,040	1,630	2,620	1,470	1,040	698	1,940	666
12	1,670	1,550	968	1,980	828	1,620	2,480	1,350	1,010	1,180	1,720	434
13	1,200	1,670	682	1,900	845	1,800	2,160	*862	1,040	1,120	1,470	735
14	1,120	1,270	1,640	1,270	1,010	1,470	1,940	*730	1,470	1,080	1,040	845
15	1,350	1,010	1,390	1,350	1,770	1,940	1,590	778	1,350	932	1,230	896
16	1,390	1,890	1,350	1,430	1,430	1,850	1,630	862	1,040	968	1,550	856
17	932	1,550	1,040	1,230	1,350	*2,270	1,470	1,310	1,010	666	1,350	746
18	730	1,550	896	1,980	1,040	*3,620	1,470	*1,080	1,470	408	1,080	462
19	1,670	1,430	1,120	1,590	862	*3,020	1,900	*1,010	932	528	862	421
20	5,720	1,430	1,160	1,630	896	*2,210	1,900	*698	561	746	932	722
21	11,800	1,040	1,800	1,120	1,040	*1,940	1,940	*518	861	2,030	730	762
22	17,100	*730	*1,270	968	1,760	*2,210	1,310	714	862	2,700	504	682
23	11,700	1,620	*2,090	1,230	1,510	*1,940	1,630	591	932	3,660	802	546
24	4,020	1,470	*2,880	1,120	1,720	*1,850	1,510	1,200	828	5,680	794	490
25	2,620	1,510	*1,760	1,920	1,270	*1,670	1,230	1,390	682	5,680	730	395
26	2,660	1,200	1,760	1,800	1,250	*2,080	1,630	1,670	832	8,000	932	395
27	4,000	1,350	1,550	1,720	1,390	1,850	1,510	1,260	576	7,670	862	494
28	4,480	1,200	2,760	1,390	1,160	1,800	1,430	968	998	2,750	651	591
29	3,560	1,270	2,520	1,510	-	2,080	968	862	1,120	1,900	434	546
30	2,750	1,900	2,120	1,430	-	1,800	1,120	914	762	1,590	621	682
31	2,160	-	1,850	1,200	-	1,760	-	1,760	-	1,310	682	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	114,196	17,100	730	3,684	2.86	3.30
November	44,790	2,300	730	1,493	1.16	1.29
December	47,856	2,880	682	1,544	1.20	1.38
Calendar year 1937	964,597	20,800	606	2,643	2.05	27.81
January	53,028	3,220	968	1,711	1.33	1.53
February	36,237	1,850	828	1,294	1.00	1.04
March	56,352	3,620	862	1,818	1.41	1.63
April	76,848	8,400	968	2,562	1.99	2.22
May	35,219	2,120	518	1,136	.881	1.02
June	34,946	1,850	561	1,165	.903	1.01
July	57,670	8,000	358	1,860	1.44	1.66
August	38,346	2,080	434	1,237	.959	1.11
September	23,900	1,630	395	797	.618	.69
Water year 1937-38	619,388	17,100	358	1,697	1.32	17.88

Peak discharge.- Oct. 5 (6 a.m.) 9,950 sec.-ft.; July 26 (3 a.m.) 9,230 sec.-ft.

*Discharge computed from graph based on partial recorder record, daily gage readings, weather records, and records for station at Silverstreet.

Saluda River near Silverstreet, S. C.

Location.- Water-stage recorder, lat. 34°11', long. 81°44', 200 feet upstream from new Higgins Ferry Bridge on State Highway 19, 1 mile downstream from Little River, and 2½ miles south of Silverstreet, Newberry County. Zero of gage is 345.13 feet above mean sea level (from partly adjusted network of levels).
Drainage area.- 1,570 square miles.
Records available.- January 1927 to September 1938.
Average discharge.- 11 years, 2,606 second-feet.
Extremes.- Maximum discharge during year, 15,800 second-feet Oct. 23 (gage height, 19.73 feet); minimum, 337 second-feet Sept. 25 (gage height, 3.72 feet); minimum daily discharge, 420 second-feet July 5.
1927-38: Maximum discharge, 83,800 second-feet Oct. 3, 1929 (gage height, 33.97 feet), from rating curve extended above 19,000 second-feet on basis of discharge measurements made at Chappells and near Chapin; minimum, 248 second-feet Sept. 29, 1927 (gage height, 3.45 feet); minimum daily discharge, 274 second-feet Sept. 29, 1927.
Remarks.- Records good. Discharge for period of missing gage heights, Aug. 21 to Sept. 19, computed on basis of partial recorder record and records for station at Chappells. Slight regulation from operation of power plants upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-23, June 18 to Sept. 30				Oct. 24 to June 17			
3.9	400	11.0	4,635	4.3	550	11.0	4,635
4.2	520	13.0	6,270	4.7	725	13.0	6,270
4.7	740	15.0	8,480	5.5	1,130	15.0	8,480
5.5	1,150	17.0	11,240	7.0	1,970	17.0	11,240
7.0	1,975	20.0	16,330	9.0	3,210		
9.0	3,210						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,010	2,030	1,790	1,910	1,940	1,780	1,810	1,300	1,740	825	1,180	700
2	1,320	2,450	1,620	1,790	1,850	1,680	6,220	1,080	1,790	935	1,840	850
3	1,120	1,970	1,520	2,450	1,790	1,620	9,260	1,350	1,620	695	2,090	1,000
4	6,460	1,850	1,570	2,510	1,400	1,240	7,570	1,520	1,970	508	1,810	1,000
5	12,300	1,910	1,350	2,210	1,020	975	3,340	1,400	1,740	420	1,540	1,800
6	8,440	1,850	1,160	2,030	1,180	1,080	2,510	1,180	1,570	610	1,920	1,600
7	3,620	1,380	1,790	2,340	1,300	1,460	4,760	950	1,620	785	2,090	1,400
8	2,630	1,350	1,570	3,620	1,740	1,790	5,580	2,000	1,570	650	1,920	1,300
9	2,090	1,970	1,570	2,950	1,620	1,680	7,080	1,680	1,790	695	2,150	1,200
10	1,420	1,790	1,620	2,330	1,620	1,970	5,550	1,790	1,370	650	1,920	1,100
11	1,150	1,680	1,400	2,450	1,300	2,090	3,140	1,740	1,160	672	2,030	800
12	1,760	1,680	1,100	2,270	975	1,740	2,880	1,400	1,050	1,120	1,810	500
13	1,480	1,850	825	2,150	925	2,090	2,390	1,100	1,160	1,260	1,590	650
14	1,260	1,620	1,550	1,620	1,100	1,620	2,210	775	1,450	1,150	1,200	850
15	1,480	1,160	1,520	1,460	1,780	2,090	1,850	875	1,400	1,040	1,200	1,000
16	1,540	1,910	1,520	1,620	1,620	2,090	1,850	825	1,160	960	1,590	900
17	1,200	1,740	1,270	1,460	1,520	3,210	1,740	1,320	1,170	810	1,420	800
18	860	1,680	1,000	2,080	1,300	3,960	1,620	1,160	1,860	496	1,230	550
19	1,400	1,620	1,240	1,850	1,020	3,340	2,030	1,100	1,260	496	885	480
20	5,320	1,520	1,270	1,790	1,000	2,630	2,090	825	810	762	935	594
21	8,250	1,350	1,760	1,400	1,130	2,150	2,150	570	806	1,780	800	785
22	14,100	900	1,460	1,160	1,840	2,330	1,680	725	985	2,760	600	718
23	15,000	1,580	2,060	1,320	1,680	2,150	1,740	612	910	3,620	800	582
24	8,330	1,570	3,760	1,350	1,970	2,090	1,740	1,040	960	5,660	850	508
25	3,020	1,680	2,340	1,970	1,620	1,850	1,400	1,520	762	6,090	750	440
26	2,880	1,460	2,030	1,970	1,320	2,210	1,680	1,620	910	7,520	900	464
27	4,690	1,410	1,790	1,910	1,570	2,030	1,680	1,570	672	9,800	950	440
28	5,410	1,570	3,220	1,570	1,350	1,970	1,520	1,050	884	4,410	750	605
29	4,260	1,380	3,140	1,680	-	2,210	1,130	1,000	1,180	2,150	500	582
30	3,080	2,030	2,570	1,620	-	1,970	1,100	782	885	1,760	600	628
31	2,390	-	2,210	1,400	-	1,910	-	1,850	-	1,480	750	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	129,270	15,000	860	4,170	2.66	3.07
November	49,940	2,450	900	1,665	1.06	1.18
December	54,595	3,760	825	1,761	1.12	1.29
Calendar year 1937	1,094,521	20,100	718	2,999	1.91	25.92
January	60,240	3,620	1,160	1,943	1.24	1.43
February	40,480	1,970	925	1,446	.921	.96
March	63,005	3,960	975	2,032	1.29	1.49
April	91,300	9,260	1,100	3,043	1.94	2.16
May	37,709	2,000	570	1,216	.775	.89
June	38,214	1,970	672	1,274	.811	.90
July	62,569	9,800	420	2,018	1.29	1.49
August	40,600	2,150	500	1,310	.834	.96
September	24,826	1,800	440	828	.527	.59
Water year 1937-38	692,748	15,000	420	1,898	1.21	16.41

Lake Murray near Columbia, S. C.

Location.- Water-stage recorder, lat. 34°03', long. 81°13', in intake tower about 500 feet above dam, 10 miles upstream from mouth of Saluda River, and 11 miles northwest of Columbia, Richland County. Zero of gage is 0.64 foot below mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 2,400 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum gage height during year, 343.56 feet Apr. 18; minimum, 329.65 feet Dec. 22, 23.
1929-38: Maximum gage height, 361.51 feet Apr. 10, 1936; minimum, 173.2 feet Aug. 31, 1929, when impounding of water started.

Remarks.- Records excellent. Those for period of missing gage heights, Nov. 16, 17, computed from graph based on partial recorder record.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	337.1	337.5	332.5	331.6	330.4	332.7	337.0	343.1	341.3	338.6	340.2	338.7
2	336.8	337.3	332.3	331.8	330.3	332.9	337.7	343.1	341.3	338.5	340.2	338.5
3	336.7	337.0	332.2	331.9	330.3	333.0	338.6	343.0	341.5	338.5	340.2	338.4
4	336.9	336.7	332.2	331.8	330.2	333.1	339.2	342.9	341.6	338.5	340.3	338.5
5	337.4	336.4	332.3	331.7	330.3	333.2	339.4	342.9	341.6	338.5	340.3	338.6
6	337.7	336.4	332.3	331.6	330.4	333.3	339.5	342.9	341.7	338.3	340.3	338.6
7	337.7	336.4	332.1	331.7	330.5	333.3	340.1	342.9	341.5	338.1	340.4	338.5
8	337.5	336.4	331.8	331.9	330.5	333.4	340.9	343.0	341.3	338.0	340.5	338.4
9	337.2	336.1	331.6	332.2	330.7	333.5	342.0	343.1	341.2	337.9	340.6	338.2
10	337.2	335.7	331.6	332.3	330.8	333.6	342.6	343.0	341.1	337.8	340.7	338.1
11	337.1	335.3	331.5	332.2	331.0	333.8	342.8	342.8	341.2	337.7	340.8	338.2
12	336.7	335.0	331.6	332.2	331.0	333.9	342.9	342.8	341.3	337.6	340.8	338.1
13	336.2	334.9	331.4	332.2	331.1	334.0	343.0	342.6	341.3	337.4	340.9	337.9
14	335.8	335.0	331.0	332.2	331.2	334.1	343.1	342.5	341.1	337.3	341.0	337.6
15	335.3	334.9	330.7	332.2	331.3	334.2	343.2	342.5	340.9	337.2	341.0	337.4
16	334.9	334.5	330.4	332.3	331.4	334.4	343.3	342.5	340.7	337.2	341.0	337.2
17	334.9	334.0	330.2	332.3	331.5	334.6	343.4	342.4	340.5	337.2	341.0	337.2
18	334.7	333.6	330.0	332.0	331.6	334.8	343.5	342.2	340.4	337.2	341.0	337.2
19	334.6	333.3	329.9	331.7	331.8	335.0	343.5	342.0	340.4	337.1	340.9	337.2
20	334.6	333.2	329.9	331.5	331.8	335.3	343.5	342.0	340.4	337.2	340.8	337.1
21	334.6	333.2	329.7	331.3	331.8	335.5	343.4	341.8	340.1	337.3	340.8	337.0
22	335.1	333.2	329.7	331.3	331.9	335.6	343.4	341.7	340.0	337.5	340.7	337.0
23	335.9	332.9	329.8	331.3	332.1	335.8	343.4	341.6	339.8	337.7	340.3	336.9
24	336.7	332.6	330.2	331.2	332.2	335.9	343.4	341.4	339.6	338.1	340.1	336.9
25	336.9	332.5	330.5	331.1	332.4	336.0	343.5	341.2	339.6	338.7	339.9	336.9
26	336.8	332.6	330.7	330.8	332.4	336.2	343.4	341.4	339.7	339.0	339.7	336.9
27	336.9	332.6	330.8	330.7	332.5	336.3	343.2	341.4	339.7	339.5	339.5	336.8
28	337.0	332.8	331.0	330.6	332.6	336.4	343.2	341.4	339.4	339.9	339.5	336.7
29	337.1	332.8	331.3	330.6	-	336.5	343.1	341.4	339.1	340.0	339.5	336.8
30	337.3	332.6	331.4	330.6	-	336.7	343.1	341.4	338.8	340.0	339.2	336.8
31	337.4	-	331.5	330.6	-	336.8	-	341.4	-	340.1	339.0	-

Saluda River near Columbia, S. C.

Location.- Water-stage recorder, lat. 34°01', long. 81°06', a quarter of a mile upstream from site of old Saluda mill and 2 miles upstream from mouth and Columbia, Richland County. Zero of gage is 149.46 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 2,450 square miles.

Records available.- August 1925 to September 1938.

Average discharge.- 13 years, 3,211 second-feet.

Extremes.- Maximum discharge during year, 11,600 second-feet Nov. 15 (gage height, 6.28 feet); minimum, 36 second-feet Sept. 26; minimum daily discharge, 50 second-feet Mar. 28, caused by shut-down of power plant at Lake Murray.

1925-38: Maximum discharge, 67,000 second-feet Oct. 2, 1929 (gage height, 15.22 feet), from rating curve extended above 39,000 second-feet on basis of discharge measurements made at Wise Ferry, near Chapin; minimum, 11 second-feet July 13, 1930; minimum daily discharge, 12 second-feet July 13, 1930, owing to impounding of water in Lake Murray.

Remarks.- Records good. Discharge for period of missing gage heights, July 2-6, computed on basis of partial record and records of power plant at Lake Murray. Considerable regulation from storage and operation of power plant at Lake Murray (capacity, about 92,000,000,000 cubic feet).

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 18						Dec. 19 to Sept. 30					
1.1	110	2.1	625	3.8	3,370	0.7	50	1.7	320	3.2	2,035
1.3	155	2.4	925	4.4	4,950	.9	76	1.9	460	3.8	3,215
1.5	220	2.8	1,450	5.0	6,910	1.1	110	2.1	625	4.4	4,740
1.7	320	3.2	2,110	5.6	9,000	1.3	155	2.4	915	5.0	6,575
1.9	460					1.5	220	2.8	1,410		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,420	4,770	4,290	612	4,040	101	164	670	2,360	2,840	798	4,250
2	4,860	6,430	3,790	227	3,280	72	726	1,830	2,100	550	1,410	3,880
3	1,770	6,860	2,530	2,630	2,450	204	287	3,150	1,790	500	1,900	600
4	6,680	6,420	408	3,810	1,320	151	934	2,850	1,020	380	1,540	177
5	7,890	5,220	152	4,500	508	89	2,340	2,270	382	3,200	883	1,230
6	7,530	957	3,950	2,910	514	71	2,260	1,340	3,130	3,400	327	3,050
7	7,410	228	5,090	1,430	146	203	1,470	728	4,820	3,080	84	3,060
8	7,710	5,070	5,200	334	92	424	931	306	6,110	3,110	422	3,140
9	4,340	7,750	3,560	169	68	250	959	2,600	3,650	1,230	796	3,240
10	413	8,670	2,560	2,980	70	86	280	3,480	2,660	1,020	639	534
11	5,720	7,340	1,210	4,020	69	206	1,210	3,490	802	3,390	628	161
12	8,270	7,380	554	4,080	67	213	1,460	2,940	220	3,910	648	2,920
13	8,700	1,200	6,030	2,010	101	198	1,500	3,380	3,110	3,040	204	4,520
14	8,440	169	6,960	1,700	193	198	758	1,930	4,530	2,400	73	4,290
15	8,580	6,880	6,650	838	83	284	564	334	4,840	1,840	928	4,440
16	4,980	8,740	4,990	368	74	573	269	1,440	4,930	1,020	1,390	2,440
17	1,400	8,680	4,300	4,710	71	135	92	3,600	4,130	963	1,480	293
18	4,330	7,270	3,600	6,230	63	95	974	4,220	2,130	1,240	1,800	526
19	2,870	6,210	1,790	6,440	227	65	1,590	2,480	1,200	864	1,870	1,640
20	5,340	1,480	3,810	5,440	340	95	4,020	3,120	4,990	205	680	1,130
21	3,970	150	2,960	3,060	62	62	4,730	2,480	4,710	228	887	1,080
22	2,780	4,230	1,720	993	74	66	2,310	1,220	4,380	402	6,590	1,140
23	486	5,900	678	764	143	65	470	3,650	3,660	148	4,990	1,170
24	116	5,530	450	4,370	143	58	144	5,190	4,230	208	4,220	369
25	3,880	908	243	4,750	73	52	2,810	4,670	2,550	1,210	5,110	68
26	4,970	1,160	110	4,690	233	185	4,670	2,150	888	1,580	4,620	1,090
27	4,720	536	1,230	2,980	261	368	2,810	2,850	4,600	1,360	1,400	1,310
28	3,930	212	1,270	2,290	123	50	1,880	1,470	5,730	1,620	81	1,590
29	2,390	4,570	1,920	1,560	-	62	2,270	502	5,570	1,610	3,550	1,060
30	475	4,240	1,320	1,000	-	55	1,090	2,570	6,070	486	4,700	558
31	144	-	1,380	3,690	-	57	-	2,710	-	94	4,490	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	143,514	8,700	116	4,629	1.89	2.18
November	135,160	8,740	150	4,505	1.84	2.05
December	84,705	6,960	110	2,732	1.12	1.29
Calendar year 1937	1,522,991	17,200	110	4,173	1.70	23.12
January	85,585	6,440	169	2,761	1.13	1.30
February	14,888	4,040	62	532	.217	.23
March	4,793	573	50	155	.063	.07
April	45,972	4,730	92	1,532	.625	.70
May	75,620	5,190	306	2,439	.996	1.15
June	101,292	6,110	220	3,376	1.38	1.54
July	47,123	3,910	94	1,520	.620	.71
August	59,138	6,590	73	1,908	.779	.90
September	55,956	4,520	68	1,865	.761	.85
Water year 1937-38	853,746	8,740	50	2,339	.955	12.97

South Fork of Edisto River near Denmark, S. C.

Location.- Water-stage recorder, lat. 33°23'35", long. 81°08'00", at bridge on State Highway 6, 200 feet downstream from Seaboard Railway bridge, 1½ miles downstream from Little River, and 4¾ miles north of Denmark, Bamberg County. Zero of gage is 165.19 feet above mean sea level (unadjusted).

Drainage area.- 720 square miles.

Records available.- August 1931 to September 1938.

Extremes.- Maximum discharge during year, 2,470 second-feet Apr. 10 (gage height, 8.20 feet); minimum, 292 second-feet Sept. 2.
1931-38: Maximum discharge, 13,500 second-feet Apr. 11, 1936 (gage height, 10.91 feet), from rating curve extended above 4,720 second-feet; minimum, 183 second-feet June 30 to July 3, 1935.

Remarks.- Records good.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 5				June 6 to Sept. 30			
4.8	306	6.6	781	4.4	292	6.4	669
5.5	404	7.0	1,090	5.0	375	6.7	843
5.9	485	7.6	1,700	5.6	468	7.1	1,185
6.3	622	8.2	2,470	6.1	561	7.5	1,590

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	421	668	814	1,000	622	622	473	581	848	528	1,090	298
2	430	668	781	922	622	602	632	545	922	510	885	292
3	440	668	781	848	602	602	962	513	848	476	695	305
4	485	668	781	814	602	581	1,180	485	814	428	607	325
5	545	645	781	781	602	545	1,280	473	922	398	575	346
6	581	622	781	781	602	545	1,230	485	1,050	375	561	428
7	602	581	751	751	622	545	1,380	473	962	375	528	476
8	668	563	721	751	622	545	1,760	473	814	382	550	452
9	694	545	694	751	622	563	2,190	499	848	390	589	468
10	645	545	721	781	602	581	2,470	513	922	368	607	492
11	602	545	721	781	602	581	2,260	499	885	375	561	501
12	563	602	721	781	602	581	2,000	485	751	398	501	501
13	529	751	721	781	581	581	1,820	485	647	412	460	492
14	513	814	721	814	581	581	1,640	485	589	412	444	466
15	499	781	721	814	581	581	1,480	461	561	412	428	452
16	499	781	694	814	563	581	1,230	421	561	436	405	428
17	499	781	694	781	563	622	1,090	389	550	452	398	398
18	513	751	694	751	563	645	922	367	538	468	382	375
19	513	721	668	751	563	645	848	360	476	476	398	353
20	513	721	668	721	545	622	781	360	412	468	420	368
21	513	721	668	694	545	622	751	346	428	510	420	368
22	499	694	668	694	545	622	781	326	428	575	436	339
23	499	668	721	668	545	645	962	312	428	721	436	318
24	499	668	922	668	581	645	1,000	319	452	922	405	305
25	513	645	1,000	668	622	622	922	326	468	922	360	298
26	529	668	1,050	668	645	563	885	421	510	1,000	346	298
27	563	751	1,050	668	622	529	814	499	550	1,230	339	312
28	622	848	1,000	645	622	499	721	545	575	1,180	332	312
29	622	848	1,000	622	-	485	694	645	607	962	325	375
30	622	814	1,000	622	-	473	645	668	550	1,140	312	468
31	668	-	1,000	622	-	461	-	668	-	1,330	305	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16,903	694	421	545	0.757	0.87
November	20,746	848	545	692	.961	1.07
December	24,708	1,050	668	797	1.11	1.28
Calendar year 1937	338,860	1,940	412	928	1.29	17.50
January	23,208	1,000	622	749	1.04	1.20
February	16,591	645	545	593	.824	.86
March	17,917	645	461	578	.803	.93
April	35,803	2,470	473	1,193	1.66	1.85
May	14,427	668	312	465	.646	.74
June	19,916	1,050	412	664	.922	1.03
July	19,031	1,330	368	614	.853	.98
August	15,100	1,090	305	487	.676	.78
September	11,611	501	292	387	.538	.60
Water year 1937-38	235,961	2,470	292	646	.897	12.19

Savannah River near Calhoun Falls, S. C.

Location.- Water-stage recorder, lat. 34°04', long. 82°38', 150 feet upstream from bridge on State Highway 7, one mile downstream from Seaboard Railway bridge, 1½ miles downstream from Rocky River, and 3 miles southwest of town of Calhoun Falls, Abbeville County. Zero of gage is 363.53 feet above mean sea level (southeastern supplementary adjustment of 1936).

Drainage area.- 2,876 square miles.

Records available.- August 1896 to December 1903, March 1930 to July 1932, April to September 1938.

Extremes.- Maximum discharge during period, 24,600 second-feet July 23 (gage height, 5.58 feet); minimum, 1,220 second-feet Sept. 26 (gage height, 1.04 feet); minimum daily discharge, 1,280 second-feet Sept. 26.
1896-1903, 1930-32, 1938: Maximum discharge observed, about 75,200 second-feet Feb. 14, 1900 (gage height, 19.4 feet, former site and datum); minimum discharge, 940 second-feet Oct. 5, 27, 1931 (gage height, 0.59 foot); minimum daily discharge, 1,175 second-feet June 11-14, 1902.

Remarks.- Records good. Slight diurnal fluctuation caused by operation of power plants upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.0	1,160	2.0	3,490	3.8	11,750
1.3	1,670	2.5	5,350	4.6	16,900
1.6	2,330	3.0	7,500	5.6	24,600

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							6,070	3,260	5,360	2,800	4,260	2,860
2							13,300	2,730	4,860	2,360	7,440	2,830
3							8,320	3,020	4,900	2,340	8,200	4,070
4							5,200	3,930	7,430	2,050	7,460	3,220
5							4,910	4,220	5,510	1,870	6,700	2,980
6							5,410	4,360	3,610	1,820	6,580	2,440
7							9,640	3,830	3,110	2,220	5,720	3,230
8							10,300	3,380	4,640	3,300	6,270	4,550
9							12,100	2,930	5,040	3,190	8,430	4,110
10							8,320	3,240	4,140	3,240	7,540	3,920
11							5,970	3,760	5,240	2,480	6,800	2,650
12							5,550	3,620	4,150	2,110	6,100	1,850
13							5,500	3,480	3,780	2,740	5,530	2,070
14							5,160	3,170	3,440	2,700	4,920	3,400
15							4,980	3,640	3,840	3,830	3,210	3,190
16							4,830	3,550	3,930	3,260	4,860	2,860
17							4,120	3,050	3,920	2,680	4,880	3,280
18							3,760	3,920	3,950	1,860	4,420	2,210
19							5,080	3,730	3,240	1,690	4,120	1,430
20							5,040	3,260	2,460	5,300	3,600	1,700
21							6,260	2,820	3,460	9,410	2,740	2,840
22							5,940	2,330	5,230	16,700	1,960	3,360
23							5,010	2,140	5,130	20,800	3,000	3,300
24							4,090	2,580	4,530	14,300	3,320	2,870
25							3,360	3,240	3,790	19,100	3,740	2,190
26							3,800	3,100	3,300	14,200	3,420	1,280
27							4,540	2,780	3,080	9,080	3,260	1,470
28							4,300	2,900	3,080	7,080	2,520	2,540
29							4,040	2,670	3,650	6,000	1,650	2,800
30							3,830	4,150	3,110	5,720	1,960	2,730
31							-	6,800	-	4,940	2,780	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January	-	-	-	-	-	-
February	-	-	-	-	-	-
March	-	-	-	-	-	-
April	178,730	13,300	3,360	5,958	2.07	2.31
May	105,790	6,800	2,140	3,413	1.19	1.37
June	124,910	7,430	2,460	4,164	1.45	1.62
July	181,170	20,800	1,690	5,844	2.03	2.34
August	147,390	8,430	1,650	4,755	1.65	1.90
September	84,230	4,550	1,280	2,808	.976	1.09
Water year						

Peak discharge.- Apr. 2 (2 p.m.) 15,200 sec.-ft.; July 23 (6 a.m.) 24,600 sec.-ft.

Seneca River near Anderson, S. C.

Location.- Water-stage recorder, lat. 34°50', long. 82°50', at highway bridge, 1½ miles downstream from mouth of Deep Creek, 4 miles upstream from confluence of Seneca and Tugaloo Rivers, and 10½ miles west of Anderson, Anderson County.
Drainage area.- 1,026 square miles.
Records available.- October 1931 to September 1938.
Extremes.- Maximum discharge during year, 27,900 second-feet Oct. 20 (gage height, 14.42 feet); minimum, 551 second-feet Aug. 28; minimum daily discharge, 654 second-feet Sept. 25.

1931-38: Maximum discharge, 55,200 second-feet Oct. 1, 1936 (gage height, 20.07 feet), from rating curve extended above 18,000 second-feet; minimum, about 90 second-feet Nov. 18, 1934; minimum daily discharge, 371 second-feet Oct. 15, 1931.

Maximum stage known, 25 feet Aug. 17, 18, 1929 (discharge, 77,000 second-feet, estimated).

Remarks.- Records good except those for periods of missing gage heights, Jan. 5-20, Feb. 2-10, which were computed on basis of partial recorder record, rainfall records and records for Saluda River near Pelzer and are fair. Diurnal fluctuation caused by operation of power plant upstream.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-20, July 22 to Sept. 30				Oct. 21 to July 21	
3.1	645	7.5	7,140	3.3	825
3.3	838	9.0	10,480	3.6	1,140
3.7	1,300	11.0	15,900	4.2	1,880
4.5	2,335	13.0	22,550	5.0	2,990
6.0	4,480			6.5	5,290
				8.0	8,190

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	956	2,080	1,570	1,570	1,670	1,290	2,150	1,280	2,080	1,080	2,470	1,190
2	1,040	1,880	1,500	1,740	1,500	1,270	2,920	1,330	1,630	1,080	2,960	956
3	1,130	1,750	1,420	1,880	1,500	1,290	2,570	1,300	3,390	967	3,100	1,560
4	3,750	1,740	1,400	1,650	1,400	1,470	2,080	1,290	3,570	1,020	2,540	1,800
5	4,160	1,670	1,360	1,400	1,400	1,280	1,820	1,110	2,430	865	2,610	1,390
6	2,680	1,710	1,500	1,600	1,400	1,400	1,740	1,440	1,680	988	2,130	1,290
7	1,680	1,620	1,380	2,200	1,400	1,510	2,150	1,280	1,480	998	2,750	1,670
8	1,380	1,530	1,320	2,000	1,300	1,320	3,060	1,270	3,420	1,150	3,170	1,870
9	1,380	1,530	1,330	1,900	1,300	1,240	4,320	1,400	1,880	956	3,590	1,520
10	1,190	1,530	1,300	1,600	1,300	2,020	3,130	1,220	1,880	1,220	2,680	1,280
11	1,240	1,530	1,240	1,700	1,230	2,920	2,500	1,140	2,430	1,060	2,270	1,100
12	1,180	1,610	1,150	1,400	1,270	1,950	2,150	1,100	2,150	988	1,940	1,080
13	1,170	1,820	1,290	1,500	1,260	1,670	1,950	1,140	1,740	925	1,800	1,110
14	1,160	1,530	1,270	1,400	1,290	1,580	1,750	1,590	1,390	925	1,610	1,070
15	1,180	1,470	1,240	1,400	1,260	1,810	1,750	1,820	1,230	1,230	1,610	1,070
16	1,120	1,450	1,240	1,400	1,200	7,050	1,660	1,300	1,210	1,060	1,490	1,030
17	1,040	1,450	1,220	1,400	1,240	8,130	1,610	1,160	1,220	816	1,450	1,040
18	1,120	1,410	1,750	1,300	1,240	3,620	1,680	1,140	1,400	865	1,450	808
19	18,100	1,390	1,740	1,300	1,360	2,500	1,820	1,140	1,230	915	1,340	768
20	23,000	1,450	1,470	1,300	1,420	2,220	1,820	1,160	1,480	2,410	1,220	902
21	6,330	1,300	1,380	1,300	1,330	2,150	2,150	1,210	1,540	4,200	1,140	828
22	3,640	1,360	1,360	1,360	1,240	1,950	1,880	1,060	1,820	9,560	1,200	788
23	3,570	1,320	1,450	1,320	1,480	2,640	1,720	1,110	1,710	7,380	1,190	788
24	2,710	1,290	2,150	1,420	2,570	2,570	1,540	1,150	1,330	5,290	1,130	778
25	2,290	1,390	1,820	2,850	1,820	2,020	1,530	1,040	1,240	4,180	1,100	654
26	2,520	1,330	1,620	2,020	1,540	1,820	1,470	1,060	1,210	3,100	1,100	778
27	6,520	1,680	1,560	1,610	1,460	2,430	1,390	1,070	1,450	2,680	1,060	838
28	3,870	2,080	2,020	1,610	1,450	2,020	1,380	1,070	1,270	2,200	951	768
29	2,710	2,020	2,020	1,400	-	1,740	1,320	1,750	1,140	2,000	1,030	828
30	2,430	1,750	1,740	1,460	-	1,700	1,270	1,750	1,030	2,060	1,030	881
31	2,020	-	1,630	1,390	-	1,660	-	3,130	-	2,000	1,030	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	108,266	23,000	956	3,492	3.40	3.92
November	47,670	2,080	1,290	1,589	1.55	1.73
December	46,440	2,150	1,150	1,498	1.46	1.68
Calendar year 1937	953,985	27,100	695	2,614	2.55	34.56
January	49,380	2,850	1,300	1,593	1.55	1.79
February	39,830	2,570	1,200	1,422	1.39	1.45
March	70,240	8,130	1,240	2,266	2.21	2.55
April	60,280	4,320	1,270	2,009	1.96	2.19
May	41,010	3,130	1,040	1,323	1.29	1.49
June	52,660	3,570	1,030	1,755	1.71	1.91
July	66,048	9,560	816	2,131	2.08	2.40
August	56,141	3,590	951	1,811	1.77	2.04
September	32,433	1,870	654	1,081	1.05	1.17
Water year 1937-38	670,398	23,000	654	1,837	1.79	24.32

Peak discharge.- Oct. 20 (6 a.m.) 27,900 sec.-ft.; Mar. 17 (5 a.m.) 10,200 sec.-ft.; July 22 (11 p.m.) 10,700 sec.-ft.

Broad River near Bell, Ga.

Location.- Wire-weight gage, lat. 33°58', long. 82°46', at bridge on State Highway 17, half a mile downstream from Long Creek, 1 mile south of Bell's crossroads and 12 miles southeast of Elberton, Elbert County. Zero of gage is 356.30 feet above mean sea level.

Drainage area.- 1,420 square miles (revised).

Records available.- November 1926 to July 1932, August 1937 to September 1938.

Extremes.- Maximum discharge observed during period August to September 1937, 4,840 second-feet Aug. 31 (gage height, 9.62 feet); minimum, 520 second-feet Sept. 27 (gage height, 3.20 feet).

Maximum discharge observed during water year 1937-38, 25,100 second-feet July 26 (gage height, 24.12 feet); minimum, 430 second-feet Sept. 26, 27 (gage height, 3.00 feet).

1926-32, 1937-38: Maximum discharge, 47,200 second-feet Oct. 2, 1929 (gage height, 34.8 feet), from rating curve extended above 25,000 second-feet; minimum, 303 second-feet Sept. 25, 1931.

Remarks.- Records good except those for periods of missing gage heights, Oct. 27-29, Dec. 25, May 8, which were computed on basis of records for Oconee River near Greensboro and are fair. Gage read twice daily.

Rating table, Aug. 3, 1937 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

3.0	430	10.0	5,200	20.0	17,900
4.0	925	12.0	7,100	22.0	21,300
5.0	1,490	14.0	9,400	24.0	24,900
6.0	2,100	16.0	12,000		
8.0	3,500	18.0	14,800		

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1											-	3,260
2											-	1,790
3											1,310	1,260
4											820	1,310
5											1,040	980
6											870	980
7											1,370	1,040
8											820	925
9											1,140	870
10											2,300	820
11											1,310	820
12											980	870
13											820	670
14											770	820
15											720	670
16											925	670
17											870	670
18											720	620
19											620	595
20											620	595
21											595	620
22											820	620
23											2,560	595
24											3,260	595
25											2,100	545
26											1,200	520
27											820	520
28											2,970	670
29											2,420	670
30											1,970	620
31											4,570	-

Discharge, in second-feet, of Broad River near Bell, Ga., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	1,200	1,140	1,090	1,090	925	3,340	1,040	2,100	720	1,490	520
2	670	1,140	1,090	1,260	1,040	925	14,700	1,040	1,430	670	1,970	595
3	670	1,140	1,040	1,200	980	925	16,000	1,040	3,420	670	1,730	1,200
4	7,100	1,140	980	1,140	980	1,040	4,140	980	3,040	770	1,430	980
5	3,900	1,090	980	1,090	980	980	2,300	1,040	2,230	720	1,260	770
6	1,430	1,090	980	1,040	980	925	1,910	1,970	1,090	670	1,090	1,550
7	1,140	1,090	1,040	2,690	980	1,140	8,920	1,670	980	670	2,620	1,430
8	980	1,040	980	2,560	980	1,040	8,680	1,400	980	620	2,160	1,040
9	870	1,040	980	1,610	925	980	9,920	1,550	1,790	620	1,490	720
10	870	1,140	980	1,430	925	1,140	5,020	1,260	1,430	770	1,430	670
11	820	1,370	980	1,430	925	2,230	2,560	980	2,900	670	1,140	670
12	820	1,490	925	1,490	925	1,490	2,160	925	1,430	670	925	620
13	820	1,430	925	1,370	925	1,200	1,910	925	1,040	595	925	620
14	820	1,140	980	1,260	925	1,140	1,790	925	925	595	870	620
15	870	1,090	980	1,200	870	1,090	1,610	925	870	1,370	820	620
16	770	1,610	925	1,140	870	2,300	1,550	925	820	1,140	1,040	595
17	770	1,260	925	1,090	870	5,560	1,490	925	770	770	820	570
18	720	1,040	980	1,090	925	4,660	1,370	870	1,970	670	720	545
19	6,900	1,090	980	1,090	980	2,360	1,850	820	1,910	620	720	545
20	21,300	1,090	980	1,090	980	1,850	1,550	820	1,430	670	670	520
21	16,600	1,040	980	1,090	925	2,100	2,100	980	1,490	3,560	620	475
22	2,760	980	925	1,040	925	1,670	2,490	870	2,040	4,300	620	475
23	2,040	980	980	1,040	925	2,900	4,140	820	1,550	6,800	595	452
24	1,850	980	2,230	1,090	1,260	2,100	3,040	770	1,250	10,600	595	452
25	1,490	980	1,700	1,370	1,140	1,670	1,730	770	1,090	20,800	595	430
26	1,430	1,040	1,310	1,260	1,040	1,430	1,370	770	1,090	22,400	570	430
27	4,000	1,140	1,200	1,090	980	1,370	1,310	770	1,310	8,440	545	452
28	3,600	1,260	1,370	1,040	980	1,370	1,260	770	1,140	2,230	520	498
29	2,500	1,260	1,490	1,040	-	1,310	1,140	820	870	1,670	520	475
30	1,370	1,140	1,370	1,040	-	1,200	1,090	3,660	770	1,490	520	570
31	1,370	-	1,140	1,040	-	1,140	-	5,020	-	1,310	520	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 3-31, 1937	41,310	4,570	595	1,424	1.00	1.08
September	26,210	3,260	520	874	.615	.69
Water year						
October 1937	91,920	21,300	670	2,965	2.09	2.41
November	34,520	1,610	980	1,151	.811	.90
December	34,465	2,230	925	1,112	.783	.90
Calendar year						
January 1938	39,500	2,690	1,040	1,274	.897	1.03
February	27,230	1,260	870	972	.685	.71
March	52,160	5,560	925	1,683	1.19	1.37
April	112,440	16,000	1,090	3,748	2.64	2.94
May	38,050	5,020	770	1,227	.864	1.00
June	45,155	3,420	770	1,505	1.06	1.18
July	98,290	22,400	595	3,171	2.23	2.57
August	31,540	2,620	520	1,017	.716	.83
September	20,109	1,550	430	670	.472	.53
Water year 1937-38	625,379	22,400	430	1,713	1.21	16.37

Augusta canal near Augusta, Ga.

Location.- Two water-stage recorders at upper end of canal: Upper gage, lat. 33°32'55", long. 82°02'15", 1,000 feet below diversion dam, 1¼ miles downstream from Stevens Creek power dam, and 5 3/8 miles northwest of Augusta, Richmond County; lower gage, lat. 33°30'50", long. 82°00'15", 3 3/8 miles downstream from upper gage. Zero of each gage is 46.58 feet by city of Augusta datum, or 149.417 feet above mean sea level (general adjustment of 1929).

Records available.- November 1930 to September 1938.

Extremes.- Maximum daily discharge during year, 3,700 second-feet Oct. 20; minimum daily, 1,220 second-feet Sept. 25.
1930-38: Maximum daily discharge, 3,940 second-feet Sept. 1, 1937; no flow Apr. 8 to May 10, 1936.

Remarks.- Records good except those for periods of missing gage heights, June 12-17, July 22, 25, 26, which were computed on basis of partial recorder record and records for similar periods and are fair. Daily discharge obtained by slope method. Canal diverts water from Savannah River at dam 1 mile downstream from Stevens Creek Dam for power and water-supply. Waste water from power houses returns to river by three channels above Thirteenth Street highway bridge. Water is also pumped from canal for water supply for Augusta, and a small amount of water entering Beaverdam ditch is discharged into river about 13 miles downstream from Augusta.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,430	3,280	3,510	2,110	3,240	3,270	2,620	2,120	3,070	2,500	3,030	3,030
2	2,420	3,340	3,560	1,690	3,290	3,220	1,710	3,090	2,910	2,220	3,250	2,940
3	2,130	3,430	3,480	2,960	3,260	3,000	1,410	3,270	2,190	1,830	3,190	1,740
4	3,480	3,410	2,460	3,260	3,190	2,740	2,340	3,260	1,420	1,840	3,230	1,730
5	3,600	3,360	2,220	3,320	2,030	1,650	3,100	3,290	1,350	2,270	3,210	1,730
6	3,570	2,450	3,220	3,300	1,740	1,450	2,870	2,790	2,730	2,550	2,150	2,820
7	3,300	2,060	3,380	2,980	2,980	2,770	3,070	2,220	3,170	2,510	1,840	3,200
8	3,120	3,010	3,590	1,930	3,230	3,020	1,950	2,060	3,160	2,460	3,080	3,330
9	2,110	3,150	3,540	1,700	3,280	3,130	1,330	3,110	3,210	2,200	3,180	3,310
10	2,100	3,180	3,430	2,920	3,250	3,210	1,360	3,320	2,670	2,050	3,210	1,940
11	3,210	3,330	2,510	3,230	3,080	3,050	2,960	3,350	1,800	2,500	3,260	1,730
12	3,150	3,260	2,340	3,210	2,110	2,260	3,200	3,220	1,600	2,700	3,330	2,900
13	3,550	2,120	3,150	3,260	1,780	1,930	3,150	2,710	3,000	2,750	1,990	2,820
14	3,550	1,860	3,200	2,930	3,000	2,900	3,110	1,860	3,200	2,690	1,230	2,720
15	3,620	3,040	3,430	2,230	3,240	2,640	2,710	1,880	3,000	2,760	3,050	3,190
16	2,340	3,260	3,200	2,110	3,310	2,870	2,030	3,060	3,000	2,230	3,270	3,210
17	2,030	3,450	2,980	3,080	3,300	3,110	1,880	3,170	2,600	1,890	3,350	1,810
18	3,360	3,500	2,230	3,220	3,190	2,730	3,160	3,160	1,860	2,870	3,370	1,370
19	3,540	3,300	1,970	3,180	1,790	1,780	3,210	3,160	1,740	3,030	3,310	2,800
20	3,700	2,140	3,270	3,180	1,370	1,710	3,240	2,660	2,990	2,730	2,370	2,570
21	2,130	1,960	3,370	2,940	2,770	2,770	3,120	1,950	3,240	3,130	2,150	2,600
22	2,790	3,280	2,820	1,900	3,180	2,930	2,660	1,730	3,050	3,350	3,090	2,790
23	1,650	3,430	2,290	1,620	3,250	2,880	1,860	2,910	2,980	2,280	3,000	2,770
24	1,910	3,590	1,960	2,930	3,250	2,800	1,570	2,960	2,560	2,010	3,310	1,250
25	3,400	3,520	1,790	3,190	3,290	2,750	2,960	3,070	1,820	2,710	3,330	1,220
26	3,530	3,130	1,740	3,240	2,030	2,220	3,090	2,930	1,530	2,560	3,330	2,430
27	3,650	2,070	2,300	3,270	1,830	1,920	3,240	2,350	2,750	2,510	2,100	2,330
28	3,670	1,880	2,530	3,060	3,080	2,990	3,150	1,930	3,060	2,770	2,040	2,350
29	3,450	3,300	3,140	2,090	-	3,120	2,640	1,860	3,180	3,010	2,910	2,670
30	2,460	3,480	3,190	1,950	-	3,130	2,180	2,930	3,110	2,190	2,530	3,020
31	2,170	-	3,060	3,030	-	3,050	-	3,130	-	1,870	2,510	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	92,120	3,700	1,650	2,972		
November	89,370	3,590	1,860	2,979		
December	88,860	3,590	1,740	2,866		
Calendar year 1937	1,066,281	3,940	298	2,921		
January	85,020	3,320	1,620	2,743		
February	78,340	3,310	1,370	2,798		
March	83,000	3,270	1,450	2,677		
April	76,880	3,240	1,330	2,563		
May	84,500	3,350	1,730	2,726		
June	77,950	3,240	1,350	2,598		
July	76,950	3,350	1,830	2,482		
August	88,200	3,370	1,250	2,845		
September	74,320	3,330	1,220	2,477		
Water year 1937-38	995,510	3,700	1,220	2,727		

Brier Creek at Millhaven, Ga.

Location.- Staff gage, lat. 32°56'00", long. 81°39'05", at Savannah & Atlanta Railway trestle at Millhaven, Screven County, 8½ miles upstream from Beaver Dam Creek.

Drainage area.- 656 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 3,110 second-feet Apr. 13 (gage height, 10.0 feet); minimum observed, 147 second-feet Aug. 28, 29, 31, Sept. 2; minimum gage height, 1.22 feet Aug. 31, Sept. 2.
1937-38: Maximum discharge observed, 4,430 second-feet May 4, 1937 (gage height, 11.50 feet); minimum observed, that of Aug. 28, 29, 31 and Sept. 2, 1938.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.2	147	4.0	456	8.0	1,845
1.5	163	5.0	663	9.0	2,420
2.0	199	6.0	940	10.0	3,110
3.0	298	7.0	1,350		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	216	385	438	687	402	385	323	475	553	298	1,090	152
2	225	385	438	687	402	385	352	438	513	264	940	147
3	234	420	438	639	402	402	553	438	573	234	817	152
4	264	438	456	573	402	402	595	475	617	225	687	157
5	298	420	475	533	385	402	687	420	663	207	513	157
6	310	420	475	513	385	352	789	420	763	199	438	163
7	310	385	456	513	402	352	905	420	789	191	402	176
8	298	352	438	494	402	337	1,170	573	763	183	420	169
9	298	323	368	494	402	337	2,300	533	687	183	385	183
10	298	323	475	475	402	337	2,300	475	617	169	402	199
11	298	323	475	475	385	352	2,180	402	573	199	438	207
12	286	368	533	494	385	352	2,680	368	494	207	420	207
13	275	420	420	494	368	368	3,110	368	385	225	385	216
14	275	420	438	494	368	385	2,740	402	337	275	352	216
15	264	385	438	513	352	385	2,240	420	323	254	323	207
16	264	385	438	494	352	402	1,690	385	352	298	286	207
17	254	385	438	475	337	456	1,260	337	385	275	244	199
18	254	385	456	494	352	475	1,010	275	385	234	216	191
19	254	385	438	494	368	494	845	254	337	216	199	176
20	275	385	420	494	352	513	763	234	264	264	183	176
21	264	385	402	475	352	513	687	225	234	456	183	169
22	264	368	402	475	352	513	663	207	244	573	169	169
23	254	368	438	438	368	533	711	191	286	573	169	169
24	275	368	573	420	402	533	763	191	298	491	163	163
25	286	368	595	438	420	533	639	183	286	617	163	157
26	352	385	617	438	385	573	573	310	368	1,050	163	152
27	438	438	595	420	385	513	553	763	385	711	157	152
28	475	456	595	420	385	420	533	763	438	711	152	157
29	475	456	595	420	-	385	513	533	475	737	147	225
30	438	438	617	420	-	368	513	533	402	737	152	402
31	420	-	663	402	-	337	-	533	-	905	147	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,391	475	216	303	0.462	0.53
November	11,722	456	323	391	.696	.66
December	15,043	663	368	485	.739	.85
Calendar year						
January	15,295	687	402	493	.752	.87
February	10,654	420	337	380	.579	.60
March	13,094	573	337	422	.643	.74
April	34,640	3,110	323	1,155	1.76	1.96
May	12,544	763	183	405	.617	.71
June	13,789	789	234	460	.701	.78
July	12,164	1,050	169	392	.598	.69
August	10,905	1,090	147	352	.537	.62
September	5,572	402	147	186	.284	.32
Water year 1937-38	164,813	3,110	147	452	.689	9.33

Ogeechee River near Louisville, Ga.

Location.- Staff gage, lat. 32°58', long. 82°23', at bridge on U. S. Highway 1, 1 mile downstream from Louisville & Wadley Railroad, 2 miles south of Louisville, Jefferson County, 2 miles downstream from Rocky Comfort Creek, and 2 miles upstream from Big Creek.

Drainage area.- 800 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 8,900 second-feet Apr. 10 (gage height, 15.16 feet); minimum observed, 121 second-feet Sept. 26 (gage height, 2.56 feet).
1937-38: Maximum discharge observed, 12,800 second-feet May 2, 1937 (gage height, 16.1 feet); minimum observed, that of Sept. 26, 1938.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.5	113	9.0	1,095	14.0	5,580
3.0	153	10.0	1,430	15.0	8,200
4.0	242	11.0	1,930	16.0	12,300
6.0	477	12.0	2,690		
8.0	855	13.0	3,900		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	214	577	477	691	449	463	421	525	711	421	1,320	153
2	232	541	493	613	449	421	751	463	691	336	990	169
3	242	449	477	577	463	407	1,160	421	731	262	731	153
4	262	395	435	541	477	395	1,360	383	833	214	559	145
5	303	359	421	525	477	383	2,430	383	731	214	541	153
6	336	371	421	525	463	383	5,580	449	691	214	595	169
7	371	347	421	541	463	371	4,040	493	671	196	671	187
8	395	336	421	559	435	371	3,130	463	595	205	711	187
9	383	336	435	559	435	371	3,500	477	509	205	731	196
10	325	336	463	577	421	395	8,550	541	407	187	711	196
11	292	347	493	613	421	449	7,600	525	691	187	671	187
12	272	371	493	691	421	463	5,780	477	509	242	595	178
13	242	383	477	731	421	449	3,760	449	435	336	477	196
14	242	395	449	711	421	449	2,690	395	395	407	371	187
15	262	421	449	671	407	477	2,060	325	371	359	314	178
16	262	435	435	651	407	477	1,650	303	336	303	282	161
17	252	449	421	613	421	651	1,360	292	272	435	232	169
18	262	435	435	613	407	731	1,160	282	223	477	232	161
19	272	421	435	559	407	791	1,020	262	205	525	252	153
20	383	407	421	541	407	855	899	242	214	671	282	153
21	595	383	421	509	421	965	811	232	325	811	262	145
22	691	383	421	493	421	965	771	214	395	751	214	129
23	613	395	477	493	421	877	811	196	449	731	205	145
24	631	407	613	509	463	731	855	196	595	1,040	187	137
25	671	407	711	509	477	613	943	232	751	1,100	178	129
26	577	407	791	493	463	541	943	371	731	1,360	169	121
27	493	407	833	477	477	525	943	359	559	2,900	161	129
28	493	421	921	477	477	493	899	359	395	2,900	153	137
29	559	435	965	477	-	449	771	336	347	2,510	145	153
30	559	449	943	463	-	421	631	463	395	2,270	153	187
31	541	-	833	463	-	395	-	651	-	1,810	145	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	12,227	691	214	394	0.492	0.57
November	12,205	577	336	407	.509	.57
December	16,901	965	421	545	.681	.79
Calendar year						
January	17,465	731	463	563	.704	.81
February	12,292	477	407	439	.549	.57
March	16,727	965	371	540	.675	.78
April	67,279	8,550	421	2,243	2.80	3.12
May	11,759	651	196	379	.474	.55
June	15,163	833	205	505	.631	.70
July	24,579	2,900	187	793	.991	1.14
August	13,240	1,320	145	427	.534	.62
September	4,843	196	121	161	.201	.22
Water year 1937-38	224,680	8,550	121	616	.770	10.44

Ogeechee River at Scarboro, Ga.

Location.- Staff gage, lat. 32°42'40", long. 81°52'45", at county highway bridge at Scarboro, Jenkins County, 3½ miles downstream from Sculls Creek, 6½ miles upstream from Horse Creek, and 7½ miles southeast of Millen.

Drainage area.- 1,940 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 11,600 second-feet Apr. 14 (gage height, 10.38 feet); minimum observed, 146 second-feet Sept. 28 (gage height, 0.34 foot).

1937-38: Maximum discharge observed, 12,900 second-feet May 6, 1937 (gage height, 10.71 feet); minimum observed, that of Sept. 28, 1938.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.4	154	4.0	820	8.0	4,020
1.0	250	5.0	1,120	9.0	6,620
2.0	420	6.0	1,510	10.0	9,980
3.0	600	7.0	2,240	11.0	14,350

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	348	900	795	1,340	900	845	900	1,510	1,610	1,120	3,800	266
2	348	845	770	1,380	870	845	870	1,460	1,610	1,020	4,020	266
3	366	795	745	1,380	870	845	930	1,420	1,880	900	4,020	266
4	402	770	745	1,380	870	845	990	1,300	2,140	770	3,580	266
5	438	770	770	1,340	870	820	1,080	1,190	2,770	720	3,150	266
6	474	770	820	1,300	845	795	900	1,080	3,360	660	2,770	282
7	510	770	820	1,220	820	770	1,340	960	3,150	564	2,350	282
8	528	745	820	1,190	820	745	1,960	930	2,770	492	2,050	282
9	528	680	820	1,160	845	720	3,360	990	2,470	438	1,810	314
10	564	660	795	1,050	845	700	6,320	990	2,140	420	1,620	348
11	582	680	795	1,020	845	700	9,240	990	2,050	438	1,420	348
12	600	700	820	1,020	845	700	10,400	990	1,880	456	1,380	366
13	620	700	820	1,020	820	680	10,400	990	1,680	528	1,340	348
14	600	700	845	1,050	795	680	11,600	930	1,510	492	1,260	314
15	546	700	820	1,080	795	700	10,700	930	1,460	564	1,190	298
16	492	720	845	1,120	770	700	8,880	930	1,460	620	1,080	330
17	474	745	845	1,160	745	845	7,860	870	1,460	640	990	314
18	438	720	870	1,160	745	870	5,500	820	1,420	640	845	314
19	456	700	870	1,120	745	930	4,740	745	1,220	640	680	298
20	456	700	870	1,080	770	990	4,020	660	990	700	564	298
21	456	700	820	1,080	795	1,050	3,150	582	870	820	474	282
22	474	700	820	1,050	820	1,120	2,770	546	820	960	456	266
23	492	700	930	1,020	795	1,190	2,470	510	870	1,120	420	250
24	528	700	930	1,050	795	1,220	2,140	474	900	1,380	420	218
25	564	680	990	1,020	795	1,220	1,880	456	930	1,460	420	218
26	620	680	1,050	990	795	1,260	1,740	546	960	1,620	384	202
27	720	680	1,120	960	795	1,260	1,810	582	1,080	2,050	348	170
28	795	700	1,160	930	820	1,220	1,740	700	1,120	3,150	314	154
29	870	745	1,190	930	-	1,190	1,620	960	1,160	4,500	282	282
30	1,020	795	1,220	930	-	1,050	1,560	1,220	1,160	4,740	266	420
31	930	-	1,300	930	-	960	-	1,510	-	4,020	250	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	17,239	1,020	348	556	0.287	0.33
November	21,850	900	660	728	.375	.42
December	27,830	1,300	745	898	.463	.53
Calendar year						
January	34,460	1,380	930	1,112	.573	.66
February	22,840	900	745	816	.412	.44
March	28,465	1,260	660	918	.473	.55
April	122,870	11,600	870	4,096	2.11	2.35
May	28,771	1,510	456	928	.478	.55
June	48,900	3,360	820	1,630	.840	.94
July	38,642	4,740	420	1,247	.643	.74
August	43,953	4,020	250	1,418	.731	.84
September	8,528	420	154	284	.146	.16
Water year 1937-38	444,348	11,600	154	1,217	.627	8.51

Ogeechee River near Eden, Ga.

Location.- Staff gage, lat. 32°10', long. 81°25', at bridge on U. S. Highway 25, 80 and 280, 2 miles west of Eden, Effingham County, 2 miles upstream from Seaboard Railway bridge, and 3 miles upstream from Black Creek.

Drainage area.- 2,650 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 10,800 second-feet Apr. 19 (gage height, 11.52 feet); minimum observed, 290 second-feet Sept. 28 (gage height, 0.52 foot).

1937-38: Maximum discharge observed, 11,400 second-feet May 11, 1937 (gage height, 11.55 feet); minimum observed, that of Sept. 28, 1938.

Remarks.- Records good. Gage read twice daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 15		Nov. 16 to Sept. 30			
1.9	700	0.5	290	7.0	2,870
2.5	890	1.0	450	8.0	3,580
3.0	1,065	2.0	770	9.0	4,690
3.5	1,250	3.0	1,100	10.0	6,480
		4.0	1,436	11.0	9,100
		5.0	1,826	12.0	12,680
		6.0	2,310		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	760	960	968	1,580	1,260	1,200	1,300	2,580	738	1,300	1,870	418
2	730	960	968	1,580	1,230	1,130	1,330	2,420	836	1,300	2,260	402
3	730	995	968	1,580	1,200	1,100	1,300	2,210	968	1,230	3,120	386
4	790	995	1,000	1,580	1,170	1,070	1,260	2,060	1,100	1,230	3,770	386
5	890	995	1,000	1,580	1,170	1,070	1,260	1,920	1,260	1,200	4,080	370
6	995	995	1,000	1,580	1,130	1,030	1,230	1,780	1,440	1,170	4,080	370
7	1,060	960	1,000	1,620	1,100	1,030	1,170	1,700	1,660	1,100	3,870	386
8	1,100	925	968	1,660	1,100	1,030	1,170	1,620	1,830	968	3,770	386
9	1,030	890	968	1,660	1,100	1,000	1,330	1,540	1,960	836	3,770	386
10	960	855	1,000	1,660	1,100	968	1,660	1,440	2,210	738	3,670	370
11	925	890	1,000	1,660	1,070	968	2,010	1,330	2,520	738	3,490	354
12	855	925	1,030	1,620	1,030	935	2,470	1,200	2,750	803	3,190	386
13	790	1,030	1,070	1,580	1,030	935	3,050	1,130	2,930	836	2,870	402
14	790	1,140	1,070	1,540	1,030	902	3,870	1,100	2,870	770	2,470	402
15	790	1,250	1,030	1,510	1,030	902	5,310	1,070	2,640	902	2,160	402
16	790	1,300	1,030	1,470	1,030	869	7,670	1,070	2,470	902	1,830	402
17	790	1,260	1,030	1,440	1,030	902	9,720	1,030	2,360	836	1,620	402
18	790	1,200	1,030	1,400	1,000	968	10,400	1,030	2,260	770	1,510	386
19	760	1,130	1,070	1,400	1,000	968	10,800	1,000	2,010	870	1,470	370
20	700	1,100	1,070	1,400	968	968	10,100	1,000	1,830	1,000	1,400	370
21	700	1,070	1,070	1,400	968	1,000	8,480	968	1,660	1,170	1,260	370
22	730	1,030	1,070	1,400	935	1,030	7,170	902	1,580	1,300	1,130	354
23	730	1,000	1,100	1,400	935	1,070	6,080	836	1,580	1,260	1,070	338
24	730	968	1,170	1,400	968	1,100	5,140	770	1,510	1,300	1,030	322
25	730	968	1,300	1,400	1,100	1,100	4,430	674	1,370	1,400	770	306
26	700	935	1,440	1,400	1,230	1,130	3,870	642	1,230	1,700	642	306
27	730	935	1,540	1,370	1,300	1,170	3,490	610	1,440	1,740	578	306
28	790	968	1,580	1,370	1,260	1,200	3,260	578	1,400	1,740	546	306
29	855	968	1,620	1,330	-	1,230	2,990	610	1,370	1,740	514	706
30	890	968	1,580	1,300	-	1,300	2,810	642	1,300	1,700	482	770
31	925	-	1,580	1,260	-	1,300	-	706	-	1,740	450	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	25,535	1,100	700	824	0.311	0.36
November	30,565	1,300	855	1,019	.385	.43
December	35,320	1,620	968	1,139	.430	.50
Calendar year						
January	46,130	1,660	1,260	1,488	.562	.65
February	30,474	1,300	935	1,088	.411	.43
March	32,575	1,300	869	1,051	.397	.46
April	126,130	10,800	1,170	4,204	1.59	1.77
May	38,168	2,580	578	1,231	.465	.54
June	53,082	2,930	738	1,769	.668	.75
July	36,289	1,740	738	1,171	.442	.51
August	64,742	4,080	450	2,088	.788	.91
September	11,820	770	306	394	.149	.17
Water year 1937-38	530,830	10,800	306	1,454	.549	7.48

Canoochee River near Claxton, Ga.

Location.- Staff gage, lat. 32°11'05", long. 81°53'25", at bridge on State Highway 73, 2 miles northeast of Claxton, Evans County, and 10 miles upstream from Lotts Creek.

Drainage area.- 555 square miles.

Records available.- May 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 2,580 second-feet Apr. 13 (gage height, 10.54 feet); minimum observed, 3.5 second-feet Sept. 27, 28 (gage height, 1.65 feet).
1937-38: Maximum discharge observed, that of Apr. 13, 1938; minimum observed, that of Sept. 27, 28, 1938.

Remarks.- Records above 20 second-feet are good; those for October and November and those below 20 second-feet are fair. Discharge for Oct. 9-12, July 19 interpolated. Gage read twice daily.

Rating table, Oct. 13 to Sept. 30 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 13-29)

1.6	2	3.0	303	7.0	1,230
1.8	12	3.5	454	8.0	1,510
2.0	39	4.0	597	9.0	1,865
2.2	80	5.0	802	10.0	2,300
2.5	158	6.0	1,000	11.0	2,930

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	144	130	303	158	187	65	260	47	288	710	16
2	79	90	130	260	138	144	50	202	67	216	646	16
3	79	82	112	230	136	120	97	150	515	175	748	14
4	109	54	94	202	122	104	147	112	1,000	150	515	14
5	144	41	85	178	112	94	202	94	1,260	127	454	12
6	154	34	80	167	109	82	202	127	1,390	92	748	15
7	148	32	78	158	117	78	158	114	1,040	65	1,710	18
8	132	29	78	167	120	67	130	85	766	50	1,260	22
9	140	27	76	170	97	56	333	62	802	37	880	18
10	98	27	90	161	87	50	820	50	730	32	571	16
11	84	22	94	152	80	52	1,160	43	485	67	423	15
12	76	112	94	161	71	50	1,680	52	260	158	318	14
13	71	485	92	202	69	47	2,460	52	202	260	230	11
14	65	454	87	230	67	41	2,400	50	150	820	167	11
15	54	393	112	230	67	36	1,940	62	152	1,020	147	9
16	47	363	107	230	62	39	1,280	69	378	1,070	216	9
17	37	333	99	216	58	65	820	56	303	820	216	8.5
18	36	216	99	216	58	107	597	45	202	690	138	8
19	37	164	99	187	67	112	423	30	167	543	80	6.5
20	45	144	104	178	71	117	318	27	164	515	52	6.5
21	71	130	107	172	67	112	274	21	138	730	47	6.5
22	80	107	102	161	67	102	230	18	130	1,420	39	5
23	85	99	112	155	67	90	216	11	184	2,350	25	4.5
24	114	92	454	147	175	92	245	10	144	2,250	24	4.5
25	107	87	454	144	230	94	274	8.5	112	1,780	20	4
26	97	94	543	164	245	87	288	7	454	1,290	17	4
27	107	90	543	175	274	78	690	67	1,160	1,070	16	3.5
28	187	122	454	164	245	76	940	109	1,040	1,160	14	4
29	202	147	393	152	-	82	748	50	710	1,210	13	14
30	181	138	348	150	-	80	393	37	393	930	13	45
31	181	-	318	164	-	78	-	36	-	766	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,116	202	36	101	0.182	0.21
November	4,352	485	22	145	.261	.29
December	5,768	543	76	186	.335	.39
Calendar year						
January	5,746	303	144	185	.333	.38
February	3,236	274	58	116	.209	.22
March	2,619	187	36	84.5	.152	.18
April	19,580	2,460	50	653	1.18	1.32
May	2,116.5	260	7	68.3	.123	.14
June	14,545	1,390	47	485	.874	.98
July	22,191	2,350	32	716	1.29	1.49
August	10,475	1,710	13	338	.609	.70
September	354.5	45	3.5	11.8	.021	.02
Water year 1937-38	94,099	2,460	3.5	258	.465	6.32

Ocmulgee River at Macon, Ga.

Location.- Water-stage recorder, lat. 32°51', long. 83°34', at Fifth Street Bridge in Macon, Bibb County. U. S. Weather Bureau gage at same site and datum. Zero of gage is 269.38 feet above mean sea level.
Drainage area.- 2,240 square miles.
Records available.- January 1893 to September 1913, October 1931 to September 1938.
Average discharge.- 25 years (1893-1911, 1931-38), 2,882 second-feet.
Extremes.- Maximum discharge during year, 31,000 second-feet Apr. 7 (gage height, 20.6 feet); minimum, 358 second-feet Sept. 20 (gage height, 1.82 feet).
1893-1913, 1931-38: Maximum discharge, 63,700 second-feet Apr. 9, 1936 (gage height, 25.23 feet); minimum, 192 second-feet Nov. 9, 16, 23, 1931; minimum gage height, -1.0 foot Oct. 5, 1904, July 27, 1914.
Maximum stage known, 26.1 feet Feb. 28, 1929 (discharge, 70,000 second-feet). A stage 1 inch lower, as determined from floodmarks, was reached Jan. 19, 1925, at Central of Georgia Railway bridge, 500 feet downstream.
Remarks.- Records good. Discharge for period of missing gage heights, Dec. 13-16, computed on basis of records for station at Lumber City. Diurnal fluctuation from operation of power plant near Jackson, Ga. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 24 to Mar. 16)

1.5	240	8.0	3,820	15.0	10,900
2.0	430	10.0	5,210	16.0	13,200
3.0	880	12.0	6,800	18.0	19,300
4.0	1,390	13.0	7,900	20.0	27,800
6.0	2,530	14.0	9,200	22.0	39,750

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	936	2,970	2,310	2,170	1,770	1,420	7,590	2,590	1,780	1,520	784	740
2	968	2,940	2,380	1,110	1,540	1,620	21,500	1,210	1,950	1,270	2,180	750
3	803	1,560	1,880	833	1,540	1,760	24,400	3,450	3,020	882	2,380	782
4	808	1,540	1,930	2,090	1,570	2,000	22,800	2,090	2,300	1,770	1,400	656
5	1,440	1,160	1,130	1,580	1,380	968	5,650	2,000	1,030	841	1,070	632
6	1,690	1,410	869	1,410	784	788	5,770	1,960	730	1,090	2,060	728
7	1,570	1,030	1,910	2,500	725	728	26,800	1,900	1,480	1,160	1,680	694
8	1,500	614	1,880	2,090	1,430	1,390	24,400	1,010	1,470	1,070	1,590	654
9	1,070	897	1,680	1,840	1,640	1,490	25,800	988	1,450	1,040	2,380	620
10	962	1,110	1,340	914	1,290	1,460	19,300	1,760	1,720	811	2,430	620
11	734	1,160	1,180	2,550	1,180	1,100	6,050	1,520	2,060	780	2,270	594
12	1,090	1,290	871	2,880	1,440	1,020	5,850	1,410	2,070	1,300	2,160	549
13	1,280	1,730	845	2,760	886	915	5,210	1,490	3,030	1,020	2,390	579
14	1,430	1,170	1,600	1,570	716	712	4,740	1,590	3,250	826	1,030	608
15	1,110	1,190	1,600	1,670	1,310	1,270	4,070	868	1,920	992	792	585
16	1,280	2,500	1,400	1,000	1,330	2,270	3,460	806	1,440	1,200	1,620	551
17	717	2,540	1,270	812	1,110	5,070	2,910	1,140	1,410	984	1,670	549
18	800	2,410	1,480	1,510	1,180	3,770	1,290	1,060	972	746	1,270	544
19	2,940	2,300	1,000	1,650	810	3,030	2,820	1,270	932	1,070	848	510
20	6,390	2,360	854	1,160	739	1,460	2,930	1,110	2,060	1,970	795	542
21	11,100	1,960	1,380	1,550	688	1,240	4,150	1,010	3,360	2,080	776	542
22	4,480	2,230	1,610	918	1,030	2,560	5,590	740	3,820	2,220	679	558
23	3,550	2,340	3,010	778	1,220	1,790	4,900	712	3,280	2,610	731	532
24	3,180	2,310	3,680	913	1,370	2,830	3,640	1,060	3,150	3,220	688	542
25	3,070	2,360	1,800	1,380	1,320	2,670	1,600	1,080	2,320	2,980	680	523
26	3,070	1,580	1,090	1,290	1,310	2,520	2,920	1,020	1,750	4,220	728	511
27	3,450	1,810	871	1,310	722	1,310	2,810	953	1,020	3,680	714	566
28	3,560	1,040	1,900	1,370	663	878	2,770	761	2,890	3,370	679	578
29	3,450	867	1,990	1,120	-	2,370	2,700	792	3,120	2,980	761	592
30	3,400	2,060	2,100	758	-	2,510	2,700	906	2,160	2,530	810	584
31	3,350	-	2,190	893	-	2,460	-	1,670	-	1,220	716	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	75,178	11,100	717	2,425	1.08	1.24
November	52,438	2,970	614	1,748	.780	.87
December	51,030	3,680	845	1,646	.735	.85
Calendar year 1937	1,387,676	34,300	614	3,802	1.70	23.02
January	45,779	2,880	758	1,477	.659	.76
February	32,693	1,770	663	1,168	.521	.54
March	57,379	5,070	712	1,851	.826	.95
April	257,120	26,800	1,290	8,571	3.83	4.27
May	41,926	3,450	712	1,352	.604	.70
June	62,944	3,820	730	2,098	.937	1.05
July	53,452	4,220	746	1,724	.770	.89
August	40,760	2,430	678	1,315	.587	.68
September	18,015	782	510	600	.268	.30
Water year 1937-38	788,714	26,800	510	2,161	.965	13.10

Peak discharge.- Oct. 21 (11 a.m.) 14,500 sec.-ft.; Apr. 3 (12 p.m.) 26,800 sec.-ft.; Apr. 7 (5 p.m.) 31,000 sec.-ft.

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Ocmulgee River at Lumber City, Ga.

Location.- Water-stage recorder, lat. 31°55', long. 82°40', at bridge on U. S. Highway 341 at Lumber City, Telfair County, 500 feet downstream from Southern Railway bridge, 1 mile upstream from Little Ocmulgee River, and 12 miles upstream from confluence with Oconee River to form Altamaha River. Prior to Nov. 9, 1937, staff gage at same site and datum.

Drainage area.- 5,180 square miles.

Records available.- October 1936 to September 1938.

Extremes.- Maximum discharge during year, 34,500 second-feet Apr. 17 (gage height, 16.85 feet); minimum, 1,460 second-feet Sept. 26-28 (gage height, 0.30 foot).
1936-38: Maximum discharge, that of Apr. 17, 1938; minimum, that of Sept. 26-28, 1938.
Maximum stage known, 26.3 feet Jan. 21, 1925.

Remarks.- Records good. Discharge for Sept. 29, 30 computed from partly estimaged gage heights. Gage height record for period Oct. 1 to Nov. 8 furnished by U. S. Weather Bureau from daily gage readings.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0	1,280	6.0	5,730	12.0	13,800
1.0	1,900	8.0	7,500	14.0	20,800
2.0	2,570	9.0	8,500	16.0	30,100
3.0	3,300	10.0	9,800	17.0	35,600
4.0	4,070	11.0	11,500		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,160	5,140	3,600	4,710	3,150	3,080	4,070	6,600	3,000	4,230	6,600	1,900
2	2,220	5,220	3,300	4,470	3,150	3,000	3,600	6,870	2,850	3,750	6,600	1,900
3	2,290	5,140	3,000	4,310	3,000	2,850	3,680	7,050	2,850	3,750	6,780	1,900
4	2,360	5,050	3,000	4,230	2,850	2,570	3,830	6,780	3,150	3,910	6,960	1,960
5	2,360	4,880	3,300	4,230	3,000	2,640	4,070	6,330	3,460	3,830	6,870	1,900
6	2,290	4,710	3,520	4,070	3,220	2,850	4,310	5,900	3,830	3,450	6,420	2,030
7	2,290	4,470	3,600	3,750	3,300	3,000	4,630	5,560	4,230	3,150	5,730	2,290
8	2,160	4,070	3,520	3,520	3,300	3,150	5,390	5,300	4,630	3,220	5,390	2,160
9	2,100	3,380	3,300	3,600	3,150	3,000	6,330	5,220	4,710	3,380	5,390	1,960
10	2,430	3,000	3,000	3,680	2,920	2,710	8,000	5,220	4,310	3,380	5,300	1,900
11	2,500	2,850	3,000	3,750	2,710	2,570	10,400	5,050	3,910	3,300	4,960	2,030
12	2,570	2,640	3,300	3,910	2,780	2,570	12,600	4,960	3,990	3,080	4,630	2,100
13	2,570	2,570	3,380	4,150	2,920	2,710	16,300	4,800	4,150	4,310	4,310	1,960
14	2,430	2,640	3,380	4,070	3,000	2,850	22,000	4,470	4,150	3,750	4,230	1,840
15	2,290	2,780	3,220	3,990	2,920	2,780	28,100	4,070	4,150	3,150	4,150	1,770
16	2,100	3,000	3,000	3,990	2,850	2,710	32,800	3,830	4,150	2,850	4,150	1,770
17	2,100	3,300	2,780	4,230	2,780	2 710	34,500	3,600	4,150	2,850	3,990	1,700
18	2,220	3,450	2,780	4,310	2,640	2,850	32,800	3,450	4,230	2,850	3,680	1,640
19	2,360	3,450	2,920	4,230	2,640	3,080	29,100	3,300	4,310	2,640	3,150	1,640
20	2,360	3,450	3,000	3,910	2,780	3,450	24,800	2,920	4,230	2,850	2,850	1,640
21	2,430	3,680	2,920	3,450	2,780	3,910	20,400	2,780	3,750	4,800	2,920	1,640
22	2,360	3,830	2,920	3,300	2,780	4,230	17,000	2,710	3,300	5,390	2,850	1,580
23	2,500	3,910	2,920	3,380	2,640	4,470	13,600	2,710	3,150	5,140	2,640	1,520
24	3,080	3,830	2,920	3,450	2,570	4,710	10,800	2,640	3,220	5,300	2,430	1,520
25	3,520	3,830	3,080	3,450	2,640	4,880	8,740	2,570	3,520	6,420	2,290	1,490
26	3,830	3,750	3,380	3,380	2,710	5,050	7,320	2,500	3,830	8,740	2,160	1,490
27	4,070	3,750	3,680	3,150	2,850	5,140	6,510	2,360	4,150	8,860	2,100	1,460
28	4,310	3,750	3,990	2,920	3,000	4,960	6,240	2,570	4,310	8,100	2,030	1,460
29	4,470	3,830	4,310	3,000	-	4,710	6,240	3,150	4,390	7,500	1,960	1,580
30	4,710	3,750	4,550	3,080	-	4,550	6,420	3,450	4,390	7,050	1,960	1,700
31	4,880	-	4,710	3,080	-	4,470	-	3,300	-	6,780	1,900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	86,320	4,880	2,100	2,785	0.538	0.62
November	113,100	5,220	2,570	3,770	.728	.81
December	103,280	4,710	2,780	3,332	.643	.74
Calendar year 1937	2,313,290	23,600	2,100	6,338	1.22	16.59
January	116,750	4,710	2,920	3,766	.727	.84
February	81,030	3,300	2,570	2,894	.559	.58
March	108,210	5,140	2,570	3,491	.674	.78
April	394,580	34,500	3,600	13,150	2.54	2.83
May	132,020	7,050	2,360	4,259	.822	.95
June	116,440	4,710	2,850	3,881	.749	.84
July	141,760	8,860	2,640	4,573	.883	1.02
August	127,380	6,960	1,900	4,109	.793	.91
September	53,430	2,290	1,460	1,781	.344	.38
Water year 1937-38	1,574,300	34,500	1,460	4,313	.833	11.30

Altamaha River at Doctortown, Ga.

Location.- Water-stage recorder, lat. 31°39', long. 81°50', at Atlantic Coast Line Railroad bridge at Doctortown, Wayne County, about 4½ miles northeast of Jesup. Zero of gage is 28.77 feet above mean sea level.

Drainage area.- 13,600 square miles.

Records available.- October 1931 to September 1938.

Extremes.- Maximum discharge during year, 68,000 second-feet Apr. 19 (gage height, 9.0 feet); minimum, 2,760 second-feet Sept. 28 (gage height, -1.61 feet).
1931-38: Maximum discharge, 178,000 second-feet Apr. 18, 1936 (gage height, 12.03 feet); minimum, 1,760 second-feet Oct. 8, 9, 14, 15, 1931 (gage height, -2.3 feet).
Maximum stage known, 14.6 feet Jan. 23, 1925 (discharge, 300,000 second-feet, from rating curve extended above 180,000 second-feet).

Remarks.- Records good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-26 and Aug. 16 to Sept. 24)

-2.0	2,400	2.0	6,650	6.0	20,500
-1.0	3,300	3.0	8,070	7.0	31,400
0	4,320	4.0	9,800	8.0	46,000
1.0	5,440	5.0	13,100	9.0	68,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,100	10,200	6,520	9,080	6,400	5,800	8,230	15,700	6,780	11,400	26,700	3,700
2	4,320	9,800	6,520	8,900	6,400	6,040	7,910	15,000	7,180	10,400	27,800	3,600
3	4,540	9,800	6,400	8,730	6,280	6,040	7,460	14,300	7,760	9,800	29,000	3,600
4	4,650	9,620	6,160	8,560	6,280	5,920	7,180	12,600	8,390	8,900	27,800	3,500
5	4,760	9,260	5,920	8,070	6,160	5,680	7,320	12,100	9,260	7,910	27,800	3,500
6	4,760	8,730	5,800	7,910	6,160	5,440	8,070	11,400	10,400	7,320	29,000	3,500
7	4,760	8,070	5,920	7,760	6,160	5,200	9,080	11,000	11,700	6,780	31,400	3,600
8	4,650	7,760	6,040	7,610	6,160	5,320	9,800	10,400	12,600	6,520	32,700	3,600
9	4,650	7,320	6,040	7,320	6,160	5,440	10,400	10,000	12,600	6,520	30,200	3,700
10	4,760	6,910	6,040	7,180	6,160	5,560	11,400	9,620	12,600	6,160	26,700	3,700
11	4,870	6,280	5,920	7,180	6,040	5,560	12,600	9,440	12,100	6,040	22,400	3,600
12	4,870	6,040	5,920	7,610	5,920	5,320	15,000	9,440	11,000	5,920	19,600	3,600
13	4,760	5,800	5,920	8,070	5,680	5,200	19,600	9,440	10,000	6,280	17,200	3,600
14	4,650	5,680	6,040	8,390	5,560	5,090	31,400	9,440	9,260	7,180	15,700	3,600
15	4,430	5,560	6,160	8,560	5,680	5,200	44,300	9,080	9,080	8,730	13,700	3,400
16	4,210	5,800	6,160	8,560	5,680	5,560	53,600	8,730	9,080	9,800	11,400	3,400
17	4,100	6,160	6,040	8,390	5,560	5,920	60,400	7,910	9,080	10,000	9,800	3,300
18	3,900	6,400	5,800	8,230	5,560	5,920	65,400	7,320	9,080	9,800	8,730	3,300
19	3,900	6,650	5,560	8,070	5,440	6,040	68,000	6,780	8,560	9,260	7,910	3,210
20	4,100	6,650	5,560	8,070	5,320	6,400	65,400	6,400	8,070	9,260	7,180	3,210
21	4,210	6,520	5,560	7,910	5,320	7,040	62,800	6,160	7,760	9,440	6,520	3,210
22	4,320	6,520	5,680	7,610	5,320	7,760	55,800	5,680	7,320	9,800	6,040	3,120
23	4,540	6,520	5,680	7,180	5,440	8,560	47,800	5,440	6,910	10,700	5,680	3,030
24	5,200	6,650	5,920	6,910	5,440	9,080	41,100	5,200	7,460	12,100	5,440	2,940
25	6,400	6,650	6,160	6,780	5,440	9,620	34,000	5,200	8,560	14,300	4,980	2,940
26	7,320	6,650	6,400	6,780	5,440	9,800	29,000	5,090	9,620	16,400	4,650	2,850
27	8,390	6,650	6,910	6,780	5,560	9,620	24,500	4,980	10,700	16,400	4,430	2,760
28	9,080	6,520	7,760	6,780	5,680	9,440	21,400	4,980	11,700	18,000	4,100	2,760
29	9,620	6,520	8,390	6,520	-	9,260	18,800	5,200	12,600	19,600	4,000	3,120
30	10,000	6,520	8,900	6,400	-	9,080	17,200	5,920	12,100	23,400	3,900	3,500
31	10,400	-	9,080	6,400	-	8,730	-	6,400	-	25,600	3,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	169,220	10,400	3,900	5,459	0.401	0.46
November	214,210	10,200	5,560	7,140	.525	.59
December	196,880	9,080	5,560	6,351	.467	.54
Calendar year 1937	5,571,110	47,800	3,900	15,260	1.12	15.23
January	238,300	9,080	6,400	7,687	.565	.65
February	162,400	6,400	5,320	5,800	.426	.44
March	210,640	9,800	5,090	6,795	.500	.58
April	874,950	68,000	7,180	29,160	2.14	2.39
May	266,350	15,700	4,980	8,592	.632	.73
June	289,310	12,600	6,780	9,644	.709	.79
July	339,720	25,600	5,920	10,960	.806	.93
August	476,260	32,700	3,800	15,360	1.13	1.30
September	100,450	3,700	2,760	3,348	.246	.27
Water year 1937-38	3,538,690	68,000	2,760	9,695	.713	9.67

Tobesofkee Creek near Macon, Ga.

Location.- Wire-weight gage, lat. 32°48', long. 83°46', at bridge on U. S. Highway 80, 8 miles west of Macon, Bibb County, and about 14 miles upstream from mouth. Prior to Feb. 3, 1938, staff gage at same site and datum.

Drainage area.- 182 square miles.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge during year, 4,860 second-feet Apr. 8 (gage height, 16.3 feet, from graph based on gage readings); minimum, 12 second-feet Sept. 20 (gage height, 2.21 feet).
1937-38: Maximum discharge, that of Apr. 8, 1938; minimum, that of Sept. 20, 1938.

Remarks.- Records fair for Oct. 1 to Dec. 16 and good thereafter. Discharge for Feb. 10-13 interpolated. Gage read twice daily. There was some regulation in October.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 16)

2.2	12	4.0	408	10.0	2,300
2.5	35	5.0	725	12.0	3,070
2.8	80	6.0	1,035	14.0	3,880
3.2	178	7.0	1,302	16.0	4,730
3.6	290	8.0	1,590		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	43	64	101	101	66	677	142	101	66	93	35
2	19	46	69	108	90	66	2,540	160	93	59	219	33
3	37	46	64	114	82	69	1,890	129	205	56	126	53
4	62	45	60	99	82	67	438	116	134	1,170	88	35
5	78	41	60	93	78	67	276	175	93	111	73	32
6	59	43	86	95	78	73	292	261	76	76	76	59
7	47	40	93	363	76	76	3,770	155	69	64	233	66
8	45	46	84	219	80	69	4,040	147	84	59	111	41
9	30	45	78	160	78	66	1,890	149	88	53	97	37
10	31	47	86	139	77	66	692	118	101	50	84	32
11	36	66	82	142	76	80	408	101	111	114	67	31
12	30	233	69	155	75	73	304	93	233	76	59	27
13	26	319	67	131	74	66	247	90	162	53	53	27
14	32	155	73	121	73	62	205	93	88	47	50	27
15	45	106	69	118	73	66	178	93	69	247	47	25
16	31	86	67	104	73	469	178	80	62	192	45	23
17	22	78	71	104	73	946	165	76	58	88	45	22
18	26	71	73	104	73	304	157	75	53	67	42	21
19	205	67	71	101	88	205	178	73	50	614	37	19
20	408	71	64	97	95	233	192	71	53	500	35	16
21	168	71	62	97	88	205	1,090	66	157	304	35	14
22	106	64	62	93	73	168	1,060	62	111	178	34	15
23	59	62	822	93	76	168	758	59	69	378	33	16
24	58	62	854	101	88	178	319	59	93	563	31	16
25	56	62	276	118	84	142	233	66	56	276	29	15
26	47	73	205	95	75	131	205	80	131	219	27	16
27	160	88	157	86	71	121	178	101	247	162	30	18
28	116	93	142	82	69	111	160	76	192	126	25	22
29	54	86	124	78	-	101	147	99	101	111	131	23
30	48	78	116	82	-	97	134	116	76	90	69	25
31	47	-	104	90	-	84	-	114	-	95	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,213	408	19	71.4	0.392	0.45
November	2,433	319	40	81.1	.446	.50
December	4,374	854	60	141	.775	.89
Calendar year						
January	3,683	363	78	119	.654	.75
February	2,219	101	69	79.2	.435	.45
March	4,695	946	62	151	.830	.96
April	23,001	4,040	134	767	4.21	4.70
May	3,295	261	59	106	.582	.67
June	3,216	247	50	107	.588	.66
July	6,264	1,170	47	202	1.11	1.28
August	2,163	233	25	69.8	.384	.44
September	841	66	14	28.0	.154	.17
Water year 1937-38	58,397	4,040	14	160	.879	11.92

Echeconnee Creek near Macon, Ga.

Location.- Wire-weight gage, lat. 32°46', long. 83°51', at Marshall Mill Bridge, 13 miles southwest of Macon, Bibb County, and about 18 miles upstream from mouth. Prior to Feb. 3, 1938, staff gage at same site and datum.

Drainage area.- 100 square miles.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge during year, 5,720 second-feet Apr. 7 (gage height, 11.6 feet); minimum, 7.0 second-feet Sept. 23 (gage height, 0.31 foot).
1937-38: Maximum discharge, that of Apr. 7, 1938; minimum, that of Sept. 23, 1938.

Remarks.- Records good above 100 second-feet and fair below. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.6	24	39	75	71	43	199	265	75	28	79	18.5
2	13.2	24	40	83	60	43	1,630	283	106	24	122	18.0
3	19.5	24	38	83	60	43	730	133	265	23	265	32
4	30	22	36	75	60	46	283	106	75	480	83	19.5
5	30	22	40	67	60	43	192	128	53	71	60	22
6	24	24	60	67	60	50	184	480	43	46	116	22
7	20	24	53	428	56	56	4,760	192	38	39	145	53
8	17.5	24	43	231	53	46	2,000	139	88	34	75	28
9	14.5	24	50	139	50	43	1,410	207	71	30	67	22
10	13.2	24	56	111	50	46	428	106	79	29	56	20
11	14.5	36	50	106	50	50	283	92	64	30	46	18.0
12	14.0	145	46	111	53	46	215	83	184	64	40	17.0
13	13.2	207	46	101	50	40	184	79	106	34	36	15.0
14	15.0	83	43	88	50	40	151	83	53	27	32	14.5
15	17.0	60	43	83	50	40	133	83	40	139	30	14.0
16	14.5	50	43	79	50	301	128	67	35	67	28	12.4
17	11.6	46	46	75	46	920	116	60	30	39	27	11.6
18	15.5	43	50	75	50	283	101	60	27	31	24	10.8
19	88	46	46	71	60	170	128	56	33	498	22	10.4
20	177	43	43	71	67	340	139	53	35	595	22	10.0
21	60	43	39	71	53	177	360	50	53	231	26	8.7
22	35	39	39	67	50	133	565	46	101	170	24	8.0
23	32	37	320	67	53	116	536	43	40	842	21	7.4
24	28	36	765	75	67	184	231	53	36	476	19.5	7.4
25	26	40	248	88	60	128	164	50	32	355	17.5	8.0
26	25	50	145	71	50	101	133	60	151	320	14.0	7.7
27	83	53	116	64	50	88	122	60	116	170	13.6	9.3
28	56	50	101	60	46	79	101	46	88	111	18.5	10.8
29	36	46	88	56	-	75	92	50	46	83	28	11.6
30	30	43	79	56	-	67	83	64	33	79	30	12.4
31	27	-	75	64	-	64	-	111	-	71	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,011.8	177	11.6	32.6	0.326	0.38
November	1,434	207	22	47.8	.478	.53
December	2,926	765	36	94.4	.944	1.09
Calendar year						
January	2,958	428	56	95.4	.954	1.10
February	1,535	71	46	54.8	.548	.57
March	3,901	920	40	126	1.26	1.45
April	15,781	4,760	83	526	5.26	5.87
May	3,588	480	43	109	1.09	1.26
June	2,196	265	27	73.2	.732	.82
July	5,236	842	23	169	1.69	1.95
August	1,607.1	265	13.6	51.8	.518	.60
September	480.0	53	7.4	16.0	.160	.18
Water year 1937-38	42,453.9	4,760	7.4	116	1.16	15.80

Little Ocmulgee River at Towns, Ga.

Location.- Staff gage, lat. 32°00', long. 82°45', at bridge on State Highway 34, at Towns, Telfair County, about 9 miles upstream from mouth.

Drainage area.- 363 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 2,200 second-feet Apr. 13 (gage height, 12.0 feet); minimum observed, 3.8 second-feet Sept. 25-28 (gage height, 2.05 feet).
1937-38: Maximum discharge observed, that of Apr. 13, 1938; minimum observed, that of Sept. 25-28, 1939.

Remarks.- Records fair. Discharge for period of missing gage heights, Oct. 20-21, computed on basis of records for Canoochee River near Claxton. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 17 to Sept. 28)

2.0	2.8	3.5	71	9.0	920
2.3	6.5	4.0	122	10.0	1,220
2.6	13.3	5.0	253	11.0	1,630
3.0	31	7.0	567	12.0	2,200

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	15.5	35	106	76	58	27	211	111	32	421	7.7
2	17.5	32	35	106	71	56	24	197	184	26	405	7.2
3	15.5	51	36	100	66	51	34	158	197	19.5	437	7.0
4	16	43	37	90	59	44	37	122	197	15.5	328	6.8
5	14.5	36	38	85	58	42	34	100	171	13.5	225	7.9
6	10.5	30	38	80	56	38	33	95	197	14.5	225	7.9
7	10.0	26	36	76	57	35	90	85	343	13.5	358	17
8	8.7	23	36	80	53	32	197	90	389	11.5	389	16
9	7.9	19.5	35	76	50	30	1,080	140	469	9.6	343	11
10	6.5	17	35	76	48	28	789	184	469	10.5	313	8.7
11	5.8	16	35	80	45	25	618	128	469	134	268	7.9
12	5.6	19.5	33	90	43	23	567	95	283	111	197	6.5
13	5.3	22	30	95	43	20	1,680	80	197	239	122	5.8
14	5.8	27	32	95	41	19.5	1,680	76	152	313	100	5.3
15	5.9	25	38	90	37	18	1,180	100	122	171	95	4.9
16	5.6	21	51	90	36	20	862	134	111	80	85	4.6
17	5.6	23	58	85	35	66	737	158	95	62	71	4.5
18	5.6	61	58	90	35	71	584	152	80	66	50	4.8
19	5.6	76	53	85	35	59	485	111	62	62	35	4.6
20	10.0	66	51	80	35	62	437	76	54	128	27	4.4
21	16	60	44	76	36	71	373	54	60	328	22	4.2
22	18.5	54	43	71	35	76	328	41	128	405	18.5	4.0
23	17	47	48	66	36	80	298	32	90	298	15	4.0
24	10.5	43	85	71	58	76	283	28	58	720	13.5	4.0
25	10.0	37	100	80	60	62	268	24	47	1,730	11	3.9
26	8.0	37	80	80	60	61	253	24	31	1,300	10.0	3.8
27	19.5	37	71	76	58	59	225	22	25	920	8.9	3.8
28	25	41	100	76	54	55	225	18	25	703	9.8	4.3
29	24	39	128	85	-	48	211	18	29	501	9.1	11
30	19.5	36	122	85	-	39	197	26	35	485	8.2	7.9
31	16.5	-	111	80	-	31	-	62	-	469	7.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	380.4	28	5.3	12.3	0.034	0.04
November	1,080.5	76	15.5	36.0	.099	.11
December	1,732	128	30	55.9	.154	.18
Calendar year						
January	2,601	106	66	83.9	.231	.27
February	1,376	76	35	49.1	.135	.14
March	1,455.5	80	18	47.0	.129	.15
April	13,836	1,680	24	461	1.27	1.42
May	2,841	211	18	91.6	.252	.29
June	4,880	469	25	163	.449	.50
July	9,391.1	1,730	9.6	303	.835	.96
August	4,627.7	437	7.7	149	.410	.47
September	201.4	17	3.8	6.71	.018	.02
Water year 1937-38	44,402.6	1,730	3.8	122	.336	4.55

Oconee River near Greensboro, Ga.

Location.- Wire-weight gage, lat. 33°35', long. 83°16', at bridge on State Highway 12, 1 mile downstream from Town Creek, 5 miles upstream from Apalachee River, 5 miles west of Greensboro, Greene County, and 12 miles downstream from Barnett Shoals Dam.

Drainage area.- 1,090 square miles.

Records available.- July 1903 to September 1923 and May 1937 to September 1938 in reports of Geological Survey. October 1903 to December 1931 in reports of Corps of Engineers, U. S. Army.

Average discharge.- 28 years (1903-13, 1914-31, 1938), 1,611 second-feet.

Extremes.- Maximum discharge observed during year, 15,200 second-feet July 26 (gage height, 20.91 feet); minimum observed, 141 second-feet Sept. 23 (gage height, 0.26 foot); minimum daily discharge, 208 second-feet Sept. 19 (gage height, 0.60 foot).
1903-31, 1937-38: Maximum gage height observed, 35.4 feet Aug. 26, 1908 (discharge not determined); minimum daily discharge, 60 second-feet Sept. 28, 1925.

Remarks.- Records good above about 600 second-feet and fair below. Discharge interpolated Feb. 2. Gage read twice daily. Flow regulated by power dam 12 miles above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0	100	8.0	3,040	16.0	7,920
.5	188	10.0	3,970	17.0	9,060
1.0	298	12.0	4,950	18.0	10,400
2.0	580	13.0	5,520	20.0	13,580
4.0	1,290	14.0	6,200	21.0	15,300
6.0	2,140	15.0	6,980		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	458	952	744	778	778	778	3,090	710	1,660	580	1,140	310
2	488	916	710	710	744	744	7,920	880	1,370	518	1,170	298
3	518	880	710	846	710	744	10,700	846	1,410	348	1,450	710
4	1,740	880	710	812	710	846	8,240	880	1,490	580	1,740	402
5	1,530	846	580	744	710	744	4,020	1,020	952	458	1,210	612
6	1,140	846	778	744	612	548	1,880	1,700	778	430	1,100	580
7	846	778	744	1,330	744	812	4,600	1,290	744	430	1,060	548
8	676	812	710	1,490	744	548	6,200	916	1,020	430	1,370	402
9	612	812	710	1,020	676	676	7,070	1,020	1,490	518	1,700	402
10	580	778	710	988	676	778	6,060	880	1,700	676	1,290	402
11	580	812	644	988	676	1,170	4,070	812	1,790	518	1,020	402
12	612	812	548	1,020	644	1,210	2,140	978	1,880	488	812	374
13	548	1,100	710	988	580	1,060	1,700	710	1,210	374	778	374
14	710	880	710	880	710	812	1,530	846	812	298	744	348
15	710	778	676	812	676	710	1,370	612	644	2,230	710	322
16	612	778	676	710	644	1,170	1,290	744	518	1,060	676	402
17	518	778	676	846	644	2,280	1,170	710	488	548	710	348
18	518	778	778	812	676	2,820	1,210	612	1,920	548	518	322
19	3,000	744	612	778	644	2,180	1,290	612	2,860	880	488	208
20	6,580	744	778	778	580	1,700	1,570	644	1,490	812	458	310
21	8,940	543	644	778	744	1,620	1,330	644	1,100	3,320	612	310
22	7,070	778	644	778	676	1,410	1,700	458	1,370	2,680	430	252
23	2,320	710	812	676	644	1,570	2,590	612	1,660	3,130	458	252
24	1,410	710	988	812	846	1,200	1,410	580	1,570	3,830	402	241
25	1,060	710	1,140	880	1,020	1,170	1,250	430	952	10,100	322	252
26	1,060	744	916	1,020	744	1,100	1,170	458	778	14,700	402	230
27	2,230	778	916	846	430	1,100	1,020	644	916	10,700	374	274
28	2,410	846	846	778	458	1,170	952	518	916	6,740	348	286
29	1,660	916	988	676	-	1,060	916	1,450	778	2,050	298	322
30	1,210	812	916	612	-	952	952	1,410	644	1,410	374	298
31	1,060	-	846	744	-	880	-	2,540	-	1,170	348	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	53,406	8,940	458	1,723	1.58	1.82
November	24,251	1,100	543	808	.741	.83
December	23,570	1,140	548	760	.697	.80
Calendar year						
January	26,674	1,490	612	860	.789	.91
February	19,140	1,020	430	684	.628	.65
March	35,552	2,820	548	1,147	1.05	1.21
April	90,410	10,700	916	3,014	2.77	3.09
May	27,156	2,540	430	876	.804	.93
June	36,910	2,860	488	1,230	1.13	1.26
July	72,554	14,700	298	2,340	2.15	2.48
August	24,512	1,740	298	791	.726	.84
September	10,793	710	208	360	.330	.37
Water year 1937-38	444,948	14,700	208	1,219	1.12	15.19

Oconee River at Milledgeville, Ga.

Location.- Wire-weight gage, lat. 33°05', long. 83°13', at bridge on State Highway 24 at Milledgeville, Baldwin County, 0.4 mile upstream from Fishing Creek and 4 miles downstream from partly-completed Furman Shoals Dam of Georgia Power Co. Zero of gage is 230.18 feet above mean sea level.

Drainage area.- 2,950 square miles.

Records available.- August 1903 to December 1905 (at present site), May 1906 to December 1908 and October 1909 to September 1923 (at Fraleys Ferry, 7 miles upstream), and April 1937 to September 1938 in reports of Geological Survey. May 1906 to December 1908 and October 1909 to December 1931 (at Fraleys Ferry) in reports of Corps of Engineers, U. S. Army.

Average discharge.- 23 years (1906-8, 1909-16, 1918-31, 1938), 3,655 second-feet.

Extremes.- Maximum discharge observed during year, 34,400 second-feet Apr. 2 (gage height, 26.19 feet); minimum observed, 276 second-feet Sept. 25 (gage height, 5.69 feet).

1903-31, 1937-38: Maximum discharge, 77,500 second-feet Aug. 16, 1928 (gage height, 38.7 feet, present site and datum), from rating curve developed in 1937 and extended above 50,000 second-feet; minimum daily discharge, 90 second-feet on several days in August and September 1925.

Remarks.- Records fair. Discharge for Aug. 16, 17, 24 interpolated. Some regulation from power dams above station. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	805	1,830	1,590	1,750	1,590	1,430	10,200	1,510	4,200	1,350	2,480	720
2	875	1,670	1,510	1,670	1,670	1,350	29,200	1,430	3,180	1,280	2,380	660
3	910	1,590	1,430	1,670	1,590	1,280	33,100	1,670	2,880	1,140	3,480	660
4	990	1,590	1,430	1,750	1,510	1,350	24,500	1,830	2,880	4,310	3,880	870
5	2,780	1,590	1,430	1,670	1,590	1,350	16,200	1,670	2,480	1,350	3,680	750
6	2,380	1,590	1,350	1,590	1,430	1,430	9,290	2,380	1,830	1,210	3,380	810
7	1,740	1,510	1,670	2,780	1,280	1,350	27,100	2,100	1,350	1,070	2,580	1,070
8	1,390	1,510	1,670	3,780	1,430	1,590	29,200	2,280	1,590	1,070	2,480	870
9	1,150	1,430	1,590	3,280	1,430	1,430	25,700	2,010	1,590	1,000	2,480	750
10	1,150	1,510	1,590	2,680	1,430	1,430	17,400	1,830	2,480	1,000	3,380	690
11	990	1,510	1,510	2,280	1,430	1,750	11,900	1,510	2,680	1,140	2,480	720
12	990	2,100	1,510	2,480	1,350	2,280	7,280	1,350	3,180	1,070	1,830	660
13	990	2,280	1,430	2,190	1,350	2,010	4,530	1,350	2,980	930	1,590	570
14	1,030	1,830	1,430	2,100	1,280	1,750	3,680	1,210	2,280	870	1,510	600
15	1,070	1,670	1,430	2,010	1,350	1,590	3,080	1,280	1,510	2,580	1,430	600
16	1,230	1,590	1,430	1,830	1,350	2,010	2,880	1,280	1,280	3,380	1,300	445
17	1,150	1,510	1,430	1,670	1,350	5,780	2,580	1,280	1,280	1,830	1,200	520
18	990	1,510	1,430	1,750	1,350	5,300	2,380	1,210	1,280	1,210	1,140	495
19	2,700	1,750	1,430	1,750	1,430	4,860	2,380	1,140	2,980	1,000	1,000	520
20	7,630	1,670	1,430	1,750	1,430	3,780	2,380	1,140	4,640	4,310	930	370
21	14,400	1,590	1,430	1,750	1,350	3,580	2,880	1,140	3,080	3,280	870	470
22	13,700	1,590	1,670	1,750	1,350	3,180	3,980	1,070	3,480	6,260	750	470
23	8,760	1,510	3,080	1,590	1,350	2,880	6,890	1,000	4,530	10,800	750	420
24	3,580	1,510	4,750	1,510	1,510	2,880	4,200	1,000	3,880	7,930	700	395
25	2,580	1,510	3,180	1,750	1,830	2,580	3,180	1,070	2,280	9,660	720	345
26	2,100	1,510	2,780	1,830	2,010	2,280	2,280	1,140	2,010	19,200	720	395
27	1,830	1,510	2,190	2,010	1,830	2,010	2,010	1,210	2,010	20,900	750	395
28	3,880	1,510	1,920	1,750	1,350	2,100	1,920	1,280	1,830	16,500	630	370
29	4,090	1,590	1,920	1,510	-	2,190	1,830	1,210	1,670	7,800	810	470
30	2,980	1,670	2,010	1,510	-	2,010	1,590	2,190	1,590	3,480	660	420
31	2,100	-	2,010	1,430	-	1,920	-	3,480	-	2,680	720	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	92,940	14,400	805	2,998	1.02	1.18
November	48,740	2,280	1,430	1,625	.551	.61
December	56,660	4,730	1,350	1,828	.620	.71
Calendar year						
January	60,820	3,780	1,430	1,962	.665	.77
February	41,200	2,010	1,280	1,471	.499	.52
March	72,710	5,780	1,280	2,345	.795	.92
April	295,720	33,100	1,590	9,857	3.34	3.73
May	47,250	3,480	1,000	1,524	.517	.60
June	74,910	4,530	1,280	2,497	.846	.94
July	141,590	20,900	870	4,567	1.55	1.79
August	52,690	3,880	630	1,700	.576	.66
September	17,500	1,070	345	583	.198	.22
Water year 1937-38	1,002,730	33,100	345	2,747	.931	12.65

Oconee River at Dublin, Ga.

Location.- Wire-weight gage, lat. 32°32', long. 82°54', at bridge on U. S. Highway 80 in Dublin, Laurens County. Zero of gage is 148.58 feet above mean sea level.
Drainage area.- 4,400 square miles.
Records available.- 1894 to 1898 (fragmentary), February 1898 to December 1913, and October 1931 to September 1938 in reports of Geological Survey. January 1929 to December 1931 in reports of Corps of Engineers, U. S. Army. Records of stage by U. S. Weather Bureau since 1893.
Average discharge.- 21 years (1898-1912, 1931-38), 5,239 second-feet.
Extremes.- Maximum discharge observed during year, 38,700 second-feet Apr. 11 (gage height, 24.08 feet); minimum, 605 second-feet Sept. 27 (gage height, 1.17 feet).
1898-1913, 1931-38: Maximum discharge, 96,700 second-feet Apr. 12-13, 1936 (gage height, 32.97 feet); minimum, 510 second-feet Oct. 11, 1935 (gage height, 0.88 foot).
Maximum stage known since 1893, that of Apr. 12-13, 1936.
Remarks.- Records good. Gage read once daily. Gage height record collected in cooperation with U. S. Weather Bureau.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-25)

1.0	530	8.0	6,200	18.0	19,700
2.0	1,100	10.0	8,200	20.0	24,600
3.0	1,800	12.0	10,400	22.0	30,700
4.0	2,600	14.0	12,900	24.0	38,300
6.0	4,350	16.0	15,900		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,310	3,360	2,440	2,920	2,360	2,360	2,840	3,180	3,720	2,280	18,900	1,040
2	1,310	2,760	2,360	2,760	2,440	2,120	4,080	3,090	5,430	1,880	14,000	1,100
3	1,310	2,440	2,200	2,760	2,600	2,200	9,080	2,920	5,430	1,660	6,800	1,040
4	1,520	2,280	2,120	2,760	2,520	2,040	10,600	3,180	5,700	1,590	5,070	980
5	1,590	2,120	2,040	2,760	2,440	2,040	15,300	3,450	5,070	3,450	5,250	980
6	1,800	2,120	2,120	2,760	2,440	2,120	22,500	3,180	4,710	2,520	6,100	1,310
7	3,090	1,960	2,200	2,680	2,360	2,200	29,100	3,900	3,450	1,800	6,000	1,240
8	2,680	1,960	2,200	3,180	2,280	2,280	28,800	4,440	2,600	1,660	5,340	1,520
9	2,120	1,960	2,440	4,710	2,280	2,200	28,800	4,550	2,280	1,520	4,440	1,520
10	1,800	1,960	2,440	4,710	2,280	2,280	32,900	4,170	2,440	1,380	4,170	1,310
11	1,660	1,960	2,280	4,260	2,200	2,280	38,300	3,630	3,450	1,380	4,710	1,170
12	1,520	2,120	2,280	3,720	2,120	2,280	37,900	3,270	3,630	1,520	4,260	1,100
13	1,520	2,520	2,280	3,720	2,120	2,760	33,600	2,760	4,820	1,590	3,270	1,100
14	1,520	3,360	2,200	3,630	2,120	3,090	27,800	2,360	4,080	1,590	2,600	1,040
15	1,520	3,180	2,040	3,450	2,120	2,680	22,500	2,200	3,450	1,730	2,280	980
16	1,520	2,920	2,200	3,090	2,040	2,440	17,000	2,120	2,360	1,960	2,040	980
17	1,590	2,680	2,120	3,000	2,120	3,270	10,200	2,040	1,800	3,990	2,040	1,040
18	1,660	2,520	2,120	2,840	2,120	5,610	6,200	1,880	1,590	3,450	2,280	980
19	1,660	2,360	2,120	2,760	2,120	7,000	5,070	1,880	1,450	2,200	2,120	920
20	2,360	2,440	2,120	2,760	2,120	7,000	4,710	1,660	1,590	2,120	1,880	860
21	4,800	2,440	2,200	2,680	2,200	6,400	4,530	1,590	5,610	5,430	1,590	800
22	7,300	2,360	2,120	2,600	2,200	5,430	4,980	1,590	6,900	5,520	1,450	680
23	8,310	2,280	2,200	2,600	2,120	4,890	6,000	1,520	6,000	7,500	1,380	710
24	8,970	2,200	3,000	2,600	2,280	4,350	8,100	1,450	5,800	9,850	1,310	710
25	9,410	2,120	5,700	2,600	2,360	4,170	8,750	1,310	5,610	10,200	1,240	655
26	8,000	2,120	5,430	2,600	2,520	3,810	7,500	1,880	4,260	12,900	1,240	630
27	4,710	2,120	4,710	2,760	2,840	3,540	5,700	2,280	3,360	13,000	1,170	605
28	3,990	2,200	4,260	2,840	2,680	3,180	4,620	1,880	3,090	13,500	1,100	630
29	4,530	2,280	3,720	2,680	-	2,920	3,990	1,800	2,680	14,600	1,100	680
30	5,340	2,440	3,270	2,440	-	3,000	3,450	1,730	2,600	17,700	1,040	710
31	4,620	-	3,090	2,360	-	3,000	-	1,880	-	19,700	1,170	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	105,040	9,410	1,310	3,388	0.770	0.89
November	71,540	3,360	1,960	2,385	.542	.60
December	84,020	5,700	2,040	2,710	.616	.71
Calendar year 1937	2,083,070	35,200	1,280	5,707	1.30	17.60
January	93,990	4,710	2,360	3,032	.689	.79
February	64,400	2,840	2,040	2,300	.523	.54
March	104,940	7,000	2,040	3,385	.769	.89
April	442,900	38,300	2,840	14,760	3.35	3.74
May	78,570	4,440	1,310	2,535	.576	.66
June	114,760	6,900	1,450	3,825	.869	.97
July	171,170	19,700	1,380	5,522	1.26	1.45
August	117,340	18,900	1,040	3,785	.860	.99
September	29,020	1,520	605	967	.22	.25
Water year 1937-38	1,477,690	38,300	605	4,048	.920	12.48

Oconee River near Mount Vernon, Ga.

Location.- Water-stage recorder, lat. 32°12', long. 82°38', at bridge on U. S. Highway 280, a quarter of a mile downstream from Seaboard Railway bridge, half a mile upstream from Okeewalkee Creek, 2 miles upstream from Flat Creek, and 2 miles west of Mount Vernon, Montgomery County.

Drainage area.- 5,110 square miles.

Records available.- November 1937 to September 1938.

Extremes.- Maximum discharge during period, 38,500 second-feet Apr. 13 (gage height, 19.0 feet, from graph based on highest recorded stage during period clock was stopped); minimum, 875 second-feet Sept. 28 (gage height, 2.17 feet).

Remarks.- Records good. Discharge for days of missing gage heights, Apr. 12, 13, computed from constructed stage graph based on maximum recorded stage.

Rating table, Nov. 10, 1937 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

2.0	800	8.0	5,300	15.0	15,800
3.0	1,320	10.0	7,600	16.0	20,000
4.0	1,930	12.0	10,100	18.0	31,600
6.0	3,450	14.0	13,200	19.0	38,500

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	2,570	3,450	2,570	2,730	3,130	4,420	3,290	3,210	16,400	1,320
2		-	2,570	3,290	2,570	2,490	3,130	4,060	4,700	2,890	18,000	1,290
3		-	2,490	3,130	2,650	2,280	4,800	3,880	6,520	2,490	18,000	1,290
4		-	2,350	3,050	2,730	2,210	7,000	3,700	7,000	2,210	15,200	1,260
5		-	2,280	3,050	2,650	2,140	8,080	3,880	6,880	2,070	11,200	1,230
6		-	2,210	3,050	2,570	2,140	9,060	4,060	6,520	3,210	8,440	1,230
7		-	2,210	3,050	2,570	2,140	10,400	3,970	6,070	2,970	7,720	1,350
8		-	2,280	2,970	2,490	2,210	14,500	4,510	5,000	2,350	7,600	1,380
9		-	2,350	3,610	2,420	2,280	26,500	5,000	3,970	2,070	7,120	1,500
10		2,140	2,490	4,510	2,420	2,280	31,600	5,000	3,450	1,930	6,290	1,620
11		2,140	2,490	4,800	2,420	2,350	32,900	4,900	3,450	1,800	5,740	1,470
12		2,210	2,490	4,510	2,350	2,280	35,000	4,510	3,970	1,800	5,740	1,350
13		2,350	2,490	4,150	2,350	2,350	37,800	4,150	4,600	2,140	5,300	1,290
14		2,810	2,420	3,970	2,280	2,730	37,100	3,610	5,100	2,490	4,330	1,260
15		3,370	2,350	3,880	2,280	2,970	33,600	3,130	4,800	2,210	3,530	1,200
16		3,370	2,280	3,700	2,210	2,810	29,200	2,810	4,240	2,140	3,050	1,150
17		3,210	2,280	3,450	2,210	2,810	24,400	2,650	3,370	2,430	2,730	1,150
18		2,970	2,280	3,290	2,210	3,610	19,000	2,490	2,650	3,830	2,570	1,150
19		2,810	2,280	3,130	2,210	5,200	13,600	2,350	2,280	3,790	2,650	1,120
20		2,650	2,280	3,050	2,280	6,400	10,000	2,280	2,070	3,130	2,570	1,100
21		2,570	2,280	3,050	2,280	6,880	7,120	2,140	2,730	3,530	2,350	1,050
22		2,570	2,280	2,970	2,280	6,880	6,180	2,070	5,850	5,740	2,070	1,020
23		2,490	2,280	2,890	2,280	6,290	6,400	1,930	7,600	6,640	1,860	975
24		2,420	2,650	2,890	2,350	5,520	7,000	1,860	7,600	7,630	1,740	950
25		2,350	3,700	2,890	2,420	4,800	7,840	1,860	7,000	9,190	1,620	950
26		2,280	5,200	2,890	2,490	4,420	8,560	2,280	6,520	10,430	1,560	925
27		2,280	5,520	2,890	2,570	4,060	8,680	2,810	5,300	11,630	1,500	925
28		2,280	5,100	2,970	2,890	3,790	7,960	3,130	4,240	13,430	1,440	875
29		2,350	4,600	2,970	-	3,450	6,290	2,890	3,790	14,630	1,410	925
30		2,490	4,150	2,890	-	3,210	5,100	2,810	3,450	14,930	1,320	925
31		-	3,610	2,650	-	3,210	-	2,890	-	14,930	1,290	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	-	-	-	-	-	-
November 10-30	54,110	3,370	2,140	2,577	0.504	0.39
December	88,810	5,520	2,210	2,865	.561	.65
Calendar year						
January	103,040	4,800	2,650	3,324	.650	.75
February	68,000	2,890	2,210	2,429	.475	.49
March	108,920	6,880	2,140	3,514	.688	.79
April	461,930	37,800	3,130	15,400	3.01	3.36
May	102,030	5,000	1,860	3,291	.644	.74
June	144,010	7,600	2,070	4,800	.939	1.05
July	163,700	14,900	1,800	5,281	1.03	1.19
August	172,340	18,000	1,290	5,559	1.09	1.26
September	35,230	1,620	875	1,174	.230	.26
Water year						

Middle Oconee River near Athens, Ga.

Location.- Water-stage recorder, lat. 33°55', long. 82°23', at Princeton Bridge on U. S. Highway 129, half a mile downstream from Princeton Mill Dam, 1½ miles upstream from Barber Creek, 2 miles south of Athens, Clarke County, and 6 miles upstream from mouth. Zero of gage is 531.30 feet above mean sea level.
Drainage area.- 404 square miles.
Records available.- October 1901 to October 1902 (at site 4½ miles upstream) and April 1937 to September 1938 in reports of Geological Survey. January 1929 to March 1932 (at present site) in reports of Corps of Engineers, U. S. Army.
Extremes.- Maximum discharge during year, 5,160 second-feet July 26 (gage height, 19.6 feet); minimum, 71 second-feet Aug. 30 (gage height, 4.71 feet); minimum daily discharge, 93 second-feet Sept. 25.
1901-2, 1929-32, 1937-38: Maximum discharge observed, 19,600 second-feet Feb. 28, 1902 (gage height, 25.5 feet, former site and datum); minimum daily discharge, 69 second-feet Sept. 30, Oct. 18, 1932.
Remarks.- Records fair. Discharge for periods of doubtful gage heights, Nov. 13 to Dec. 23, computed on basis of records for Oconee River near Greensboro and Apalachee River near Buckhead.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 2

5.4	164	12.0	1,843
6.0	248	14.0	2,606
7.0	428	16.0	3,470
8.0	650	18.0	4,390
9.0	900	20.0	5,360
10.0	1,174		

Apr. 3 to Sept. 30

4.7	70
5.0	98
5.5	157
6.0	232
7.0	425

Note.- Same as preceding table above 7.6 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	197	398	270	314	280	264	1,170	323	381	214	464	129
2	170	378	270	332	280	256	3,030	323	359	208	461	139
3	204	369	260	341	256	272	3,120	323	457	202	564	132
4	546	360	260	306	272	306	1,220	373	294	194	532	223
5	603	360	260	314	264	280	747	314	224	186	376	294
6	428	350	260	306	264	280	709	650	207	211	458	206
7	341	341	250	517	264	341	2,500	394	258	186	616	184
8	288	332	250	535	256	280	2,570	333	394	258	522	153
9	256	314	250	378	248	264	2,570	333	436	192	522	136
10	226	306	250	369	248	420	1,920	294	868	180	415	143
11	256	297	250	360	248	674	874	258	603	174	319	138
12	233	280	250	378	264	418	722	258	431	166	276	130
13	226	350	250	332	248	350	626	258	267	160	262	130
14	323	320	250	323	248	341	580	285	232	164	248	142
15	323	300	250	314	248	323	534	276	207	370	232	139
16	233	290	240	297	248	598	501	249	192	190	277	135
17	204	320	240	288	240	1,600	468	215	418	158	224	118
18	218	320	240	297	248	1,380	446	215	1,740	456	200	112
19	2,610	280	240	288	272	626	747	224	576	257	186	106
20	3,650	280	240	288	288	698	523	258	515	898	185	104
21	2,860	270	240	280	248	797	534	224	540	1,130	169	96
22	848	270	250	280	233	568	626	199	674	1,120	168	96
23	797	270	350	280	272	535	603	199	648	1,220	164	98
24	698	270	516	288	568	546	490	184	365	3,250	160	97
25	603	270	408	418	369	460	425	192	284	3,930	148	93
26	535	280	350	323	314	428	394	199	298	4,730	143	97
27	1,290	300	332	297	288	398	373	215	396	1,480	135	100
28	1,150	340	398	280	288	449	363	199	444	756	129	98
29	650	300	388	264	-	398	343	192	261	566	128	110
30	491	280	350	272	-	369	323	383	226	472	126	117
31	428	-	332	297	-	378	-	516	-	434	122	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	21,865	3,650	170	706	1.75	2.02
November	9,395	398	270	313	.775	.86
December	8,944	516	240	289	.715	.82
Calendar year						
January	10,156	535	264	328	.812	.94
February	7,764	568	233	277	.686	.71
March	15,297	1,600	256	493	1.22	1.41
April	30,051	3,120	323	1,000	2.48	2.77
May	8,858	650	184	286	.708	.82
June	13,195	1,740	192	440	1.09	1.22
July	24,112	4,730	158	778	1.93	2.22
August	8,933	616	122	288	.713	.82
September	3,995	294	93	133	.329	.37
Water year 1937-38	162,585	4,730	93	445	1.10	14.98

Peak discharge.- Oct. 20 (12 p.m.) 4,210 sec.-ft.; Apr. 2 (7 p.m.) 3,520 sec.-ft.; July 26 (8 a.m.) 5,160 sec.-ft.

Apalachee River near Buckhead, Ga.

Location.- Staff gage, lat. 33°36', long. 83°21', at bridge on State Highway 12, 2 miles downstream from Hard Labor Creek, 5 miles northeast of Buckhead, Morgan County, and 9 miles upstream from mouth.

Drainage area.- 436 square miles.

Records available.- March 1901 to December 1908, May 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 9,270 second-feet Apr. 2 (gage height, 19.0 feet, from graph based on observer's and engineer's readings); minimum observed, 64 second-feet Sept. 28 (gage height, 0.64 foot).

1901-8, 1937-38: Maximum gage height observed, 27.5 feet, former datum, Aug. 25, 1908 (discharge not determined); minimum daily discharge observed, 43 second-feet Oct. 24, 1904 (gage height, 0.4 foot, former datum), caused by regulation at High Shoals Dam, 23 miles above station.

Remarks.- Records good below 1,500 second-feet and fair above. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.6	59	6.0	1,160	16.0	6,510
1.0	113	8.0	1,740	18.0	8,320
1.5	188	10.0	2,500	19.0	9,270
2.0	270	12.0	3,545		
4.0	662	14.0	4,890		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	142	342	236	288	288	236	1,740	306	852	204	534	120
2	157	324	236	306	270	236	7,070	324	514	188	574	120
3	164	306	236	324	252	236	7,940	342	662	188	780	270
4	342	306	236	288	270	270	3,000	554	454	180	640	150
5	342	288	236	270	288	270	1,270	708	306	180	596	164
6	270	288	270	360	270	270	900	684	252	172	378	150
7	236	288	270	474	270	270	2,450	494	252	157	414	150
8	204	288	236	640	270	270	5,040	324	252	157	534	142
9	180	270	252	618	252	270	4,390	378	554	157	534	142
10	180	270	270	396	236	324	2,590	534	618	172	534	127
11	172	306	270	414	236	434	1,560	288	640	324	342	127
12	180	342	252	434	236	360	1,060	236	804	172	342	113
13	180	342	270	414	236	288	708	220	574	164	306	127
14	196	324	270	360	236	270	618	220	324	127	270	120
15	196	324	252	360	236	288	554	220	236	780	252	106
16	188	306	252	342	252	474	534	204	220	306	252	106
17	188	494	236	306	252	1,130	494	204	188	252	204	106
18	196	474	252	306	270	952	474	188	732	157	204	106
19	1,350	454	252	288	270	662	454	188	1,620	204	204	85
20	6,950	454	236	288	270	618	474	188	708	708	188	99
21	5,120	434	220	288	252	662	804	172	780	2,250	164	92
22	1,370	360	220	288	236	514	926	164	926	2,680	150	92
23	618	288	342	288	236	434	662	157	828	1,560	157	92
24	474	288	474	342	342	454	474	157	378	1,650	157	85
25	414	270	378	414	324	414	434	157	342	6,860	142	72
26	396	252	288	414	288	360	396	180	414	4,960	127	67
27	708	270	306	414	252	414	378	220	396	1,620	120	82
28	1,060	306	306	342	252	494	360	188	378	804	120	92
29	756	306	306	270	-	396	342	252	270	454	120	92
30	434	288	306	252	-	360	324	306	220	474	113	99
31	414	-	288	270	-	324	-	1,000	-	474	120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	23,777	6,950	142	767	1.76	2.03
November	9,852	494	252	328	.752	.84
December	8,454	474	220	273	.626	.72
Calendar year						
January	11,058	640	252	357	.819	.94
February	7,342	342	236	262	.601	.63
March	12,954	1,130	236	418	.959	1.11
April	48,420	7,940	324	1,614	3.70	4.13
May	9,757	1,000	157	315	.722	.83
June	15,694	1,620	188	523	1.20	1.34
July	28,775	6,860	127	928	2.13	2.46
August	9,572	780	113	309	.709	.82
September	3,495	270	67	116	.266	.30
Water year 1937-38	189,150	7,940	67	518	1.19	16.15

Ohoopee River near Reidsville, Ga.

Location.- Staff gage, lat. 32°04', long. 82°11', at Sheppard Bridge, half a mile downstream from Brazells Creek, 1½ miles downstream from Rocky Creek, 3⅝ miles west of Reidsville, Tattnall County, about 6 miles downstream from Pendleton Creek, and about 14 miles upstream from mouth.
Drainage area.- 1,110 square miles.
Records available.- June 1903 to December 1907, May 1937 to September 1938.
Extremes.- Maximum discharge observed during year, 6,990 second-feet Apr. 13 (gage height, 15.3 feet); minimum observed, 55 second-feet Sept. 17, 25, 26 (gage height, 1.48 feet).
1903-7, 1937-38: Maximum discharge observed, 10,400 second-feet Feb. 17, 1905 (gage height, 19.0 feet, former datum), from rating curve extended above 6,000 second-feet; minimum, 50 second-feet Oct. 29 to Nov. 2, 1904, Oct. 24-26, 1905 (gage height, 0.30 foot, former datum).
Remarks.- Records good. Gage read twice daily. Regulation at times during periods of low flow from operation of gristmill a quarter of a mile above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 13				Apr. 14 to Sept. 30					
2.0	104	8.0	2,010	1.4	51	4.0	468	12.0	3,770
2.5	188	10.0	2,960	1.7	77	5.0	726	14.0	5,500
3.0	286	12.0	4,100	2.0	111	6.0	1,036	16.0	7,900
4.0	512	14.0	5,600	2.5	179	8.0	1,750		
5.0	810	16.0	7,900	3.0	262	10.0	2,630		
6.0	1,160								

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188	266	179	326	236	226	144	696	1,420	1,790	3,770	124
2	188	197	152	326	226	197	144	590	1,910	1,140	3,050	118
3	206	170	144	326	226	179	216	492	2,780	726	2,630	111
4	266	144	136	326	226	161	306	424	4,440	616	2,350	105
5	286	144	136	306	216	152	326	360	4,700	516	1,950	99
6	326	136	136	286	216	136	370	300	3,910	280	2,220	105
7	306	128	136	286	206	128	414	262	3,220	340	2,530	93
8	286	120	136	286	197	120	438	244	2,730	280	2,530	93
9	226	120	144	286	197	120	714	244	2,170	227	2,350	99
10	188	112	152	286	179	112	1,740	262	1,630	213	2,350	93
11	170	112	170	286	179	120	2,460	280	1,240	340	2,120	93
12	161	144	179	306	170	120	4,240	320	940	424	1,910	87
13	136	236	188	326	161	112	6,750	360	816	424	1,000	82
14	128	266	188	326	152	104	6,160	380	670	1,340	972	77
15	120	256	188	348	152	104	4,700	340	642	2,260	616	77
16	120	188	188	348	136	112	3,510	300	564	2,580	446	82
17	112	170	179	326	136	152	2,730	262	468	2,260	380	68
18	112	161	170	306	136	216	2,260	227	402	1,750	320	72
19	112	152	170	306	144	236	1,830	202	340	1,340	262	64
20	120	144	179	286	144	246	1,480	172	280	1,710	210	68
21	188	136	170	286	161	246	1,280	150	262	1,990	210	77
22	206	136	179	286	161	266	1,100	137	340	2,530	186	64
23	188	136	236	266	179	266	940	124	816	3,160	164	64
24	179	128	326	266	206	256	846	111	1,140	3,050	150	68
25	152	128	348	266	286	236	846	105	1,750	2,780	130	55
26	136	136	370	306	306	216	908	111	2,630	2,880	130	55
27	179	152	286	306	266	206	940	137	3,050	3,840	124	64
28	216	170	246	306	246	197	876	380	2,440	4,700	124	77
29	370	179	226	286	-	179	876	616	1,870	4,610	118	157
30	370	179	256	266	-	179	876	786	1,830	5,390	130	280
31	306	-	348	246	-	161	-	1,000	-	4,790	137	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,247	370	112	202	0.182	0.21
November	4,846	266	112	162	.146	.16
December	6,241	370	136	201	.181	.21
Calendar year						
January	9,290	348	246	300	.270	.31
February	5,446	306	136	194	.175	.18
March	5,461	266	104	176	.159	.18
April	50,420	6,750	144	1,681	1.51	1.68
May	10,376	1,000	105	335	.302	.35
June	81,400	4,700	262	1,713	1.54	1.72
July	60,281	5,390	218	1,945	1.75	2.02
August	35,569	3,770	118	1,147	1.03	1.19
September	2,771	280	55	92.4	.083	.09
Water year 1937-38	248,348	6,750	55	680	.613	8.30

Satilla River near Waycross, Ga.

Location.- Staff gage, lat. 31°14', long. 82°19', at Atlantic Coast Line Railroad bridge and pumping station, 3 miles northeast of Waycross, Ware County, and 13 miles upstream from Alabama River.

Drainage area.- 1,300 square miles.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 4,160 second-feet July 30 (gage height, 14.10 feet); minimum, 13 second-feet May 23 (gage height, 2.56 feet).
1937-38: Maximum discharge observed, 9,240 second-feet Apr. 11, 1937 (gage height, 16.2 feet); minimum, that of May 23, 1938.

Remarks.- Records good. Gage read twice daily. Atlantic Coast Line Railroad pumps about 2,000,000 gallons daily at gage for use in shops.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.5	10	5.0	330	11.0	2,030
3.0	42	6.0	554	12.0	2,480
3.5	92	8.0	1,096	13.0	3,120
4.0	157	10.0	1,690	14.0	4,040

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	682	187	290	468	290	150	92	31	31	630	3,520	290
2	734	172	272	414	290	157	86	30	63	370	3,200	254
3	844	157	254	392	290	150	86	28	81	272	2,910	164
4	1,420	150	219	330	290	136	76	26	81	172	2,480	150
5	1,630	157	219	310	272	122	65	26	129	136	2,000	129
6	1,510	150	219	272	254	116	60	25	129	98	1,570	157
7	1,270	143	219	254	254	110	59	24	98	81	1,630	482
8	1,100	129	203	236	236	104	56	24	81	67	1,920	682
9	956	122	203	219	254	98	55	22	70	61	2,190	630
10	872	110	203	219	236	98	50	21	67	54	2,380	554
11	760	104	187	203	219	92	47	20	55	55	2,380	506
12	656	143	180	203	203	86	46	19	48	86	2,230	578
13	554	203	172	236	187	81	45	19	43	310	1,960	578
14	458	236	164	272	172	76	43	18	50	604	1,630	414
15	392	219	164	272	157	76	42	18	56	872	1,240	272
16	330	203	164	290	143	76	43	17	98	1,010	816	203
17	272	219	172	290	129	164	76	17	136	788	550	195
18	254	219	180	272	129	219	136	16	92	630	370	254
19	236	219	180	290	129	350	143	16	62	656	272	392
20	236	290	180	330	122	414	122	16	50	760	203	554
21	219	350	180	350	116	436	98	15	55	872	172	788
22	203	370	172	350	116	458	86	14	116	844	143	984
23	187	370	195	330	116	458	104	14	122	984	129	1,040
24	180	330	254	310	116	414	81	14	236	1,270	290	872
25	164	290	330	310	116	370	60	18	187	1,570	506	578
26	150	290	436	330	116	290	49	20	272	1,920	330	414
27	172	310	458	414	129	236	41	24	578	2,430	180	290
28	172	330	436	436	143	187	37	28	682	3,050	136	219
29	172	330	436	392	-	157	35	23	928	3,820	110	414
30	187	310	436	350	-	129	32	36	928	4,160	98	1,330
31	195	-	458	310	-	110	-	26	-	3,920	172	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square m'le	Run-off in inches
October	17,167	1,630	150	554	0.426	0.49
November	6,812	370	104	227	.175	.20
December	7,835	458	164	253	.195	.22
Calendar year						
January	9,654	468	203	311	.239	.28
February	5,224	290	116	187	.144	.15
March	6,120	458	76	197	.152	.18
April	2,051	143	32	68.4	.053	.06
May	665	36	14	21.5	.017	.02
June	5,624	928	31	187	.144	.16
July	32,552	4,160	54	1,050	.808	.93
August	37,697	3,520	98	1,216	.935	1.08
September	14,367	1,330	129	479	.368	.41
Water year 1937-38	145,768	4,160	14	399	.307	4.18

Satilla River at Atkinson, Ga.

Location.- Water-stage recorder, lat. 31°13', long. 81°52', at bridge on U. S. Highway 84, about 400 feet downstream from Atlantic Coast Line Railroad bridge and 1 mile west of Atkinson, Brantley County.

Drainage area.- 2,880 square miles.

Records available.- October 1931 to September 1938.

Extremes.- Maximum discharge during year, 7,140 second-feet Aug. 5, 6 (gage height, 13.68 feet); minimum, 42 second-feet May 24 (gage height, 2.78 feet).
1931-38: Maximum discharge observed, 15,200 second-feet Feb. 18, 1933 (gage height, 16.96 feet); minimum observed, 4.5 second-feet Nov. 19, 20, 1931 (gage height, 1.9 feet).

Remarks.- Records fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,540	440	775	940	775	346	346	103	107	700	5,720	380
2	3,640	428	760	905	775	335	314	95	107	835	6,040	330
3	3,740	415	730	870	760	335	280	90	118	940	6,380	368
4	3,640	402	700	870	760	324	247	87	109	940	6,740	475
5	3,640	390	655	870	775	324	237	82	95	805	7,140	445
6	3,740	379	625	870	760	324	237	78	91	640	7,140	405
7	3,840	368	580	835	715	314	222	76	114	502	6,580	368
8	3,840	357	552	775	685	303	206	75	140	390	6,400	342
9	3,840	346	552	730	625	292	195	73	191	324	6,080	368
10	3,740	335	540	685	595	292	178	66	220	265	5,500	520
11	3,450	324	528	640	552	303	167	64	230	237	4,880	698
12	3,100	335	528	610	528	292	153	61	233	213	4,340	855
13	2,630	346	528	595	515	282	147	58	233	314	4,140	970
14	2,220	390	515	595	490	276	138	57	213	580	4,140	1,010
15	1,870	502	502	640	465	263	131	54	188	540	4,340	1,100
16	1,570	580	490	700	440	261	125	52	181	730	4,540	1,100
17	1,330	610	478	730	402	314	121	50	202	1,130	4,650	1,010
18	1,130	580	478	730	390	314	118	48	226	1,420	4,540	820
19	1,010	552	465	730	379	402	114	46	243	1,720	4,140	645
20	870	565	465	745	368	565	114	45	247	1,980	3,460	550
21	760	580	465	775	357	700	123	45	228	2,280	2,550	535
22	685	610	465	805	357	745	144	44	191	2,560	1,730	645
23	625	685	478	835	346	760	155	43	166	2,940	1,140	785
24	565	745	478	835	346	745	147	44	163	3,270	785	970
25	540	775	515	805	335	715	140	70	209	3,540	595	1,100
26	502	775	625	760	324	685	138	105	241	4,170	475	1,230
27	478	760	760	730	335	640	141	75	335	4,770	430	1,280
28	452	730	835	700	346	580	137	74	440	5,160	490	1,230
29	440	730	905	685	-	515	125	86	478	5,440	505	1,050
30	452	760	940	715	-	452	114	127	565	5,580	520	855
31	452	-	940	730	-	390	-	128	-	5,580	520	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	62,331	3,840	440	2,011	0.698	0.80
November	15,794	775	324	526	.183	.20
December	18,852	940	465	608	.211	.24
Calendar year 1937	1,014,329	13,100	324	2,779	.965	13.08
January	23,440	940	595	756	.262	.30
February	14,500	775	324	518	.180	.19
March	13,388	760	261	432	.150	.17
April	5,154	346	114	172	.060	.07
May	2,201	128	43	71.0	.025	.03
June	6,504	565	91	217	.075	.08
July	60,495	5,580	213	1,951	.677	.78
August	116,630	7,140	430	3,762	1.31	1.51
September	22,439	1,280	330	748	.260	.29
Water year 1937-38	361,728	7,140	43	991	.344	4.66

St. Marys River near Macclenny, Fla.

Location.- Staff gage, lat. 30°21'35", long. 82°04'55", in sec. 2, T. 2 S., R. 22 E., at Stokes Bridge, 1 mile downstream from junction of North and South Prongs and 6 miles northeast of Macclenny. Zero of gage is 40.00 feet above mean sea level.
Drainage area.- 859 square miles. Watershed in Okeefenokee Swamp indeterminate.
Records available.- October 1926 to September 1938.
Average discharge.- 12 years, 642 second-feet.
Extremes.- Maximum discharge observed during year, 7,920 second-feet Aug. 8 (gage height, 16.25 feet); minimum observed, 26 second-feet May 20-24; minimum gage height observed, 0.58 foot May 23, 24.
1926-38: Maximum discharge, 20,000 second-feet Sept. 20, 1928 (gage height, 21.9 feet, from floodmarks), from rating curve extended above 12,000 second-feet; minimum discharge observed, 12 second-feet May 22, 1932; minimum gage height observed, 0.04 foot June 4, 5, 1927.
Remarks.- Records good except those for February, March, June, and July and those for days of rapidly changing stage, which are fair. Gage read once daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 4 to Mar. 17 and May 23 to July 28)

0.5	23	4.0	352	11.0	2,200
0.7	29	5.0	508	12.0	2,770
1.0	40	6.0	680	13.0	3,620
1.5	66	7.0	878	14.0	4,740
2.0	102	8.0	1,120	15.0	6,030
2.5	154	9.0	1,430	16.0	7,580
3.0	214	10.0	1,780	16.5	8,430

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,150	322	382	190	736	214	79	34	54	367	2,250	240
2	6,180	294	352	202	1,540	190	76	34	63	308	2,060	227
3	6,940	280	322	412	1,570	178	79	34	60	367	1,980	202
4	7,580	266	308	755	1,570	178	86	34	60	190	1,940	227
5	7,260	253	280	857	1,400	166	79	32	57	166	1,710	227
6	6,330	227	280	836	1,240	154	79	32	54	143	2,200	214
7	5,510	214	280	717	1,120	154	72	32	116	116	6,030	202
8	4,500	202	266	644	878	143	69	30	178	98	7,920	190
9	3,820	190	266	575	775	138	72	30	106	86	7,260	166
10	3,070	178	280	508	698	126	79	29	106	82	6,480	166
11	2,580	178	294	476	662	121	76	29	166	86	5,510	190
12	2,160	294	294	492	626	116	72	29	90	90	4,260	154
13	1,780	524	266	698	558	98	66	28	86	126	3,330	132
14	1,500	508	253	922	524	94	60	28	76	154	2,520	116
15	1,270	476	240	900	476	90	57	29	66	166	2,020	106
16	1,070	412	240	755	428	90	54	29	63	253	1,640	98
17	922	428	227	662	397	86	52	29	57	508	1,300	102
18	836	575	214	592	382	352	49	29	57	558	1,020	154
19	755	575	214	644	367	352	46	28	46	698	836	178
20	755	541	214	755	367	253	46	26	54	736	680	178
21	717	508	214	755	352	202	44	26	111	878	609	166
22	680	492	190	680	337	178	44	26	154	1,150	609	132
23	626	428	190	609	308	143	44	26	178	1,570	558	116
24	575	412	240	575	294	132	42	26	202	1,740	492	102
25	524	382	280	541	280	121	40	29	166	1,500	428	94
26	476	382	253	575	266	111	40	46	154	1,210	382	166
27	444	412	240	541	240	111	38	49	253	1,300	322	240
28	444	428	227	492	214	106	38	49	382	1,360	322	178
29	412	460	214	444	-	98	36	42	412	1,740	352	190
30	382	444	202	412	-	98	36	44	412	2,250	294	308
31	352	-	202	382	-	90	-	52	-	2,350	266	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	73,600	7,580	352	2,374	2.76	3.18
November	11,285	575	178	376	.438	.49
December	7,924	382	190	256	.298	.34
Calendar year 1937	288,999	7,580	38	792	.922	12.51
January	18,598	922	190	600	.698	.80
February	18,605	1,570	214	664	.774	.81
March	4,683	352	86	151	.176	.20
April	1,750	86	36	58.3	.068	.076
May	1,020	52	26	32.9	.038	.044
June	4,039	412	46	135	.157	.18
July	22,346	2,350	82	721	.839	.97
August	67,580	7,920	266	2,180	2.54	2.93
September	5,161	308	94	172	.200	.22
Water year 1937-38	236,591	7,920	26	648	.754	10.24

St. Johns River near Christmas, Fla.

Location.- Water-stage recorder, lat. 28°33', long. 80°57', in sec. 29 or 32, T. 22 S., R. 34 E., at bridge on State Highway 22 about 5 miles east of Christmas. Zero of gage is 1.68 feet above mean sea level (survey by Corps of Engineers, U. S. Army).

Drainage area.- 1,320 square miles.

Records available.- December 1933 to September 1938.

Extremes.- Maximum discharge during year, 3,620 second-feet Nov. 30 to Dec. 3; maximum gage height, 8.17 feet Dec. 1, 2; minimum, 118 second-feet May 23-26; minimum gage height, 3.13 feet May 24, 26.
1933-38: Maximum discharge, 4,800 second-feet June 20, 1934 (gage height, 8.9 feet, from floodmarks); minimum, 29 second-feet June 4, 1935 (gage height, 1.35 feet).
Flood of September 1926 reached a stage of 10.8 feet (discharge, 10,000 second-feet, from rating curve extended above 4,500 second-feet).

Remarks.- Records good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.0	107	4.5	250	5.4	400	6.0	690	6.6	1,260	7.5	2,580
3.5	150	5.0	315	5.6	475	6.2	840	6.8	1,530	8.0	3,380
4.0	200	5.2	352	5.8	570	6.4	1,030	7.0	1,830	8.2	3,700

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,490	2,980	3,620	2,430	1,540	950	535	256	175	250	1,100	525
2	2,000	2,980	3,620	2,430	1,600	930	520	250	160	250	1,040	525
3	2,060	2,980	3,620	2,430	1,560	903	502	240	150	250	960	516
4	1,950	2,980	3,540	2,430	1,530	894	493	235	140	250	894	506
5	1,830	2,980	3,460	2,430	1,520	885	475	230	131	267	832	498
6	1,720	2,980	3,380	2,430	1,500	858	471	225	136	267	816	464
7	1,650	2,980	3,300	2,360	*1,450	840	447	215	155	267	849	475
8	1,540	2,980	3,220	2,280	*1,420	832	435	210	170	286	921	475
9	1,460	2,900	3,220	2,280	*1,400	816	424	205	220	324	930	467
10	1,380	2,900	3,140	2,280	*1,380	800	414	195	220	407	921	459
11	1,400	2,900	3,060	2,200	*1,350	784	407	190	215	493	912	451
12	1,380	2,980	3,060	2,200	*1,320	768	400	180	200	612	894	435
13	1,380	2,980	2,980	2,130	*1,300	760	387	175	190	739	849	421
14	1,320	2,900	2,980	2,130	*1,270	732	374	170	180	808	808	410
15	1,320	2,900	2,900	2,060	1,250	725	363	165	170	950	768	400
16	1,640	2,820	2,900	2,060	1,220	711	352	155	160	1,040	732	387
17	2,070	2,820	2,900	2,060	1,200	732	342	150	150	1,240	697	374
18	2,500	2,740	2,820	1,980	1,090	746	332	140	136	1,210	672	374
19	2,900	2,740	2,820	1,950	1,140	739	332	136	126	1,020	654	353
20	3,140	2,660	2,820	1,920	1,020	725	324	131	122	1,030	636	363
21	3,220	2,580	2,740	1,890	1,080	704	315	126	126	940	630	363
22	3,220	2,580	2,740	1,860	1,070	690	308	122	136	876	606	352
23	3,140	2,500	2,740	1,830	1,060	672	308	118	140	824	588	352
24	3,140	2,500	2,660	1,800	1,070	660	300	118	160	784	582	352
25	3,140	2,430	2,660	1,760	1,030	642	293	118	210	784	570	352
26	3,060	2,500	2,580	1,720	1,010	630	286	118	225	768	560	352
27	3,060	2,660	2,580	1,680	980	612	273	122	230	800	545	352
28	2,980	2,980	2,580	1,660	970	594	267	131	235	876	530	363
29	2,980	3,380	2,500	1,620	-	582	261	180	245	1,020	520	374
30	2,980	3,620	2,500	1,560	-	565	256	185	250	1,140	516	374
31	2,980	-	2,500	1,530	-	550	-	175	-	1,050	525	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	70,030	3,220	1,320	2,259	1.71	1.97
November	85,810	3,620	2,430	2,860	2.17	2.42
December	92,140	3,620	2,500	2,972	2.25	2.59
Calendar year 1937	362,396	3,620	208	993	.752	10.21
January	63,380	2,430	1,530	2,045	1.55	1.79
February	35,330	1,600	970	1,262	.956	1.00
March	23,031	950	550	743	.563	.65
April	11,196	535	256	373	.283	.32
May	5,366	256	118	173	.131	.15
June	5,263	250	122	175	.133	.15
July	21,822	1,240	250	704	.533	.61
August	25,057	1,100	516	744	.564	.65
September	12,494	525	352	416	.315	.35
Water year 1937-38	448,919	3,620	118	1,230	.932	12.65

*Discharge computed from interpolated gage heights.

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St. Johns River near De Land, Fla.

Location.- Slope station with two gages in T. 17 S., R. 29 E.; upstream water-stage recorder at Hawkinsville landing, 1 mile upstream from Crows Bluff Bridge; downstream water-stage recorder at St. Francis landing, 3⅛ miles downstream from aforesaid bridge. Zeros of gages are 1.106 feet and 0.716 foot, respectively, below mean sea level (survey by Corps of Engineers, U. S. Army).
An auxiliary recorder is operated at Crows Bluff Bridge, lat. 29°01', long. 81°23', 5 miles west of De Land, and it is at this recorder that the drainage area is determined and discharge measurements made.

Drainage area.- 2,830 square miles.

Records available.- January 1934 to September 1938.

Extremes.- Maximum daily discharge during year, 6,290 second-feet Dec. 21; minimum daily, 10 second-feet Apr. 24.
1934-38: Maximum daily discharge, 10,600 second-feet July 4-6, 1934; minimum daily, that of Apr. 24, 1938.
Maximum stage known, 6.8 feet (at upper gage) in 1910 (discharge not determined).

Remarks.- Records good above 2,000 second-feet, fair between 1,000 and 2,000 second-feet, and poor below 1,000 second-feet. Discharge determined graphically by use of three-dimensional diagram showing stages at each end of reach and discharge; diagram is defined by many discharge measurements. Discharge for period when gage heights at upper gage were missing, Nov. 21 to Dec. 5, computed by interpolating slope relation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	410	5,480	5,280	5,140	3,700	2,380	1,480	960	110	760	3,530	1,440
2	980	5,410	5,500	5,320	3,080	2,400	1,660	780	20	780	3,560	1,710
3	2,440	5,320	5,420	5,240	2,900	2,480	1,080	620	320	780	3,610	1,760
4	3,090	5,180	5,470	5,050	2,840	2,470	980	760	720	1,040	3,630	1,840
5	3,750	5,060	5,520	4,910	2,880	2,410	1,220	610	600	510	3,680	1,820
6	3,840	5,020	5,630	4,880	3,030	2,300	1,580	620	940	850	3,700	1,780
7	4,020	4,970	5,620	4,920	3,230	2,050	1,580	700	910	1,110	3,800	1,660
8	4,140	5,030	5,860	4,800	3,340	2,110	1,820	620	1,060	1,360	3,740	1,540
9	4,230	5,000	6,070	4,760	3,370	2,150	1,330	520	1,140	1,560	3,670	1,310
10	4,100	5,030	6,120	4,740	3,460	2,250	1,060	280	1,050	2,080	3,640	1,060
11	4,100	5,020	6,110	4,760	3,520	2,300	1,240	250	1,280	2,530	3,580	760
12	4,170	5,060	6,120	4,680	3,610	2,120	1,160	260	1,400	2,810	2,880	620
13	4,260	4,900	6,080	4,580	3,500	2,020	820	340	2,640	3,090	3,620	760
14	4,230	4,750	6,140	4,530	3,430	2,150	920	530	1,030	3,180	3,490	940
15	4,120	4,760	6,160	4,400	3,420	2,140	880	440	660	3,310	3,380	1,060
16	4,080	4,770	6,160	4,280	3,190	2,120	920	520	460	3,370	3,220	1,240
17	4,340	4,710	6,220	4,230	2,940	2,320	740	610	750	3,280	3,020	1,300
18	4,520	4,530	6,240	4,100	2,980	2,020	810	760	920	3,500	2,850	1,460
19	4,670	4,510	6,270	4,040	3,120	2,200	900	780	950	3,600	2,740	1,380
20	4,660	4,440	6,260	3,920	3,010	2,130	1,060	800	960	3,660	2,190	1,080
21	4,740	4,510	6,290	3,840	2,990	1,980	1,260	780	1,100	3,770	1,980	720
22	4,850	4,560	6,230	3,780	2,840	2,080	1,300	950	1,450	3,800	1,700	770
23	4,770	4,650	6,210	3,770	2,650	2,040	640	780	1,380	3,810	1,910	790
24	4,850	4,690	6,160	4,000	2,320	2,000	10	720	1,370	3,780	2,070	780
25	4,970	4,730	6,020	4,160	2,250	1,830	20	700	1,620	3,880	2,150	800
26	5,180	5,020	5,940	4,130	2,440	1,570	100	790	1,440	3,780	2,000	1,160
27	5,360	5,160	5,820	4,250	2,650	1,590	100	710	1,500	3,670	1,850	880
28	5,400	5,220	5,720	4,200	2,640	1,140	370	600	1,510	3,710	1,740	1,050
29	5,520	5,250	5,540	4,260	-	1,020	400	360	1,200	3,570	1,720	1,220
30	5,540	5,280	5,300	4,210	-	1,110	780	280	1,020	3,520	1,600	960
31	5,550	-	5,200	4,160	-	1,410	-	180	-	3,560	1,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	130,880	5,550	410	4,222	1.49	1.72
November	148,020	5,480	4,440	4,934	1.74	1.94
December	182,680	6,290	5,200	5,893	2.08	2.40
Calendar year 1937	861,390	6,290	370	2,360	.834	11.30
January	138,040	5,320	3,770	4,453	1.57	1.81
February	85,330	3,700	2,250	3,048	1.08	1.12
March	62,290	2,480	1,020	2,009	.710	.82
April	28,220	1,820	10	941	.332	.37
May	18,610	960	180	600	.212	.24
June	31,510	2,640	20	1,050	.371	.41
July	84,010	3,880	510	2,710	.957	1.10
August	87,670	3,800	1,420	2,828	.999	1.15
September	35,650	1,840	620	1,188	.420	.47
Water year 1937-38	1,032,910	6,290	10	2,830	1.00	13.55

Econlockhatchee River near Chuluota, Fla.

Location.- Staff gage, lat. 81°07', long. 28°41', in sec. 9 or 10, T. 21 S., R. 32 E., at highway bridge 3 miles northeast of Chuluota. Zero of gage is 2.135 feet above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Drainage area.- 296 square miles.

Records available.- November 1935 to September 1938.

Extremes.- Maximum discharge observed during year, 1,760 second-feet Dec. 1 (gage height, 10.57 feet); minimum observed, 8 second-feet May 17, 18, 20, 21 (gage height, 0.62 foot).

1935-38: Maximum discharge observed, 1,760 second-feet Oct. 15, 1936, Dec. 1, 1937; maximum gage height, that of Dec. 1, 1937; minimum observed, that of May 17, 18, 20, 21, 1938.

Maximum stage known, 16.7 feet sometime in 1928 (discharge not determined).

Remarks.- Records fair above 500 second-feet and poor below. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	304	291	1,760	136	56	30	17	9	18	226	541	53
2	670	278	1,550	127	60	28	17	9	20	239	472	53
3	1,200	226	1,260	127	66	28	17	12	26	265	375	53
4	1,420	204	1,060	127	66	26	14	14	48	291	332	63
5	1,390	183	872	136	66	26	14	15	58	346	278	73
6	1,260	173	773	136	66	25	14	18	58	332	226	85
7	1,360	145	632	136	63	23	14	15	79	346	193	103
8	872	136	559	136	63	22	14	15	85	346	173	111
9	689	111	489	127	60	22	12	14	97	215	173	97
10	595	111	455	127	58	20	12	12	79	215	154	85
11	506	111	406	127	53	20	12	12	73	332	145	73
12	438	119	375	127	50	20	12	12	127	422	136	60
13	406	127	332	119	46	20	12	11	173	506	127	56
14	390	*183	304	111	46	20	12	9	163	796	119	50
15	375	291	304	111	46	20	12	9	136	1,260	97	46
16	360	375	278	111	40	20	12	9	111	1,490	97	40
17	406	346	265	103	38	24	12	8	103	1,490	119	38
18	455	304	239	97	38	25	12	8	85	1,420	119	36
19	1,060	346	252	91	36	28	12	9	73	1,200	97	34
20	1,580	304	226	85	34	28	12	8	58	820	79	34
21	1,720	*145	215	85	34	28	12	8	73	670	79	34
22	1,550	119	204	73	32	25	12	9	70	489	79	34
23	1,330	136	193	73	32	24	12	9	70	406	68	30
24	1,060	127	183	73	32	21	12	9	63	346	103	28
25	898	127	*173	68	30	21	12	9	58	489	173	26
26	729	119	*173	66	32	20	12	9	*68	472	173	26
27	613	154	163	63	30	20	12	12	111	472	127	26
28	523	239	154	58	32	18	11	12	226	438	91	28
29	455	924	145	58	-	18	10	12	278	472	73	38
30	375	1,450	145	56	-	18	9	12	252	651	58	36
31	332	-	145	56	-	17	-	18	-	670	53	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	25,321	1,720	304	817	2.76	3.18
November	7,904	1,450	111	263	.888	.99
December	14,284	1,760	145	461	1.56	1.80
Calendar year 1937	76,193	1,760	16	209	.706	9.57
January	3,126	136	56	101	.341	.39
February	1,307	66	30	47	.159	.17
March	705	30	17	23	.078	.09
April	379	17	9	13	.044	.05
May	347	18	8	11	.037	.04
June	2,939	278	18	98	.331	.37
July	18,132	1,490	215	585	1.98	2.28
August	5,129	541	53	165	.557	.64
September	1,549	111	26	52	.176	.20
Water year 1937-38	81,122	1,760	8	222	.750	10.20

*No gage reading; discharge computed from gage heights obtained from stage graph drawn on basis of preceding and subsequent daily readings.

Wekiva River near Sanford, Fla.

Location.- Staff gage, lat. 28°49', long. 81°25', on line between secs. 21 and 28, T. 19 S., R. 29 E., at highway bridge, 9 miles west of Sanford.

Records available.- October 1931 to September 1935 (discharge measurements only), October 1935 to September 1938.

Extremes.- Maximum discharge observed during year, 673 second-feet Oct. 2 (gage height, 3.98 feet); minimum observed, 129 second-feet Aug. 31; minimum gage height observed, 3.12 feet June 18, 19.

1935-38: Maximum discharge observed, 912 second-feet June 5, 1936 (gage height, 4.36 feet), from rating curve extended above 550 second-feet; minimum observed, that of Aug. 31, 1938; minimum gage height observed, 3.02 feet Dec. 11, 12, 1935.

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	562	211	525	228	211	177	163	168	250	333	233	168
2	673	211	562	383	211	173	163	168	272	351	233	233
3	636	216	490	383	216	173	177	168	266	313	233	238
4	562	222	442	363	216	173	163	168	233	263	211	211
5	598	228	435	338	216	173	159	168	211	313	192	192
6	562	228	396	307	216	182	154	168	201	313	192	173
7	490	228	344	290	216	182	154	168	197	331	222	154
8	429	222	319	290	216	182	154	168	228	370	266	154
9	376	222	319	266	211	173	159	168	238	389	260	154
10	351	216	307	260	206	173	159	168	216	393	250	150
11	307	233	290	250	206	177	163	168	197	435	238	150
12	278	266	284	250	201	173	163	168	187	435	238	177
13	278	266	272	307	197	173	168	168	177	455	216	168
14	266	266	266	296	197	168	168	168	163	490	197	177
15	255	255	250	272	192	168	168	168	159	490	173	182
16	250	250	244	255	192	168	168	168	154	455	163	177
17	255	250	233	244	192	244	168	168	146	443	159	177
18	255	244	228	244	187	238	168	168	142	490	154	211
19	278	244	402	244	187	233	168	163	142	429	154	238
20	331	238	402	244	182	211	168	163	159	393	150	290
21	313	233	389	238	182	211	168	163	182	363	154	307
22	290	233	357	233	182	197	173	168	266	325	159	301
23	272	233	338	233	182	187	168	168	272	301	163	284
24	260	233	319	233	182	182	168	168	272	290	255	266
25	255	228	301	222	182	177	168	173	272	373	222	266
26	244	301	290	216	182	173	168	238	290	373	187	255
27	233	370	272	211	182	173	168	260	301	333	168	244
28	233	525	260	211	182	168	168	238	301	293	159	244
29	222	562	244	206	-	168	168	238	301	263	142	260
30	211	562	244	206	-	168	168	238	301	253	137	266
31	211	-	238	201	-	163	-	233	-	244	129	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,736	673	211	346		
November	8,196	562	211	273		
December	10,262	562	228	331		
Calendar year 1937	97,833	673	145	268		
January	8,124	383	201	262		
February	5,524	216	182	197		
March	5,681	244	163	183		
April	4,960	177	154	165		
May	5,635	260	163	182		
June	6,696	301	142	223		
July	11,333	490	244	366		
August	6,009	266	129	194		
September	6,467	307	150	216		
Water year 1937-38	89,623	673	129	246		

Blue Spring near Orange City, Fla.

Location.- Lat. 28°56', long. 81°21', in sec. 7, T. 18 S., R. 30 E., about 2⅛ miles west of Orange City.

Records available.- March 1932 to September 1938 (discharge measurements only).

Extremes.- Maximum discharge measured during year, 170 second-feet Dec. 6; minimum, 132 second-feet Oct. 5.

1932-38: Maximum discharge measured, 188 second-feet Dec. 5, 1932; minimum measured, 62.7 second-feet Nov. 6, 1935, uncertain owing to adverse measuring conditions and abnormal amount of backwater from St. Johns River.

Remarks.- Measurements are made about once monthly in the spring run above its confluence with St. Johns River, a quarter of a mile below spring.

Discharge measurements, in second-feet, water year October 1937 to September 1938

Oct.	5	132	Feb.	2	157	June 25	156
Nov.	9	160	Mar.	2	157	July 27	134
Dec.	6	170	Apr.	8	158	Aug. 26	156
Jan.	5	159	May	18	161		

Oklawaha River near Ocala, Fla.

Location.- Water-stage recorder, lat. 29°11', long. 82°00', in sec. 15, T. 15 S., R. 23 E., at county highway bridge known as Sharpes Ferry, 2 miles upstream from Silver River and 9 miles east of Ocala. Zero of gage is 36.11 feet (revised) above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 854 second-feet Oct. 11 (gage height, 3.45 feet); minimum, 190 second-feet June 19 (gage height, 0.05 foot).
1930-38: Maximum discharge, 1,810 second-feet June 15, 1934: maximum gage height, 5.52 feet Sept. 6, 1933: minimum discharge, 48 second-feet June 4, 1933: minimum gage height, -1.76 feet Aug. 2, 1931.

Remarks.- Records excellent. No effect this year from regulation by power plant at Moss Bluff, 12 miles upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	736	584	790	689	608	460	332	224	206	284	608	377
2	790	584	790	689	608	451	325	224	206	263	620	362
3	790	572	772	689	608	451	332	224	206	254	608	425
4	772	572	772	669	596	451	318	218	200	260	572	451
5	772	561	772	689	596	451	304	224	200	291	550	460
6	772	561	772	689	596	442	304	230	200	273	572	470
7	772	561	753	689	584	442	304	242	200	272	572	479
8	753	550	753	689	584	434	304	230	195	347	584	460
9	720	550	736	674	584	408	304	224	200	392	572	451
10	753	550	736	674	584	400	304	224	200	416	539	442
11	854	550	720	674	572	408	298	218	195	442	518	425
12	810	561	720	674	572	400	284	218	195	479	496	408
13	772	561	720	660	572	400	278	212	195	451	470	408
14	753	561	704	660	561	392	278	200	195	416	451	392
15	736	561	704	660	561	384	278	195	195	392	434	370
16	720	561	704	660	550	370	272	195	195	416	416	362
17	704	561	704	646	550	400	272	195	195	643	400	362
18	704	550	704	646	539	408	272	195	190	720	377	370
19	689	550	704	646	539	400	260	195	190	733	362	384
20	674	550	704	646	539	392	254	195	195	720	354	392
21	674	539	689	633	528	384	254	195	200	720	347	400
22	660	550	689	620	518	384	254	195	254	720	347	384
23	660	550	689	620	508	384	254	195	260	704	340	362
24	646	550	689	620	508	384	254	200	254	689	347	347
25	633	550	689	620	488	377	248	206	242	660	347	340
26	620	596	689	608	479	377	230	206	242	643	347	340
27	620	646	689	608	470	377	224	206	254	633	340	340
28	608	704	689	608	460	370	224	200	298	633	340	384
29	608	772	689	608	-	362	224	206	340	720	340	434
30	596	772	689	608	-	347	224	218	325	689	340	479
31	584	-	689	608	-	340	-	206	-	643	347	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	21,955	854	584	708		
November	17,440	772	539	581		
December	22,313	790	689	720		
Calendar year 1937	184,872	1,630	251	506		
January	20,193	689	608	651		
February	15,462	608	460	552		
March	12,430	460	340	401		
April	8,267	332	224	276		
May	6,515	242	195	210		
June	6,622	340	190	221		
July	15,938	736	254	514		
August	13,859	620	340	447		
September	12,060	479	340	402		
Water year 1937-38	173,054	854	190	474		

Oklawaha River near Conner, Fla.

Location.- Water-stage recorder, lat. 29°13', long. 81°59', in sec. 3, T. 15 S., R. 23 E., at bridge on Ocala-Daytona highway, a quarter of a mile downstream from Silver River about 1½ miles southwest of Conner, and 8 miles east of Ocala. Zero of gage is 31.80 feet above mean sea level (general adjustment of 1929).

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge during year, 1,960 second-feet Oct. 11 (gage height, 6.97 feet); minimum, 873 second-feet June 18-20; minimum gage height, 4.41 feet June 19, 20.

1930-38: Maximum discharge, 3,700 second-feet Sept. 6, 1933 (gage height, 9.14 feet); minimum, 631 second-feet Feb. 1, 1933 (gage height, 2.88 feet).

Remarks.- Records good. Discharge for periods of missing gage heights, Oct. 24-29, Nov. 21-26, Apr. 17-22, Sept. 20-23, computed from gage-height graphs drawn on basis of graph for station near Ocala. No effect this year from operation of power plant at Moss Bluff.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,860	1,540	1,560	1,560	1,440	1,260	1,130	1,000	895	1,000	1,480	1,200
2	1,830	1,510	1,560	1,560	1,440	1,240	1,130	1,000	895	958	1,480	1,180
3	1,800	1,510	1,560	1,560	1,440	1,240	1,150	985	895	945	1,460	1,240
4	1,770	1,510	1,560	1,560	1,410	1,240	1,130	985	884	958	1,410	1,280
5	1,770	1,480	1,560	1,560	1,410	1,240	1,110	1,000	884	1,000	1,380	1,280
6	1,740	1,480	1,560	1,540	1,410	1,220	1,110	1,020	884	985	1,460	1,280
7	1,710	1,480	1,560	1,540	1,380	1,220	1,110	1,030	884	985	1,480	1,300
8	1,710	1,460	1,560	1,540	1,380	1,200	1,110	1,000	884	1,110	1,460	1,280
9	1,680	1,460	1,590	1,510	1,380	1,180	1,110	985	884	1,150	1,440	1,260
10	1,710	1,460	1,590	1,510	1,380	1,160	1,110	970	884	1,180	1,380	1,260
11	1,960	1,460	1,590	1,510	1,380	1,180	1,110	970	864	1,240	1,340	1,240
12	1,830	1,480	1,590	1,510	1,380	1,160	1,100	958	884	1,260	1,320	1,220
13	1,740	1,460	1,590	1,510	1,380	1,160	1,080	958	884	1,220	1,300	1,220
14	1,680	1,460	1,590	1,510	1,360	1,150	1,080	932	884	1,160	1,300	1,200
15	1,650	1,460	1,590	1,510	1,360	1,150	1,080	932	884	1,130	1,280	1,160
16	1,650	1,460	1,590	1,480	1,360	1,150	1,080	920	884	1,180	1,260	1,160
17	1,620	1,460	1,590	1,480	1,360	1,180	1,080	920	884	1,480	1,240	1,160
18	1,620	1,440	1,590	1,480	1,360	1,180	1,060	920	873	1,540	1,220	1,180
19	1,620	1,440	1,590	1,480	1,340	1,180	1,040	920	873	1,510	1,200	1,200
20	1,620	1,410	1,590	1,480	1,340	1,180	1,040	908	873	1,480	1,200	1,220
21	1,620	1,410	1,590	1,460	1,320	1,160	1,040	908	884	1,460	1,200	1,200
22	1,620	1,410	1,590	1,460	1,320	1,160	1,040	908	945	1,460	1,200	1,180
23	1,620	1,380	1,590	1,460	1,320	1,160	1,040	895	958	1,440	1,200	1,160
24	1,590	1,380	1,590	1,460	1,320	1,160	1,040	908	958	1,440	1,200	1,150
25	1,590	1,360	1,560	1,460	1,300	1,150	1,030	908	945	1,440	1,180	1,130
26	1,590	1,410	1,560	1,440	1,280	1,150	1,000	908	945	1,460	1,180	1,130
27	1,590	1,460	1,560	1,440	1,260	1,150	1,000	908	970	1,480	1,180	1,130
28	1,560	1,510	1,560	1,440	1,260	1,150	1,000	895	1,080	1,480	1,160	1,180
29	1,560	1,560	1,540	1,440	-	1,150	1,000	908	1,110	1,680	1,150	1,240
30	1,540	1,560	1,540	1,440	-	1,150	985	920	1,060	1,620	1,150	1,280
31	1,540	-	1,540	1,440	-	1,150	-	895	-	1,540	1,160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	51,990	1,960	1,540	1,677		
November	43,880	1,560	1,360	1,463		
December	48,780	1,590	1,540	1,574		
Calendar year 1937	492,180	2,510	1,030	1,348		
January	46,330	1,560	1,440	1,495		
February	38,070	1,440	1,260	1,360		
March	36,560	1,260	1,150	1,179		
April	32,125	1,150	985	1,071		
May	29,274	1,030	895	944		
June	27,535	1,110	873	918		
July	39,971	1,680	945	1,289		
August	40,050	1,480	1,150	1,292		
September	36,300	1,300	1,130	1,210		
Water year 1937-38	470,865	1,960	873	1,290		

Oklawaha River near Orange Springs, Fla.

Location.- Staff gage, lat. 29°30'15", long. 81°54'45", in sec. 29, T. 11 S., R. 24 E., at Jordans Ferry and mouth of Orange Creek, 2½ miles east of Orange Springs. Zero of gage is 5.36 feet above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Records available.- February 1930 to September 1938.

Extremes.- Maximum discharge observed during year, 2,980 second-feet Oct. 5-7, Aug. 7, 8; maximum gage height observed, 7.54 feet Aug. 7; minimum discharge observed, 911 second-feet June 19 (gage height, 3.48 feet).

1930-38: Maximum discharge, 9,760 second-feet Sept. 9, 1933 (gage height, 12.00 feet, from floodmarks); minimum discharge observed, 741 second-feet several days in period January to June 1933; minimum gage height observed, 2.46 feet Feb. 2, 1933.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,500	2,020	2,240	1,960	1,930	1,570	1,230	1,060	1,100	1,160	2,580	1,430
2	2,740	1,990	2,270	2,020	1,960	1,540	1,230	1,060	1,070	1,140	2,660	1,470
3	2,820	1,990	2,240	2,130	1,990	1,520	1,230	1,060	1,050	1,120	2,540	1,520
4	2,900	1,960	2,240	2,200	1,990	1,500	1,230	1,060	1,030	1,110	2,460	1,520
5	2,980	1,960	2,240	2,200	1,990	1,500	1,220	1,070	1,000	1,120	2,300	1,520
6	2,980	1,930	2,240	2,200	1,960	1,470	1,200	1,080	998	1,100	2,740	1,500
7	2,980	1,900	2,200	2,160	1,930	1,450	1,200	1,070	1,020	1,080	2,980	1,470
8	2,900	1,900	2,200	2,130	1,900	1,450	1,200	1,070	1,010	1,120	2,980	1,470
9	2,900	1,870	2,160	2,100	1,870	1,450	1,200	1,070	992	1,180	2,900	1,450
10	2,820	1,870	2,160	2,060	1,840	1,430	1,180	1,060	1,000	1,230	2,740	1,450
11	2,660	1,870	2,130	2,020	1,810	1,430	1,180	1,050	985	1,350	2,580	1,430
12	2,580	1,930	2,130	2,020	1,810	1,410	1,180	1,040	968	1,430	2,380	1,430
13	2,580	1,960	2,130	2,020	1,780	1,410	1,170	1,030	960	1,410	2,200	1,430
14	2,740	1,960	2,100	2,020	1,750	1,390	1,170	1,020	958	1,470	2,020	1,410
15	2,900	1,960	2,060	2,020	1,750	1,390	1,160	1,020	948	1,470	1,960	1,410
16	2,820	1,930	2,060	1,990	1,720	1,370	1,160	1,010	937	1,520	1,870	1,390
17	2,740	1,960	2,060	1,960	1,720	1,450	1,160	995	930	1,540	1,810	1,370
18	2,580	1,960	2,060	1,930	1,720	1,500	1,140	990	926	1,520	1,750	1,390
19	2,500	2,100	2,020	1,930	1,690	1,500	1,140	982	915	1,500	1,690	1,450
20	2,420	1,930	1,990	1,930	1,690	1,470	1,140	975	944	1,520	1,630	1,430
21	2,340	1,930	1,990	1,900	1,660	1,430	1,120	970	948	1,720	1,630	1,410
22	2,300	1,900	1,990	1,900	1,660	1,410	1,110	968	978	1,840	1,630	1,390
23	2,240	1,870	1,990	1,870	1,630	1,390	1,110	962	992	1,900	1,630	1,370
24	2,200	1,870	2,020	1,900	1,660	1,370	1,100	998	1,010	1,930	1,600	1,350
25	2,200	1,900	2,020	1,900	1,660	1,370	1,100	1,020	1,010	1,900	1,600	1,350
26	2,160	1,960	1,990	1,870	1,660	1,330	1,080	1,040	1,030	1,900	1,570	1,330
27	2,160	2,060	1,990	1,840	1,630	1,330	1,080	1,040	1,070	1,930	1,500	1,330
28	2,130	2,130	1,990	1,840	1,600	1,310	1,070	1,020	1,110	1,900	1,450	1,330
29	2,100	2,160	1,990	1,810	-	1,290	1,070	1,020	1,160	2,380	1,410	1,390
30	2,060	2,200	1,960	1,810	-	1,270	1,080	1,030	1,160	2,500	1,390	1,430
31	2,060	-	1,960	1,840	-	1,250	-	1,060	-	2,540	1,390	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	78,990	2,980	2,060	2,548		
November	58,930	2,200	1,870	1,964		
December	64,820	2,270	1,960	2,091		
Calendar year 1937	638,320	4,120	1,110	1,749		
January	61,480	2,200	1,810	1,983		
February	49,960	1,990	1,600	1,784		
March	43,950	1,570	1,250	1,418		
April	34,640	1,230	1,070	1,155		
May	31,900	1,080	962	1,029		
June	30,209	1,160	915	1,007		
July	48,530	2,540	1,080	1,565		
August	63,570	2,980	1,390	2,051		
September	42,620	1,520	1,330	1,421		
Water year 1937-38	609,599	2,980	915	1,670		

North Fork of Black Creek near Middleburg, Fla.

Location.- Staff gage, lat. 30°07'10", long. 81°54'35", in sec. 28, T. 4 S., R. 24 E., about 4 miles northwest of Middleburg.

Drainage area.- 207 square miles.

Records available.- November 1931 to September 1938.

Extremes.- Maximum discharge during year, 4,620 second-feet Oct. 2 (gage height, 18.05 feet, from floodmarks); minimum discharge observed, 4.8 second-feet May 23, 24, June 19 (gage height, 0.46 foot).

1931-38: Maximum discharge, 6,000 second-feet (revised) Sept. 6, 1933 (gage height, 19.35 feet, from floodmarks); minimum discharge observed, 3.6 second-feet June 8, 1935 (gage height, 0.26 foot).

Maximum stage known, 25.3 feet sometime in June 1919, from information given by old resident (discharge, 15,000 second-feet, revised, from rating curve extended above 4,300 second-feet).

Remarks.- Records good except those below 10 second-feet, which are fair. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	62	259	51	204	41	18	6.8	22	17	226	74
2	3,760	58	184	109	623	37	18	6.5	22	13	371	100
3	2,360	51	136	455	611	36	38	5.9	21	11	359	78
4	1,580	48	104	707	431	36	41	5.9	17	10	204	104
5	1,190	41	86	759	303	37	30	6.8	13	9.2	127	145
6	798	38	82	503	215	37	24	5.9	9.4	8.6	359	184
7	467	34	86	336	164	35	20	7.0	8.6	7.5	889	118
8	325	32	78	237	136	33	18	6.8	7.5	13	1,300	104
9	248	30	74	174	118	30	18	7.8	7.2	26	941	82
10	194	30	82	136	100	29	20	5.9	7.2	16	455	62
11	164	33	82	127	91	28	19	5.7	7.0	31	226	62
12	145	70	74	154	78	26	17	5.7	6.3	30	127	51
13	118	91	70	204	70	24	15	5.4	7.0	28	86	41
14	109	78	62	237	62	24	14	6.1	12	28	58	36
15	104	74	58	215	58	22	12	7.0	6.3	30	44	30
16	104	70	58	164	51	21	10	6.8	6.3	62	34	28
17	127	82	54	136	51	118	9.4	6.3	5.9	104	29	28
18	136	104	51	127	58	184	9.2	6.3	5.2	96	26	41
19	109	91	54	204	78	127	7.8	5.9	5.0	82	23	54
20	104	86	51	248	82	104	7.2	6.1	5.4	58	78	78
21	104	86	48	215	74	86	7.2	5.9	7.0	74	104	78
22	96	78	44	174	66	70	6.5	5.2	8.9	82	82	70
23	86	70	48	136	58	51	7.5	4.8	11	82	44	70
24	78	62	74	118	62	41	7.2	5.0	9.4	82	36	58
25	74	62	86	127	58	34	7.8	8.3	6.3	74	30	51
26	66	91	82	145	54	29	7.2	9.4	15	74	24	145
27	66	174	86	127	48	26	6.8	8.9	27	96	19	259
28	66	226	86	104	44	23	7.0	10	34	136	26	226
29	70	281	74	91	-	22	6.5	10	33	259	35	215
30	74	347	66	82	-	21	6.5	22	24	303	26	237
31	70	-	54	78	-	48	-	20	-	281	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,192	3,760	66	458	2.21	2.55
November	2,680	347	30	89.3	0.431	.48
December	2,533	259	44	81.7	.395	.46
Calendar year 1937	57,078.6	3,760	5.8	156	.754	10.26
January	6,680	759	51	215	1.04	1.20
February	4,048	623	44	145	.700	.73
March	1,480	184	21	47.7	.230	.27
April	435.8	41	6.5	14.5	.070	.08
May	236.1	22	4.8	7.6	.037	.04
June	376.9	34	5.0	12.6	.061	.07
July	2,223.3	303	7.5	71.7	.346	.40
August	6,436	1,300	19	208	1.00	1.15
September	2,909	259	28	97.0	.469	.52
Water year 1937-38	44,230.1	3,760	4.8	121	.585	7.95

Lake Okeechobee at St. Lucie Canal, Fla.

Location.- Staff gage, lat. 26°59', long. 80°37', in sec. 22. T. 40 S., R. 37 E., on east shore of Lake Okeechobee, at entrance to St. Lucie Canal, 8 miles north of Canal Point. Zero of gage is 1.405 feet below mean sea level (level line unadjusted, surveys by Corps of Engineers, U. S. Army).

Records available.- October 1931 to September 1938 in reports of Geological Survey. 1915 to 1931 in reports or files of Everglades Drainage District.

Extremes.- Maximum stage observed during year, 17.30 feet Dec. 6; minimum. 14.60 feet May 25.
1931-38: Maximum stage observed, 21.5 feet, Sept. 4, 1933; minimum observed, 11.7 feet, May 17, 1932.

Remarks.- Abrupt change in stage frequently caused by wind. Gage read once daily.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.50	16.55	17.10	16.50	16.00	15.85	15.70	15.10	14.80	15.00	15.30	15.15
2	15.55	16.50	17.20	16.50	16.00	15.90	15.70	15.10	14.80	15.00	15.20	15.15
3	15.60	16.50	17.15	16.50	16.00	15.90	15.65	15.10	15.10	15.00	15.15	15.10
4	15.65	16.55	17.15	16.55	16.05	15.90	15.44	15.10	15.15	15.00	15.20	15.10
5	15.70	16.55	17.05	16.40	16.05	15.90	15.50	15.05	15.10	14.90	15.30	15.10
6	15.75	16.55	17.30	16.35	16.00	15.85	15.50	15.00	15.15	15.00	15.30	15.10
7	15.75	16.55	17.00	16.35	16.00	15.90	15.50	14.95	15.20	15.00	15.30	15.10
8	15.75	16.50	16.95	16.35	16.00	15.90	15.50	14.95	15.20	15.05	15.30	14.90
9	15.75	16.60	16.95	16.10	15.90	15.90	15.90	15.10	15.10	15.00	15.25	15.15
10	15.75	16.55	16.95	16.10	15.90	15.90	15.55	15.10	15.10	15.10	15.15	15.15
11	15.80	16.60	17.05	16.20	16.00	15.90	15.45	15.05	15.00	15.10	15.15	15.10
12	15.75	16.65	17.00	16.20	16.00	15.85	15.45	15.00	15.05	15.15	15.20	15.15
13	15.85	16.80	16.90	16.15	16.00	15.80	15.45	15.00	15.05	15.15	15.30	15.10
14	15.90	16.80	16.90	16.10	16.00	15.85	15.45	14.95	15.05	15.20	15.30	15.10
15	15.80	16.80	16.90	16.10	16.00	15.85	15.35	15.00	15.10	15.10	15.30	15.10
16	15.80	16.65	16.90	16.10	15.95	15.80	15.35	14.85	14.90	15.10	15.25	15.10
17	16.00	16.70	16.85	16.20	15.90	15.85	15.30	14.80	14.90	15.10	15.30	15.10
18	16.05	16.60	16.90	16.20	15.90	15.80	15.30	14.80	14.95	15.05	15.30	15.20
19	16.30	16.62	16.85	16.15	16.00	15.75	15.35	14.70	14.90	15.10	15.30	15.25
20	16.35	16.85	16.85	16.10	16.00	15.80	15.30	14.75	14.90	15.10	15.25	15.20
21	16.30	16.85	16.70	16.10	15.90	15.75	15.30	14.75	14.10	15.10	15.10	15.25
22	16.55	16.55	16.70	16.10	15.85	15.70	15.30	14.75	15.05	15.10	15.10	15.20
23	16.50	16.45	16.70	16.10	15.90	15.75	15.35	14.70	15.10	15.05	15.05	15.10
24	16.50	16.45	16.70	16.05	16.10	15.80	15.20	14.70	15.10	15.10	15.10	15.10
25	16.45	16.25	16.70	16.45	16.00	15.75	15.10	14.60	15.05	15.15	15.15	15.10
26	16.45	16.60	16.65	16.10	15.90	15.75	15.20	14.70	15.00	15.20	15.20	15.00
27	16.50	16.80	16.60	16.05	16.00	15.75	15.05	14.80	15.00	15.25	15.15	15.10
28	16.50	16.80	16.60	15.90	16.00	15.80	15.10	14.80	15.10	15.30	15.30	15.20
29	16.55	17.10	16.60	15.95	-	15.70	15.15	14.83	15.10	15.30	15.30	15.25
30	16.50	17.10	16.60	16.00	-	15.60	15.15	14.90	15.00	15.25	15.25	15.25
31	16.50	-	16.50	16.00	-	15.55	-	14.90	-	15.25	15.25	-

Kissimmee River below Lake Kissimmee, Fla.

Location.- Water-stage recorder, lat. 27°46', long. 81°11', in sec. 24, T. 31 S., R. 31 E., 3 miles downstream from Vero Bridge on State Highway 30 and 3 miles downstream from Lake Kissimmee. Auxiliary staff gage at highway bridge. Zero of gage is 1.14 feet below mean sea level (unadjusted).

Drainage area.- 1,850 square miles.

Records available.- October 1933 to September 1938.

Extremes.- Maximum discharge during year, 1,940 second-feet Dec. 3, 6 (gage height, 53.87 feet); minimum discharge observed, 525 second-feet July 6-11 (gage height, 50.00 feet). 1933-38: Maximum discharge, 7,150 second-feet June 24, 1934 (gage height, 56.26 feet); no flow Sept. 3, 4, 1935, owing to hurricane wind blowing upstream; minimum gage height observed, 46.10 feet Sept. 4, 1935.

Remarks.- Records good. Discharge for periods when recorder was not operating, Apr. 25-27, June 21 to July 22, computed from auxiliary gage record. Gage-height record at bridge during period October to December and six discharge measurements furnished by Okeechobee Flood Control District.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

50.0	525	52.5	1,160
50.5	596	53.0	1,370
51.0	691	53.5	1,650
51.5	810	54.0	2,030
52.0	970		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	1,650	1,720	1,650	1,420	1,200	900	670	551	551	713	650
2	691	1,650	1,790	1,650	1,420	1,160	900	650	551	533	713	650
3	713	1,650	1,860	1,650	1,420	1,160	935	650	613	551	713	650
4	713	1,650	1,790	1,720	1,420	1,160	900	650	613	551	713	650
5	736	1,650	1,720	1,720	1,370	1,120	870	650	596	533	713	631
6	736	1,650	1,790	1,720	1,370	1,120	840	631	596	533	713	631
7	736	1,590	1,860	1,720	1,370	1,160	840	631	596	525	736	631
8	736	1,590	1,790	1,720	1,370	1,120	810	631	596	525	760	613
9	736	1,590	1,790	1,720	1,320	1,120	870	631	580	525	760	631
10	736	1,590	1,790	1,720	1,320	1,080	870	631	580	525	760	631
11	760	1,590	1,790	1,650	1,320	1,120	840	631	580	525	760	631
12	760	1,530	1,790	1,650	1,320	1,120	810	613	565	533	736	631
13	760	1,590	1,790	1,650	1,320	1,040	810	613	565	580	736	631
14	760	1,590	1,790	1,650	1,280	1,040	785	596	565	565	736	631
15	785	1,590	1,790	1,650	1,280	1,040	785	596	565	580	736	613
16	840	1,530	1,790	1,590	1,280	1,040	785	596	551	580	736	613
17	1,000	1,590	1,720	1,590	1,280	1,040	760	580	551	63[illegible]	713	596
18	1,470	1,590	1,720	1,590	1,240	1,040	760	565	538	63[illegible]	713	596
19	1,530	1,530	1,790	1,590	1,240	1,040	736	565	538	63[illegible]	691	613
20	1,590	1,530	1,790	1,590	1,240	1,040	736	551	538	631	691	613
21	1,590	1,590	1,790	1,530	1,240	1,040	736	551	538	63[illegible]	691	613
22	1,590	1,590	1,720	1,530	1,200	1,000	736	551	538	631	691	596
23	1,720	1,530	1,720	1,530	1,200	1,000	736	538	551	631	670	596
24	1,720	1,470	1,720	1,470	1,240	1,000	736	538	551	631	670	580
25	1,650	1,420	1,720	1,530	1,280	1,000	713	538	551	650	670	596
26	1,650	1,470	1,720	1,530	1,280	970	691	551	551	650	650	596
27	1,650	1,590	1,720	1,470	1,200	970	670	565	551	650	650	580
28	1,720	1,650	1,720	1,470	1,200	970	670	565	538	670	650	580
29	1,650	1,720	1,720	1,470	-	935	670	580	551	691	650	580
30	1,650	1,720	1,720	1,420	-	900	670	565	551	691	650	596
31	1,650	-	1,720	1,420	-	900	-	565	-	691	650	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	35,698	1,720	670	1,152	0.623	0.72
November	47,670	1,720	1,420	1,589	.859	.96
December	54,650	1,860	1,720	1,763	.953	1.10
Calendar year 1937	323,054	1,860	486	885	.478	6.50
January	49,560	1,720	1,420	1,599	.864	1.00
February	36,440	1,420	1,200	1,301	.703	.73
March	32,645	1,200	900	1,053	.569	.66
April	23,570	935	670	786	.425	.47
May	18,438	670	538	595	.322	.37
June	16,899	613	538	563	.304	.34
July	18,476	691	525	596	.322	.37
August	21,834	760	650	704	.381	.44
September	18,449	650	580	615	.332	.37
Water year 1937-38	374,329	1,860	525	1,026	.555	7.53

Kissimmee River near Okeechobee, Fla.

Location.- Staff gage, lat. 27°14', long. 80°59', in sec. 24, T. 37 S., R. 33 E., at bridge on State Highway 8, about 10 miles west of Okeechobee. Zero of gage is at mean sea level, Okeechobee Flood Control District datum, and 1.33 feet below mean sea level, Coast and Geodetic Survey datum.

Drainage area.- 3,260 square miles.

Records available.- October 1930 to September 1938.

Extremes.- Maximum discharge observed during year, 6,080 second-feet Oct. 27 (gage height, 28.90 feet); minimum observed, 570 second-feet May 23-27; minimum gage height observed, 19.58 feet May 26.

1930-38: Maximum discharge, 15,600 second-feet Sept. 9, 1933 (gage height, 29.33 feet, from graph based on gage readings); minimum discharge observed, 231 second-feet May 18, 1932; minimum gage height observed, 17.78 feet June 18, 1935.

Flood of August 1928, resulting from hurricane, reached a peak stage of 30.3 feet (discharge, 20,000 second-feet, from rating curve extended above 14,000 second-feet).

Remarks.- Records good. Gage read twice daily. Gage-height record for October to December and results of six discharge measurements furnished by Okeechobee Flood Control District.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-8 and Oct. 26 to Jan. 4)

19.6	570	23.5	1,510	26.0	4,130
20.5	760	24.0	1,710	26.5	5,090
21.5	982	24.5	1,970	26.9	6,080
22.5	1,220	25.0	2,450		
23.0	1,360	25.5	3,270		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	4,310	3,610	2,320	1,910	1,510	*1,180	826	694	826	1,670	1,360
2	1,200	4,130	3,950	2,210	1,910	1,510	*1,180	826	694	804	1,710	1,330
3	1,200	3,780	4,130	2,210	1,860	1,510	1,150	826	782	782	1,710	1,300
4	1,200	3,440	4,130	2,210	1,860	1,480	1,150	782	782	760	1,710	1,300
5	1,200	3,270	4,130	2,120	1,860	1,480	1,120	782	782	782	1,710	1,300
6	1,220	3,100	4,490	2,120	1,860	1,480	1,120	760	804	804	1,710	1,280
7	1,250	2,930	4,490	2,210	1,810	1,480	1,100	738	804	843	1,710	1,280
8	1,250	2,760	4,490	2,320	1,810	1,450	1,100	716	804	843	1,670	1,280
9	1,250	2,600	4,310	2,320	1,610	1,450	1,100	716	804	877	1,670	1,250
10	1,250	2,450	4,310	2,320	1,760	1,420	1,050	694	826	982	1,630	1,250
11	1,250	2,450	4,130	2,320	1,760	1,420	1,050	716	826	959	1,630	1,250
12	1,250	2,450	4,130	2,320	1,760	1,420	1,050	716	826	959	1,590	1,250
13	1,250	2,450	3,950	2,320	1,710	1,390	1,030	694	804	933	1,590	1,250
14	1,250	2,320	3,780	2,320	1,710	1,390	1,000	673	782	959	1,550	1,220
15	1,250	2,210	3,780	2,210	1,710	1,360	1,000	652	760	1,000	1,550	1,220
16	1,280	2,210	3,610	2,210	1,710	1,360	982	652	738	1,000	1,510	1,200
17	1,330	2,210	3,610	2,210	1,670	1,360	959	652	716	1,030	1,480	1,180
18	1,420	2,210	3,440	2,210	1,670	1,360	959	631	694	1,050	1,480	1,180
19	1,420	2,120	3,440	2,120	1,670	1,330	936	610	673	1,080	1,450	1,200
20	1,450	2,120	3,270	2,120	1,630	1,330	936	610	673	1,100	1,450	1,200
21	1,510	2,040	3,100	2,120	1,630	1,300	914	590	673	1,120	1,420	1,180
22	1,710	2,040	3,100	2,040	1,630	1,300	914	590	673	1,150	1,450	1,150
23	2,210	2,040	2,930	2,040	1,630	1,300	936	570	694	1,180	1,480	1,120
24	3,950	1,970	2,930	2,040	1,630	1,280	936	570	738	1,200	1,450	1,150
25	5,520	1,970	2,760	2,040	1,590	1,280	892	570	760	1,220	1,450	1,150
26	5,780	2,040	2,760	1,970	1,550	1,250	870	570	760	1,280	1,420	1,150
27	6,080	2,600	2,600	1,970	1,550	1,250	870	570	782	1,330	1,420	1,150
28	5,520	2,760	2,600	1,910	1,550	1,220	848	610	826	1,390	1,420	1,150
29	5,300	3,100	2,450	1,910	-	1,220	826	652	826	1,480	1,420	1,150
30	4,860	3,270	2,450	1,910	-	1,200	826	652	826	1,510	1,390	1,180
31	4,680	-	2,320	1,910	-	1,200	-	673	-	1,590	1,360	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	72,510	6,080	1,200	2,339	0.717	0.83
November	79,350	4,310	1,970	2,645	.811	.90
December	109,180	4,490	2,320	3,522	1.08	1.24
Calendar year 1937	580,272	6,080	920	1,590	.488	6.63
January	66,560	2,320	1,910	2,148	.659	.76
February	48,210	1,910	1,550	1,722	.528	.55
March	42,290	1,510	1,200	1,364	.418	.48
April	29,984	1,180	826	999	.306	.34
May	20,889	826	570	674	.207	.24
June	22,826	826	673	761	.233	.26
July	32,829	1,590	760	1,059	.325	.37
August	47,860	1,710	1,360	1,544	.474	.55
September	35,610	1,360	1,120	1,220	.374	.42
Water year 1937-38	609,118	6,080	570	1,669	.512	6.94

*Discharge interpolated.

Istokpoga Canal near Cornwell, Fla.

Location.- Water-stage recorder, lat. 27°24', long. 81°09', in sec. 30, T. 35 S., R. 32 E., at county highway bridge, a quarter of a mile east of Seaboard Air Line Railway bridge, 1½ miles upstream from junction with Kissimmee River, and 3 miles northwest of Cornwell. Zero of gage is 29.71 feet above mean sea level (survey by Corps of Engineers, U. S. Army).

Drainage area.- 660 square miles.

Records available.- March 1934 to September 1938.

Extremes.- Maximum discharge during year, 714 second-feet Dec. 6; maximum gage height, 8.00 feet Oct. 23; minimum discharge, 35 second-feet May 25 (gage height, 3.29 feet).
1934-38: Maximum discharge, 899 second-feet Mar. 17, 18, 1936; maximum gage height, 8.59 feet June 21, 1934; minimum discharge, 18 second-feet June 4, 1935 (gage height, 2.56 feet).
Maximum stage known, 10.1 feet in September 1933 (discharge not determined).

Remarks.- Records fair except those for October and September, which are poor. Gage-height record for October to December and results of six discharge measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	326	390	622	459	379	*288	188	80	57	†117	*316	*346
2	316	390	652	447	*379	*288	181	78	58	†105	*316	*346
3	316	390	684	447	*379	*288	181	73	76	†97	*326	*346
4	306	390	699	436	*368	*278	170	71	80	†93	*326	*346
5	306	401	699	436	*368	*278	164	66	82	†93	*336	*336
6	297	401	714	436	*368	*278	157	62	87	†94	*336	*336
7	288	401	684	447	*357	*269	154	58	93	†100	*336	*336
8	288	401	668	471	*357	269	153	59	95	†101	*346	326
9	278	401	652	459	*357	260	159	62	102	†101	*346	326
10	278	401	652	459	*357	260	153	59	97	†104	*357	326
11	269	401	637	447	*346	260	139	58	95	†113	*357	316
12	269	401	622	447	*346	252	134	56	91	†123	*357	316
13	260	401	622	447	*346	252	130	54	88	†133	*368	306
14	252	401	622	436	*336	243	124	57	86	†139	*368	306
15	252	401	607	436	*336	243	119	55	79	†140	*368	297
16	252	412	607	436	*336	243	116	44	68	†157	*368	297
17	260	424	607	436	*326	243	110	38	65	†167	*368	288
18	269	424	607	424	*326	243	106	38	61	†173	*368	288
19	278	424	607	424	*326	243	105	38	58	†183	379	278
20	346	436	607	424	*316	234	101	38	55	†195	379	278
21	424	436	582	424	*316	234	97	38	58	†203	379	278
22	510	436	578	412	*316	226	102	39	59	210	379	269
23	523	436	564	412	*306	226	101	38	†67	218	379	260
24	497	436	550	401	*306	218	97	38	†81	223	379	260
25	471	424	536	412	*306	218	93	36	†88	234	368	260
26	447	447	523	401	*297	218	88	38	†100	243	368	260
27	424	484	510	390	*297	210	84	47	†111	243	357	260
28	412	523	497	390	*297	202	83	58	†117	269	357	*269
29	401	578	484	390	-	202	82	60	†123	283	357	*269
30	401	582	471	379	-	195	82	60	†123	303	357	*269
31	390	-	459	379	-	188	-	58	-	316	357	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,606	523	252	342	0.518	0.60
November	12,873	582	390	429	.650	.73
December	18,625	714	459	601	.911	1.05
Calendar year 1937	136,868	714	241	375	.568	7.72
January	13,244	471	379	427	.647	.75
February	9,450	379	297	338	.512	.53
March	7,549	288	188	244	.370	.43
April	3,753	188	82	125	.189	.21
May	1,654	80	36	53.4	.081	.09
June	2,500	123	55	83.3	.126	.14
July	5,302	316	94	171	.259	.30
August	11,058	379	316	357	.541	.62
September	8,994	346	260	300	.455	.51
Water year 1937-38	105,608	714	36	289	.438	5.96

*Gage height missing; discharge computed from interpolated gage heights.
†Gage height missing; discharge computed on basis of records for Kissimmee River near Cornwell.

St. Lucie Canal at lock 1, at Lake Okeechobee, Fla.

Location.- Slope station, lat. 26°59', long. 80°36'; upper gage is water-stage recorder at Florida East Coast Railway Co. bridge in sec. 23, T. 40 S., R. 37 E., two-thirds of a mile below lock 1, at Lake Okeechobee; lower gage is water-stage recorder at bridge on State Highway 85, in sec. 4, T. 40 S., R. 39 E., 1⅛ miles east of Indiantown, 11 miles below lock 1, and 14 miles above lock 2. Zero of each gage is 1.405 feet below mean sea level (from unadjusted level line by Corps of Engineers, U. S. Army).

Records available.- April 1931 to September 1938.

Extremes.- Maximum daily discharge during year, 5,070 second-feet Dec. 6; minimum daily, 20 second-feet (estimated leakage through lock 1) Oct. 13, May 24, 25, June 13, 14. 1931-38: Maximum daily discharge, that of Dec. 6, 1937; minimum daily, 20 second-feet (estimated leakage through lock 1) on several days in some of the years.

Remarks.- Records good above 3,000 second-feet, fair between 1,000 and 3,000 second-feet (except those for period Oct. 22 to Nov. 3, which may be poor), and poor below 1,000 second-feet. Discharge for period of missing gage heights at lower gage, Oct. 1-11, computed from gage graph based on daily readings. Discharge estimated for other periods of missing gage heights at lower gage, Feb. 21 to Mar. 8, Mar. 16 to Apr. 5, and July 7-10. Results of five discharge measurements furnished by Okeechobee Flood Control District. Discharge determined graphically by use of three-dimensional diagram of discharge and stages at each end of reach. This diagram is defined by numerous discharge measurements.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	890	1,980	1,460	4,680	*40			170	290	750	70	1,160
2	480	2,550	1,500	4,690	100			180	200	2,080	120	500
3	1,100	2,250	2,700	4,680	160		300	150	560	350	150	420
4	1,880	560	4,340	4,670	220			150	190	450	*40	1,040
5	1,100	300	4,880	4,640	220	200		140	380	350	130	1,490
6	550	420	5,070	4,620	210		660	190	760	600	*40	600
7	1,340	50	4,940	4,660	130		520	170	1,030	300	*40	540
8	1,650	540	4,880	4,630	300		400	70	*40	400	*30	150
9	700	800	4,950	4,560	1,120	260	110	100	*30	450	*40	70
10	250	1,340	4,940	4,540	1,200	60	210	110	60	700	240	100
11	750	840	4,940	4,500	500	*40	240	160	170	350	180	80
12	950	90	4,900	4,490	1,140	320	210	190	200	140	90	70
13	*20	420	4,880	4,400	1,730	420	390	450	*20	380	*40	110
14	*40	740	4,820	4,290	160	200	390	100	*20	200	90	*40
15	120	910	4,820	3,320	130	240	600	840	420	810	120	*40
16	220	830	4,870	3,110	130		780	1,220	1,160	830	90	*40
17	500	750	4,900	1,850	160		250	800	200	840	*30	*30
18	790	840	4,890	2,610	80		160	760	100	670	*30	*40
19	*40	860	4,860	2,230	60		390	1,320	60	180	120	160
20	230	1,420	4,630	1,360	70		440	170	380	250	90	600
21	180	640	4,800	270			920	190	270	270	260	440
22	1,760	300	4,800	400			650	140	880	170	120	370
23	1,740	360	4,800	160			240	240	60	100	140	320
24	2,530	640	4,790	80		300	260	*20	50	70	200	530
25	2,760	740	4,770	100	200		190	*20	50	90	140	1,010
26	2,880	390	4,750	*40			280	240	*40	*40	160	760
27	3,000	340	4,740	60			320	300	60	*40	150	940
28	2,240	480	4,730	100			250	340	50	110	150	800
29	1,040	2,240	4,710	160	-		170	100	*40	100	760	70
30	1,250	2,320	4,690	130	-		70	160	340	*40	1,100	60
31	1,260	-	4,680	100	-		-	300	-	130	630	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	34,240	3,000	20	1,105		
November	26,960	2,550	50	899		
December	140,630	5,070	1,460	4,536		
Calendar year 1937	447,670	5,070	20	1,226		
January	80,130	4,690	40	2,585		
February	9,460	1,730	40	338		
March	7,940	420	40	256		
April	10,600	920	70	353		
May	9,490	1,320	20	306		
June	8,100	1,160	20	270		
July	12,440	2,080	40	401		
August	5,590	1,100	30	180		
September	12,600	1,490	30	420		
Water year 1937-38	358,180	5,070	20	981		

*Estimated leakage through lock.

Fisheating Creek at Palmdale, Fla.

Location.- Staff gage, lat. 26°56', long. 81°19', in sec. 3, T. 41 S., R. 30 E., at bridge on State Highway 67, 1 mile south of Palmdale. Zero of gage is 27.19 feet above mean sea level (general adjustment of 1929).

Drainage area.- 305 square miles.

Records available.- April 1931 to September 1938.

Extremes.- Maximum discharge observed during year, 1,730 second-feet Aug. 1; maximum gage height observed, 6.30 feet Nov. 30, Aug. 1; no flow Apr. 5 to June 2.
1931-38: Maximum discharge observed, 6,460 second-feet Sept. 6, 1933 (gage height, 8.60 feet); no flow during one period in nearly every year.

Remarks.- All records rated poor because of shifting control, although those for much of the time are probably fair. Gage read once daily. Gage-height record for October to December and results of six discharge measurements furnished by Okeechobee Flood Control District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	365	430	1,330	104	80	5.6	0.1		0	220	1,730	71
2	338	398	1,130	100	74	5.4	.1		0	202	1,630	130
3	310	365	855	97	71	5.0	.1		2.6	185	1,330	116
4	338	310	725	94	65	4.8	.1		2.1	158	930	97
5	670	260	625	94	59	4.7	0		1.3	183	725	74
6	1,230	240	580	94	56	4.3	0		1.6	260	580	59
7	855	220	580	100	54	4.0	0		2.0	260	465	52
8	725	202	540	120	49	3.6	0		2.4	240	430	44
9	670	185	500	172	46	3.3	0		1.6	172	365	36
10	540	172	500	185	42	3.0	0		1.9	150	338	32
11	670	172	465	185	39	2.4	0		1.2	150	310	32
12	930	185	430	240	36	2.1	0		.6	172	285	52
13	930	172	398	240	32	1.7	0		.4	185	285	54
14	855	158	365	202	28	1.4	0		.3	930	260	54
15	725	150	338	185	24	1.2	0		.5	1,330	240	54
16	725	142	285	185	22	.8	0		4.6	930	220	49
17	725	136	260	158	20	.6	0		6.3	930	185	44
18	670	136	240	150	18	.7	0		6.3	855	172	44
19	780	136	220	142	14	.6	0		5.3	725	150	46
20	625	130	202	130	12	*.5	0		4.5	*670	142	44
21	540	130	185	130	10	*.5	0		4.7	670	136	42
22	580	130	158	125	8.2	.4	0		4.4	580	130	39
23	580	125	150	120	7.5	.3	0		4.4	500	125	36
24	580	120	142	120	8.2	.2	0		4.5	430	120	36
25	580	120	136	104	7.7	.3	0		7.0	430	112	46
26	625	120	130	100	7.1	.2	0		30	338	100	44
27	670	120	125	97	6.5	.2	0		77	310	97	39
28	625	1,030	125	97	6.1	.2	0		165	500	90	44
29	580	1,130	116	90	-	.2	0		220	580	80	42
30	540	1,530	112	83	-	.1	0		240	780	74	52
31	465	-	108	83	-	.1	-		-	1,330	71	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	20,041	1,230	310	646	2.12	2.44
November	8,854	1,530	120	295	.967	1.08
December	12,055	1,330	106	389	1.28	1.48
Calendar year 1937	89,327.3	3,010	.6	245	.803	10.89
January	4,126	240	83	133	.436	.50
February	902.1	80	6.1	32.2	.106	.11
March	58.4	5.6	.1	1.88	.0062	.007
April	.4	.1	0	.01	.00003	.00003
May	0	0	0	0	0	0
June	822.5	240	0	27.4	.090	.10
July	15,357	1,330	150	495	1.62	1.87
August	11,907	1,730	71	384	1.26	1.45
September	1,604	130	32	53.5	.175	.20
Water year 1937-38	75,727.4	1,730	0	207	.679	9.24

*Discharge estimated.

Twelvemile Creek near Fort Myers, Fla.

Location.- Staff gage, lat. 26°40', long. 81°43', in sec. 5, T. 44 S., R. 26 E., about 1½ miles southeast of Buckingham and 8 miles northeast of Fort Myers. Zero of gage is 1.71 feet above mean sea level (general adjustment of 1929).

Drainage area.- 83.4 square miles.

Records available.- November 1935 to September 1938.

Extremes.- Maximum discharge observed during year, 810 second-feet July 14 (gage height, 7.40 feet); no flow Apr. 3 to May 31.
1935-38: Maximum discharge, 5,300 second-feet June 15, 1936 (gage height, 13.40 feet, from floodmarks); no flow Apr. 3 to May 31, 1938.

Remarks.- Records poor. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	27	1.4	-			-		-	15	690	3.6
2	5.6	26	1.1	-			-		-	10	390	2.6
3	5.0	24	1.1	-			0		26	2.8	158	3.1
4	3.9	18	.5	-			0		37	3.1	77	9.8
5	2.9	11	.6	-			0		20	102	35	25
6	1.9	9.4	1.9	-			0		22	270	30	41
7	1.2	7.6	3.1	3.4			0		46	120	31	46
8	.3	5.6	3.1	3.9			0		29	114	37	35
9	-	5.3	2.2	1.4			0		17	158	39	25
10	-	3.4	1.5	.6			0		11	87	30	24
11	8.4	5.8	.9	.8			0		14	49	25	19
12	7.0	7.4	.8	.6			0		11	58	20	13
13	11	6.7	.5	.3			0		5.6	650	17	7.0
14	15	6.7	.2	.1			0		.7	790	32	3.6
15	15	3.9	.5	-			0		.3	590	22	1.8
16	15	4.3	.3	.8			0		-	390	14	.7
17	15	2.4	-	.5			0		-	150	7.0	.4
18	11	1.2	-	-			0		-	71	17	5.3
19	8.7	-	1.5	.1			0		-	43	17	4.4
20	10	.5	.6	-			0		-	56	13	2.2
21	17	1.1	.2	-			0		-	38	18	.9
22	71	.6	-	-			0		8.0	34	15	.4
23	63	.3	-	-			0		41	30	9.0	2.2
24	84	-	-	-			0		80	158	13	1.4
25	74	.3	-	-			0		202	102	14	28
26	77	.6	-	-			0		188	77	16	41
27	68	1.5	-	-			0		142	51	15	58
28	48	3.3	-	-			0		84	42	15	63
29	36	2.4	-	-			0		71	39	13	51
30	37	1.7	-	-			0		40	63	6.5	40
31	31	-	-	-			-		-	650	6.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	746.84	84	-	24.1	.289	.33
November	188.08	27	-	6.27	.075	.08
December	22.54	3.1	-	.727	.0087	.01
Calendar year 1937	17,535.37	850	-	48.0	.576	7.82
January	13.42	3.9	-	.433	.0052	.006
February	.67	-	-	.024	.00029	.0003
March	.31	-	-	.010	.00012	.0001
April	.02	-	0	.001	.00001	.00001
May	0	0	0	0	0	0
June	1,095.99	202	-	36.5	.438	.49
July	5,012.9	790	2.8	162	1.94	2.24
August	1,841.7	690	6.2	59.4	.712	.82
September	558.44	63	.4	18.6	.223	.25
Water year 1937-38	9,480.91	790	0	26.0	.312	4.23

Note.- Discharge less than 0.1 second-foot on days for which no figures are given.

Peace Creek at Zolfo Springs, Fla.

Location.- Water-stage recorder, lat. 27°30', long. 81°48', in sec. 22, T. 34 S., R. 25 E., at bridge on U. S. Highway 17, 0.8 mile north of Zolfo Springs.

Drainage area.- 785 square miles.

Records available.- September 1933 to September 1938.

Extremes.- Maximum discharge during year, 2,700 second-feet July 14, 15; maximum gage height, 9.25 feet July 14; minimum discharge observed, 69 second-feet May 21 (gage height, -0.08 foot).

1933-38: Maximum discharge, 26,300 second-feet Sept. 6, 1933 (gage height, 20.05 feet); minimum, 67 second-feet Apr. 18-21, 1935; minimum gage height, that of May 21, 1938.

Remarks.- Records good except those for April and May, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	374	292	1,560	395	302	232	125	*87	609	462	2,030	430
2	332	273	1,400	384	292	209	120	*86	1,190	866	2,190	439
3	322	264	1,220	384	282	198	118	*85	841	793	2,230	406
4	342	254	1,050	439	282	186	115	*84	673	520	1,750	374
5	353	236	918	508	273	178	114	*83	485	384	1,280	406
6	342	223	892	542	264	170	115	*82	498	589	998	428
7	332	213	918	577	264	163	112	81	892	601	866	384
8	312	202	841	673	264	159	110	80	697	841	998	374
9	282	197	793	697	254	152	110	81	417	1,080	1,080	342
10	264	192	721	649	236	149	109	*82	302	1,250	1,030	322
11	273	200	697	577	236	145	109	84	282	1,280	918	322
12	428	245	649	542	234	138	109	80	273	1,340	817	342
13	428	273	613	520	227	132	104	*78	231	2,175	721	302
14	374	264	577	496	225	129	102	77	181	2,700	613	273
15	332	254	542	474	214	128	102	*76	157	2,530	520	236
16	353	245	520	450	205	126	100	75	139	2,280	439	229
17	697	245	496	428	200	143	97	*74	126	2,070	384	220
18	793	245	485	417	195	214	93	73	118	1,840	353	240
19	841	232	531	395	193	214	91	*72	124	1,560	332	332
20	793	222	554	384	183	197	91	*70	154	1,280	292	342
21	793	211	531	374	175	185	89	69	222	1,430	273	312
22	769	204	496	364	175	166	89	*72	600	1,220	264	273
23	745	197	485	353	178	161	88	74	1,580	998	292	236
24	673	195	485	353	294	193	87	*80	1,730	944	322	236
25	601	193	485	353	353	180	87	*85	1,310	892	485	338
26	531	330	474	342	312	156	92	102	1,110	918	353	496
27	474	961	462	332	282	152	*91	146	1,030	1,470	292	625
28	428	1,250	450	322	264	146	*90	135	769	2,015	264	745
29	384	1,630	428	312	-	141	*89	278	625	2,430	254	868
30	353	1,660	417	312	-	135	*88	342	496	1,840	245	1,250
31	322	-	406	302	-	130	-	245	-	1,870	254	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	14,640	841	264	472	0.601	0.69
November	11,602	1,660	192	387	.493	.55
December	21,096	1,560	406	680	.866	1.00
Calendar year 1937	224,358	3,390	141	615	.783	10.63
January	13,650	697	302	440	.560	.65
February	6,858	353	175	245	.312	.32
March	5,107	232	126	165	.210	.24
April	3,036	125	87	101	.129	.14
May	3,218	342	69	104	.132	.15
June	17,861	1,730	118	595	.758	.85
July	42,468	2,700	384	1,370	1.75	2.02
August	23,139	2,230	245	746	.950	1.10
September	12,122	1,250	220	404	.515	.57
Water year 1937-38	174,797	2,700	69	479	.610	8.28

*Gage height missing; discharge interpolated.

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Peace Creek at Arcadia, Fla.

Location.- Water-stage recorder, lat. 81°52', long. 27°12' in sec. 26, T. 37 S., R. 24 E., at bridge on State Highway 18, half a mile west of Arcadia. Zero of gage is 8.25 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,330 square miles.

Records available.- April 1931 to September 1938.

Extremes.- Maximum discharge during year, 4,150 second-feet July 15, 16; maximum gage height, 8.42 feet July 16; minimum, 45 second-feet May 22 (gage height, -0.57 foot).
1931-38: Maximum discharge, 36,200 second-feet Sept. 9, 1933 (gage height, 17.67 feet); minimum, that of May 22, 1938.
Maximum stage known, 18.3 feet in 1912, from information furnished by county engineer (discharge, 43,000 second-feet, from rating curve extended above 30,000 second-feet).

Remarks.- Records excellent except those for period March to June, which are fair. A loss of flow between this station and that at Zolfo Springs during the period of extreme drought extending through April and May is revealed by a comparison of the records for the two stations and substantiated by discharge measurements made Apr. 26.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 27 to Mar. 21, May 21 to June 25)

-0.6	45	1.0	384	5.0	1,990
-.4	72	1.5	545	6.0	2,510
-.2	103	2.0	734	7.0	3,040
0	139	3.0	1,130	8.0	3,720
.5	249	4.0	1,540	8.5	4,270

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,170	563	2,780	528	347	274	126	72	354	792	3,390	347
2	1,210	510	2,670	510	338	249	117	69	782	657	3,320	480
3	1,090	477	2,460	510	327	230	113	65	1,460	950	3,260	545
4	1,130	445	2,190	510	319	218	106	69	1,670	950	3,090	528
5	1,210	414	1,940	563	311	207	105	84	1,460	657	2,780	477
6	1,250	384	1,800	638	303	198	106	78	910	545	2,190	477
7	1,210	361	1,710	695	295	191	108	68	851	1,010	1,630	461
8	1,380	341	1,630	812	287	182	103	65	1,130	1,460	1,460	430
9	1,330	322	1,540	890	284	178	106	62	1,010	1,670	1,540	399
10	1,130	308	1,460	890	274	170	100	64	667	1,800	1,590	361
11	990	311	1,290	812	262	159	98	71	454	1,890	1,540	333
12	851	338	1,210	754	259	153	100	80	370	2,040	1,330	327
13	890	399	1,090	695	254	143	100	69	324	2,780	1,210	333
14	832	430	1,050	657	244	135	97	61	279	3,555	1,050	300
15	734	399	970	619	237	130	95	58	223	4,040	890	295
16	657	372	910	600	232	128	97	57	187	4,150	754	247
17	773	364	851	563	218	146	89	55	163	3,820	638	225
18	1,090	355	792	545	214	204	86	54	143	3,330	581	220
19	1,210	349	773	510	209	277	82	54	133	2,930	510	256
20	1,250	335	792	494	202	259	81	52	131	2,510	461	319
21	1,210	311	792	477	193	223	81	49	162	2,090	414	341
22	1,210	295	754	445	187	202	80	45	232	1,890	381	319
23	1,250	279	714	430	191	182	84	46	588	1,800	358	264
24	1,250	269	695	430	214	191	81	46	1,577	1,750	381	242
25	1,130	272	676	414	338	211	75	46	2,140	1,750	563	262
26	1,050	343	676	414	370	202	75	66	2,040	1,750	563	322
27	930	1,110	657	414	335	170	78	108	1,750	1,910	430	486
28	832	1,970	619	399	297	159	80	148	1,630	2,720	361	695
29	754	2,400	600	372	-	151	74	167	1,290	3,230	327	970
30	676	2,720	581	364	-	143	69	245	1,010	3,720	311	1,130
31	619	-	545	355	-	135	-	352	-	3,630	314	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	32,298	1,380	734	1,042	0.783	0.90
November	17,746	2,720	269	592	.445	.50
December	37,217	2,780	545	1,201	.903	1.04
Calendar year 1937	368,403	5,130	150	1,009	.759	10.29
January	17,309	890	355	558	.420	.48
February	7,541	370	187	269	.202	.21
March	5,800	274	128	187	.141	.16
April	2,788	126	69	92.9	.070	.08
May	2,625	352	45	84.7	.064	.07
June	25,120	2,140	131	837	.629	.70
July	67,896	4,150	545	2,190	1.65	1.90
August	37,617	3,390	311	1,213	.912	1.05
September	12,391	1,130	220	413	.311	.35
Water year 1937-38	266,348	4,150	45	730	.549	7.44

Kissengen Spring near Bartow, Fla.

Location.- Lat. 27°51', long. 81°49', in sec. 28, T. 30 S., R. 25 E., about 4½ miles southeast of Bartow.

Records available.- 1917 and 1929-31 (a single discharge measurement in each year), March 1932 to September 1938 (discharge measurements).

Extremes.- Maximum discharge measured during year, 29.3 second-feet Mar. 11; minimum measured, 14.4 second-feet June 13.

1932-38: Maximum discharge measured, 43.6 second-feet Oct. 11, 1933; minimum measured, that of June 13, 1938.

Remarks.- Discharge measurements made about once monthly from footbridge at outlet of pool.

Discharge measurements, in second-feet, water year October 1937 to September 1938

Oct. 14.....	23.2	Apr. 25.....	22.0
Nov. 11.....	23.0	May 26.....	14.9
Dec. 8.....	23.0	June 13.....	14.4
Jan. 3.....	25.3	July 19.....	22.6
Feb. 4.....	23.4	Aug. 16.....	20.0
Mar. 11.....	29.3	Sept. 8.....	24.7

Miakka River near Sarasota, Fla.

Location.- Staff gage, lat. 27°14', long. 82°19', in sec. 28, T. 37 S., R. 20 E., at bridge on State Highway 220, 2 miles downstream from Atlantic Coast Line Railroad bridge and about 14 miles southeast of Sarasota.

Drainage area.- 200 square miles.

Records available.- August 1936 to September 1938.

Extremes.- Maximum discharge observed during year, 3,190 second-feet July 13 (gage height, 8.80 feet); no flow Mar. 14, 15, Mar. 28 to June 4.
1936-38: Maximum discharge observed, that of July 13, 1938; minimum discharge, that of Mar. 14, 15, Mar. 28 to June 4, 1938.

Remarks.- Records poor. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	192	366	211	50	38	5.7			0	956	1,180	52
2	172	280	280	46	38	4.5			0	911	1,140	48
3	158	211	323	46	33	2.8			0	866	1,140	46
4	134	211	280	46	34	2.0			0	866	1,090	40
5	124	172	323	42	33	1.8			.2	911	1,050	38
6	124	143	366	39	30	1.4			2.9	911	1,050	34
7	774	143	280	39	29	.9			13	911	1,000	17
8	866	124	246	40	29	.7			33	1,050	911	13
9	866	108	211	40	28	.2			46	1,280	820	12
10	684	102	211	39	28	.2			55	1,370	729	10
11	592	95	192	39	26	.2			62	1,910	684	9.9
12	456	90	192	40	24	.2			60	3,000	592	11
13	211	85	172	44	22	.1			60	3,190	502	13
14	172	81	158	48	20	0			60	3,000	366	11
15	134	77	143	48	18	0			58	2,910	246	9.9
16	102	74	124	50	16	.3			58	2,820	192	9.2
17	172	74	108	55	14	.5			55	2,730	172	8.4
18	246	68	95	55	12	.7			65	2,640	158	7.6
19	366	65	102	55	12	.9			65	2,370	143	7.2
20	547	65	102	55	11	.9			60	1,280	134	7.0
21	638	62	95	52	11	.7			60	1,280	124	7.0
22	684	60	85	50	10	.3			55	1,370	108	6.8
23	638	58	71	48	10	.3			55	1,280	85	6.6
24	592	55	77	48	10	.3			65	1,370	81	6.3
25	592	68	71	46	10	.2			71	1,370	81	6.2
26	592	74	71	46	10	.2			74	1,370	77	6.0
27	547	77	65	46	7.5	.1			134	1,370	77	6.6
28	502	85	62	44	6.0	0			638	1,280	71	6.8
29	456	108	60	42	-	0			820	1,180	71	6.6
30	411	143	58	42	-	0			911	1,180	62	6.8
31	411	-	55	40	-	0			-	1,180	58	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	13,155	866	102	424	2.12	2.44
November	3,424	366	55	114	.570	.64
December	4,889	366	55	158	.790	.91
Calendar year 1937	91,896.4	1,340	6.4	252	1.26	17.09
January	1,420	55	39	45.8	.229	.26
February	569.5	38	8.0	20.3	.102	.11
March	28.1	5.7	0	.84	.0042	.0048
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	3,636.1	911	0	121	.605	.68
July	50,112	3,190	866	1,617	8.08	9.32
August	14,194	1,180	58	458	2.29	2.64
September	531.1	52	6.0	17.7	.088	.10
Water year 1937-38	91,956.8	3,190	0	252	1.26	17.10

Alafia River at Lithia, Fla.

Location.- Staff gage, lat. 27°52', long. 82°12', in sec. 16, T. 30 S., R. 21 E., at Marvinia Bridge, 1 mile northeast of Lithia. Zero of gage is 9.71 feet above mean sea level (unadjusted).

Drainage area.- 336 square miles.

Records available.- January 1933 to September 1938.

Extremes.- Maximum discharge during year, 1,860 second-feet Aug. 3 (gage height, 10.20 feet, from floodmarks); minimum observed, 17 second-feet May 3, 10, 13 (gage height, 0.46 foot).

1933-38: Maximum discharge, 25,000 second-feet Sept. 7, 1933 (gage height, 25.6 feet, from floodmarks), from rating curve extended above 12,000 second-feet; minimum observed, 13 second-feet June 5, 6, 10, 1935 (gage height, 0.31 foot).

Remarks.- Records good except those for January to April, which are fair. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	203	80	588	139	96	97	42	19	123	203	1,270	131
2	179	74	502	139	105	88	38	18	139	163	1,590	147
3	171	70	366	187	105	75	39	17	287	139	1,700	203
4	219	64	283	332	99	68	37	18	299	123	1,530	203
5	332	60	251	315	99	62	35	18	*219	267	1,140	187
6	332	57	251	251	99	59	34	18	203	570	940	171
7	251	54	235	231	96	53	30	18	349	714	1,440	155
8	219	54	235	251	91	47	36	18	267	826	1,440	147
9	195	52	219	235	91	43	35	18	187	902	1,180	115
10	171	49	219	219	89	44	31	17	139	1,040	960	107
11	155	53	219	203	81	44	28	*18	107	1,060	696	123
12	131	83	203	187	78	44	29	18	104	1,100	519	115
13	123	93	195	187	75	43	29	17	75	1,120	383	104
14	107	89	179	187	75	40	24	18	85	1,140	315	101
15	107	83	171	171	72	40	24	18	123	1,020	251	85
16	107	*83	171	171	64	37	39	20	105	960	219	85
17	123	83	163	155	64	78	28	19	75	902	187	131
18	219	74	171	147	64	171	35	19	57	902	171	139
19	203	70	235	139	62	171	23	18	57	642	147	203
20	203	68	251	131	62	131	23	18	75	488	139	171
21	195	68	235	131	59	99	23	18	123	588	131	147
22	171	68	203	131	56	91	24	18	400	660	139	131
23	163	62	187	123	62	72	24	24	570	642	155	131
24	155	59	187	115	123	78	24	26	536	660	147	115
25	123	59	187	123	155	85	24	54	434	642	147	251
26	115	155	171	123	139	86	20	139	332	660	139	187
27	107	400	163	123	123	74	19	139	349	696	123	171
28	107	570	163	115	104	63	19	105	451	940	139	179
29	101	642	155	107	-	57	19	89	468	980	123	235
30	93	606	155	101	-	49	19	*75	349	1,180	107	235
31	83	-	147	99	-	45	-	63	-	1,270	115	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,163	332	83	167	0.497	0.57
November	4,082	642	49	136	.405	.45
December	7,060	588	147	228	.679	.78
Calendar year 1937	104,307	1,710	49	286	.851	11.54
January	5,268	332	99	170	.506	.58
February	2,488	155	56	88.9	.265	.28
March	2,234	171	37	72.1	.215	.25
April	854	42	19	28.5	.085	.09
May	1,112	139	17	35.9	.107	.12
June	7,067	570	57	236	.702	.78
July	23,179	1,270	123	748	2.23	2.57
August	17,682	1,700	107	570	1.70	1.96
September	4,605	251	85	154	.458	.51
Water year 1937-38	80,794	1,700	17	221	.658	8.94

*Gage height missing; discharge computed from interpolated gage height.

Hillsboro River near Harney, Fla.

Location.- Staff gage, lat. 28°03', long. 82°22', on line between secs. 12 and 13, T. 28 S., R. 19 E., at Fowler Street Bridge, 2½ miles north of Harney and 4 miles west of Thonotosassa. Zero of gage is 19.14 feet above mean sea level (survey by Hillsboro County Engineering Department).

Drainage area.- 525 square miles.

Records available.- October 1933 to September 1938.

Extremes.- Maximum discharge observed during year, 1,820 second-feet Aug. 4 (gage height, 5.50 feet); minimum observed, 46 second-feet Apr. 29; minimum gage height observed, 1.83 feet June 19.

1933-38: Maximum discharge, 11,700 second-feet June 20, 1934 (gage height, 13.42 feet, from observed readings on crest); minimum discharge observed, that of Apr. 29, 1938; minimum gage height observed, 1.75 feet May 7, 19, June 5, 1935.

Maximum stage known, 15.55 feet Sept. 9, 1933, prior to failure of Tampa Power Dam, from floodmarks (discharge 16,400 second-feet, from discharge measurement near crest).

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	255	695	220	175	105	68	49	98	172	1,540	220
2	380	255	745	220	175	100	64	50	104	170	1,610	200
3	360	238	795	205	169	98	62	51	115	165	1,680	215
4	360	220	795	205	163	96	62	53	117	160	1,750	230
5	360	205	745	205	160	92	62	54	115	165	1,750	230
6	380	190	695	220	152	92	61	57	117	165	1,750	230
7	380	184	695	220	152	88	59	60	119	170	1,610	245
8	360	169	650	255	155	84	59	64	115	175	1,480	260
9	360	160	605	290	152	80	59	62	107	175	1,420	278
10	380	155	560	290	150	78	59	61	105	188	1,300	195
11	380	155	540	290	148	80	57	60	102	200	1,120	295
12	380	190	500	272	142	80	59	59	96	215	1,060	260
13	360	190	460	272	138	76	59	60	92	230	950	245
14	342	190	420	272	133	72	59	59	87	260	995	230
15	325	184	400	255	128	72	59	58	86	295	785	215
16	325	178	380	255	128	68	59	57	84	370	680	200
17	325	178	360	238	124	102	59	57	82	410	585	188
18	325	178	360	238	120	131	59	57	82	410	472	188
19	325	172	342	220	115	138	59	57	84	410	410	215
20	342	166	325	220	111	142	57	57	93	430	370	215
21	325	160	325	205	107	145	57	57	102	495	350	200
22	325	155	308	205	100	142	57	57	121	562	350	200
23	325	150	308	190	102	133	53	61	130	730	330	200
24	325	145	308	187	117	126	53	69	132	950	312	200
25	325	155	290	181	117	113	53	80	140	1,240	312	200
26	325	220	290	184	117	105	52	88	152	1,420	295	200
27	325	290	272	187	113	94	50	86	168	1,420	278	215
28	325	360	255	190	109	88	47	88	175	1,420	260	245
29	308	460	255	187	-	80	46	98	172	1,420	245	295
30	290	560	238	181	-	76	49	98	172	1,420	230	430
31	272	-	238	178	-	72	-	98	-	1,420	215	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,619	400	272	343	.653	.75
November	6,467	560	145	216	.411	.46
December	14,154	795	238	457	.870	1.00
Calendar year 1937	187,547	1,960	76	514	.979	13.28
January	6,937	290	178	224	.427	.49
February	3,772	175	100	135	.257	.27
March	3,048	145	68	98.3	.187	.22
April	1,718	68	46	57.3	.109	.12
May	2,022	98	49	65.2	.124	.14
June	3,464	175	82	112	.219	.24
July	17,432	1,420	160	562	1.07	1.23
August	26,494	1,750	215	855	1.63	1.88
September	6,939	430	188	231	.440	.49
Water year 1937-38	103,066	1,750	46	282	.537	7.29

Crystal Springs near Zephyrhills, Fla.

Location.- Staff gage, lat. 28°11', long. 82°10', in sec. 35, T. 26 S., R. 21 E., 1⅛ miles west of village of Crystal Springs and 3½ miles south of Zephyrhills.

Records available.- 1933 (miscellaneous discharge measurements), October 1934 to September 1938 (discharge measurements).

Extremes.- Maximum discharge measured during year, 96.6 second-feet Oct. 15; minimum measured, 57.3 second-feet May 24.
1934-38: Maximum discharge measured, 121 second-feet Sept. 17, 1937; minimum measured, 54.9 second-feet July 10, 1935.

Remarks.- Discharge measurements made of Hillsboro River both above and below Crystal Springs in order to obtain discharge of the springs, which is the difference between that of the river at each of the two sites.

Discharge measurements, in second-feet, water year October 1937 to September 1938

Date	Hillsboro River		Difference, or spring flow
	Below Springs	Above Springs	
Oct. 15.....	117	20.4	96.6
Nov. 10.....	93.0	7.0	86.0
Dec. 8.....	159	83.4	75.6
Jan. 3.....	114	43.4	70.6
Jan. 31.....	79.7	5.4	74.3
Mar. 7.....	73.5	3.5	70.0
Apr. 16.....	65.7	2.2	63.5
Apr. 29.....	64.9	2.6	62.3
May 24.....	58.4	1.1	57.3
June 1.....	85.5	28.7	58.8
June 16.....	61.2	*1.0	60.2
July 18.....	114	44.9	69.1
Aug. 20.....	92.4	13.6	78.8
Sept. 7.....	127	32.3	94.7

*Estimated.

WEEKIWACHEE RIVER BASIN

Weekiwachee Spring near Brooksville, Fla.

Location.- Lat. 28°31', long. 82°34', in sec. 2, T. 23 S., R. 17 E., at head of Weekiwachee River, about 12 miles southwest of Brooksville.

Records available.- 1917 and 1929-30 (a single discharge measurement in each year), February 1931 to September 1938 (discharge measurements).

Extremes.- Maximum discharge measured during year, 174 second-feet Aug. 15; minimum measured, 124 second-feet June 20.
1931-38: Maximum discharge measured, 231 second-feet May 6, 1931; minimum measured, 106 second-feet Feb. 14, 1933.

Remarks.- Discharge measurements fair; they were made from boat at outlet of pool.

Discharge measurements, in second-feet, water year October 1937 to September 1938

Oct. 12.....	164	Apr. 29.....	150
Nov. 16.....	166	June 1.....	138
Dec. 10.....	164	June 20.....	124
Jan. 7.....	171	July 18.....	144
Feb. 5.....	155	Aug. 15.....	174
Mar. 11.....	148	Sept. 10.....	160

Withlacoochee River at Trilby, Fla.

Location.- Staff gage, lat. 28°29', long. 82°12', in sec. 22, T. 23 S., R. 21 E., at highway bridge 1 mile north of Trilby.

Drainage area.- 780 square miles.

Records available.- August 1928 to February 1929, February 1930 to September 1938.

Extremes.- Maximum discharge observed during year, 711 second-feet Oct. 6, 7; maximum gage height observed, 6.90 feet Oct. 7; minimum discharge observed, 20 second-feet May 21-25, June 15-20; minimum gage height observed, 0.00 foot June 17, 18. 1928-29, 1930-38: Maximum discharge, 8,840 second-feet June 21, 1934 (gage height, 20.5 feet, observed at crest); minimum discharge observed, 11 second-feet Apr. 29, May 14-17, 22-24, 1932 (gage height, -0.48 foot).

Remarks.- Records fair. Gage read once daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.0	20	1.0	62	3.5	279
.2	26	1.5	94	4.0	334
.4	34	2.0	133	5.0	454
.6	42	2.5	177	6.0	585
.8	52	3.0	227	7.0	725

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	519	545	394	382	187	80	40	24	23	42	430	125
2	519	545	370	370	187	77	40	24	23	44	418	159
3	545	532	370	370	177	77	38	24	23	47	394	187
4	571	519	358	370	177	74	38	24	23	44	370	257
5	641	493	370	370	177	71	38	26	23	42	346	346
6	711	480	370	370	168	68	38	28	23	42	334	382
7	711	467	370	358	168	65	36	28	22	40	382	346
8	683	*442	394	358	159	62	36	28	23	40	382	346
9	669	*430	406	346	159	60	34	28	23	40	382	358
10	641	*418	430	346	150	60	34	26	22	40	370	346
11	627	*406	442	334	141	57	34	26	22	38	370	346
12	613	*394	*430	334	133	57	34	24	22	40	334	334
13	599	*382	*406	323	133	57	32	23	22	40	323	334
14	571	*370	*394	312	133	54	32	23	22	42	301	334
15	558	*358	*382	301	125	54	30	22	20	42	290	323
16	545	346	*370	301	117	57	30	22	20	54	268	323
17	545	334	*346	290	117	60	30	22	20	80	247	312
18	558	312	334	279	117	65	28	22	20	117	237	312
19	571	312	346	268	109	68	28	†22	20	133	237	312
20	585	301	346	257	109	68	28	†22	20	133	227	301
21	599	279	358	247	101	62	26	†20	23	133	207	312
22	585	268	358	247	101	60	26	†20	44	133	207	290
23	571	257	370	237	94	57	26	†20	42	150	217	279
24	571	227	370	237	94	54	26	†20	42	168	217	257
25	558	247	382	237	94	52	26	†20	40	187	197	237
26	558	301	382	227	94	50	26	23	38	227	187	227
27	558	312	394	217	94	47	24	23	38	279	168	227
28	558	406	394	207	84	47	24	23	38	346	150	227
29	558	430	382	197	-	44	24	23	40	370	133	257
30	545	418	382	197	-	42	24	23	40	418	133	279
31	545	-	382	187	-	42	-	23	-	430	117	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,188	711	519	587	0.753	0.87
November	11,531	545	227	384	.492	.55
December	11,782	442	334	380	.487	.56
Calendar year 1937	135,879	1,760	48	372	.477	6.48
January	9,076	382	187	293	.376	.43
February	3,699	187	84	132	.169	.18
March	1,848	80	42	59.6	.076	.09
April	930	40	24	31.0	.040	.04
May	726	28	20	23.4	.030	.03
June	821	44	20	27.4	.035	.04
July	3,981	430	38	128	.164	.19
August	8,575	430	117	277	.355	.41
September	8,675	382	125	289	.371	.41
Water year 1937-38	79,832	711	20	219	.281	3.80

*Gage height doubtful; discharge interpolated.
†Gage height doubtful; discharge computed from gage height revised on basis of rainfall record.

Withlacoochee River near Holder, Fla.

Location.- Water-stage recorder, lat. 28°59'15", long. 82°20'50", in sec. 19, T. 17 S., R. 20 E., at bridge on State Highway 74, 4½ miles northeast of Holder. Zero of gage is 27.59 feet above mean sea level (from benchmark of State Road Department of Florida).

Drainage area.- 1,660 square miles.

Records available.- August 1928 to February 1929, August 1931 to September 1938.

Extremes.- Maximum discharge during year, 2,240 second-feet Oct. 3-8; maximum gage height, 7.03 feet Oct. 5; minimum discharge, 300 second-feet May 21 (gage height, 0.75 foot).

1928-29, 1931-38: Maximum discharge, 6,740 second-feet July 8-13, 1934; maximum gage height, 11.63 feet July 9, 10, 1934; minimum discharge, 144 second-feet Feb. 1, 1933; minimum gage height, -0.37 foot May 14, 1932.

Remarks.- Records excellent except those for period June to August and periods of missing gage heights, Dec. 8-11, Jan. 28 to Feb. 4, Mar. 5-12, Mar. 19 to Apr. 13, June 3-19, June 21 to July 10, which were computed on basis of rainfall records and records for station at Trilby and are good.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,200	1,780	1,860	1,440	1,030	688	574	372	353	1,060	1,240	1,120
2	2,200	1,750	1,860	1,440	1,000	662	562	382	353	1,090	1,240	1,120
3	2,200	1,750	1,820	1,400	1,000	662	562	372	353	1,090	1,210	1,120
4	2,240	1,710	1,780	1,400	1,000	662	550	353	345	1,090	1,180	1,120
5	2,240	1,680	1,750	1,370	970	636	538	345	345	1,090	1,150	1,120
6	2,240	1,640	1,750	1,370	970	636	526	345	338	1,090	1,150	1,120
7	2,240	1,610	1,750	1,330	970	636	514	345	338	1,090	1,150	1,150
8	2,200	1,570	1,710	1,330	940	636	514	353	330	1,090	1,180	1,150
9	2,150	1,570	1,680	1,300	940	636	502	353	322	1,090	1,180	1,150
10	2,150	1,540	1,680	1,270	911	636	491	345	322	1,090	1,180	1,150
11	2,150	1,540	1,680	1,270	911	636	480	330	330	1,090	1,150	1,150
12	2,150	1,570	1,640	1,240	911	636	480	322	338	1,090	1,150	1,150
13	2,100	1,570	1,640	1,240	882	624	468	322	345	1,090	1,150	1,120
14	2,100	1,570	1,640	1,240	853	611	468	322	345	1,060	1,150	1,120
15	2,060	1,570	1,610	1,210	853	611	457	330	353	1,060	1,150	1,090
16	2,020	1,540	1,610	1,210	824	611	457	338	353	1,060	1,150	1,090
17	2,020	1,540	1,610	1,210	824	688	457	330	361	1,090	1,150	1,090
18	2,060	1,540	1,610	1,180	824	714	468	330	372	1,180	1,150	1,120
19	2,060	1,500	1,610	1,180	796	688	457	315	372	1,240	1,120	1,180
20	2,100	1,470	1,570	1,150	796	688	446	315	372	1,270	1,120	1,180
21	2,100	1,440	1,570	1,150	768	688	435	308	414	1,300	1,120	1,180
22	2,060	1,400	1,540	1,120	741	662	435	330	662	1,400	1,120	1,150
23	2,060	1,370	1,540	1,090	741	662	435	353	911	1,370	1,180	1,150
24	2,020	1,330	1,540	1,090	741	662	435	353	1,060	1,330	1,210	1,150
25	1,980	1,330	1,540	1,090	741	636	424	361	1,060	1,330	1,210	1,150
26	1,940	1,440	1,540	1,060	714	636	403	392	1,060	1,300	1,210	1,150
27	1,900	1,540	1,500	1,060	714	624	392	392	1,060	1,270	1,180	1,180
28	1,900	1,680	1,500	1,030	688	611	382	372	1,060	1,270	1,180	1,210
29	1,860	1,780	1,470	1,030	-	598	382	382	1,060	1,270	1,150	1,330
30	1,820	1,820	1,470	1,030	-	598	372	382	1,060	1,240	1,150	1,440
31	1,820	-	1,470	1,030	-	586	-	372	-	1,240	1,120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	64,340	2,240	1,820	2,075	1.25	1.44
November	47,140	1,820	1,330	1,571	.946	1.06
December	50,540	1,860	1,470	1,630	.982	1.13
Calendar year 1937	419,057	2,960	457	1,148	.692	9.40
January	37,560	1,440	1,030	1,212	.730	.84
February	24,053	1,030	688	859	.517	.54
March	19,960	714	586	644	.388	.45
April	14,066	574	372	469	.283	.32
May	10,816	392	308	349	.210	.24
June	16,347	1,060	322	545	.328	.37
July	36,420	1,400	1,060	1,175	.708	.82
August	36,130	1,240	1,120	1,165	.702	.81
September	34,700	1,440	1,090	1,157	.697	.78
Water year 1937-38	392,072	2,240	308	1,074	.647	8.80

Blue Springs near Dunnellon, Fla.

Location.- Lat. 29°06'15", long. 82°26'05", in sec. 12, T. 16 S., R. 18 E., 4 miles northeast of Dunnellon.

Records available.- 1907, 1917, and 1929-30 (a single discharge measurement in each year), February 1931 to September 1938 (discharge measurements).

Extremes.- Maximum discharge measured during year, 816 second-feet Oct. 6; minimum measured, 563 second-feet June 20.
1931-38: Maximum discharge measured, 927 second-feet Nov. 9, 1936; minimum measured, 487 second-feet Oct. 3, 1932.

Remarks.- Discharge measurements made about once monthly at highway bridge 5 miles downstream from springs. Measured discharge is nearly entire flow from spring, as surface run-off is negligible except after heavy rains.

Discharge measurements, in second-feet, water year October 1937 to September 1938

Oct.	6	816	Apr.	14	666
Nov.	15	746	May	21	596
Dec.	11	744	June	20	563
Jan.	8	723	July	11	696
Feb.	5	709	Aug.	13	749
Mar.	12	678	Sept.	12	772

Suwannee River at Fargo, Ga.

Location.- Staff gage, lat. 30°41', long. 82°34', at Southern Railway bridge at Fargo, Clinch County, 4 miles upstream from Suwanoochee Creek and 12 miles downstream from Mixons Ferry dam site. Zero of gage is 91.90 feet above mean sea level. Prior to June 10 datum of gage was 1 foot higher.

Drainage area.- About 925 square miles.

Records available.- January 1921 to September 1923 (gage heights only), January 1927 to December 1931, April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 4,410 second-feet Oct. 8 (gage height, 12.74 feet, present datum); minimum observed, 1.9 second-feet May 24 (gage height, 0.62 foot, present datum).
1921-23, 1927-31, 1937-38: Maximum discharge observed, 12,700 second-feet Oct. 3, 1929 (gage height, 19.6 feet, present datum); no flow Dec. 5-8, 1931.

Remarks.- Records good. Twice-daily gage readings furnished by Superior Pine Products Co.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,240	1,260	870	505	466	254	119	32	7.8	62	424	78
2	3,460	1,140	846	505	531	243	110	29	8.4	70	435	86
3	3,570	1,080	822	505	544	232	119	26	9.6	78	508	110
4	3,800	1,010	778	505	531	232	128	24	7.8	94	534	102
5	3,920	950	758	518	531	221	119	21	7.2	119	471	94
6	4,160	870	738	505	518	200	110	19	9.6	128	521	94
7	4,410	822	720	505	505	200	110	16	10	128	732	90
8	4,410	778	703	505	492	190	110	14	19	110	880	78
9	4,410	738	687	505	479	180	110	13	16	90	910	70
10	4,280	703	671	492	466	170	102	13	16	82	825	66
11	4,160	671	656	492	453	170	98	12	13	74	712	66
12	4,040	800	641	492	440	160	90	10	10	82	605	62
13	3,800	822	626	505	428	150	82	8.8	9.6	74	521	58
14	3,680	870	612	505	416	150	78	8.0	8.4	66	459	55
15	3,460	896	598	505	392	137	74	7.8	8.8	90	402	52
16	3,240	922	584	492	380	146	66	6.5	7.5	90	347	45
17	3,140	950	570	479	380	205	62	5.3	6.5	90	303	43
18	2,940	980	570	479	368	292	55	4.7	5.8	90	270	41
19	2,750	980	557	479	368	270	52	4.3	5.1	110	226	43
20	2,660	1,010	544	466	356	259	48	4.3	5.1	128	195	42
21	2,570	1,010	544	466	344	248	44	4.1	9.2	119	175	35
22	2,400	1,010	531	466	332	237	44	3.1	16	146	155	32
23	2,320	980	518	453	332	226	48	2.5	23	185	137	29
24	2,160	950	531	453	320	215	48	3.1	21	215	119	26
25	2,090	950	531	466	309	205	46	4.7	17	205	110	24
26	1,950	922	531	479	298	185	44	8.8	19	195	94	21
27	1,820	922	531	466	287	175	42	5.5	27	270	86	20
28	1,700	896	531	453	276	165	39	3.9	52	380	82	21
29	1,590	896	518	440	-	146	36	3.3	62	459	90	39
30	1,480	870	518	428	-	137	34	3.1	62	471	86	58
31	1,340	-	518	416	-	128	-	4.7	-	435	82	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	94,950	4,410	1,340	3,063	3.31	3.82
November	27,658	1,260	671	922	.997	1.11
December	19,353	870	518	624	.675	.78
Calendar year						
January	14,930	518	416	482	.521	.60
February	11,542	544	276	412	.445	.46
March	6,128	292	128	198	.214	.25
April	2,267	128	34	75.6	.082	.09
May	325.5	32	2.5	10.5	.011	.01
June	499.4	62	5.1	16.6	.018	.02
July	4,935	471	62	159	.172	.20
August	11,496	910	82	371	.401	.46
September	1,680	110	20	56	.061	.07
Water year 1937-38	195,763.9	4,410	2.5	536	.579	7.87

Suwannee River at White Springs, Fla.

Location.- Water-stage recorder, lat. 30°20', long. 82°45', in sec. 7, T. 2 S., R. 16 E., at bridge on U. S. Highway 41, 1 mile southeast of White Springs. Zero of gage is 48.54 feet above mean sea level (from bench mark of Corps of Engineers, U. S. Army).

Drainage area.- About 1,990 square miles (approximate because watershed in Okeefenokee Swamp is indeterminate).

Records available.- May 1906 to December 1908, February 1927 to September 1938.

Average discharge.- 13 years, 1,714 second-feet.

Extremes.- Maximum discharge during year, 6,660 second-feet Oct. 4 (gage height, 21.90 feet); minimum, 16 second-feet May 23, 24 (gage height, 1.44 feet).
1906-8, 1927-38: Maximum discharge, 20,600 second-feet Sept. 30, Oct. 1, 1928 (gage height, 33.9 feet, former site and datum, or 35.0 feet, present site and datum); minimum, 4.8 second-feet Nov. 15, 1931; minimum gage height, 1.17 feet, June 27, 1935.

Remarks.- Records excellent above 100 second-feet and good below except those for one period of missing gage heights, Oct. 24 to Nov. 22, which were computed on basis of records for station at Fargo and are fair. Discharge for other periods of missing gage heights, Oct. 17-22, May 1-9, computed on basis of records for other stations on Suwannee River.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 21 to June 26, Sept. 7-30)

1.4	12	2.6	130	5.0	653	11.0	2,600
1.6	22	3.0	193	6.0	930	14.0	3,710
1.8	37	3.5	268	7.0	1,220	18.0	5,190
2.0	55	4.0	402	8.0	1,540	21.0	6,300
2.3	88	4.5	524	9.0	1,880	22.0	6,700

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,860	1,740	1,160	694	874	402	215	59	49	378	1,160	238
2	6,460	1,610	1,130	680	1,130	378	210	55	40	309	1,100	221
3	6,620	1,510	1,100	734	1,160	354	217	52	35	257	1,080	226
4	6,660	1,410	1,080	818	1,100	342	205	50	29	226	1,100	331
5	6,540	1,340	1,050	818	1,080	331	208	46	26	205	1,100	536
6	6,420	1,250	1,020	790	1,020	320	205	42	26	202	1,430	549
7	6,340	1,160	988	790	988	309	196	40	30	203	3,640	499
8	6,230	1,080	959	790	930	286	190	36	40	196	4,080	450
9	6,150	988	959	762	874	278	190	34	45	200	3,780	378
10	6,080	959	959	734	818	267	183	31	45	265	3,520	331
11	5,970	930	930	734	790	257	175	28	68	259	3,160	298
12	5,860	1,020	902	790	762	247	167	26	64	207	2,750	267
13	5,740	1,080	874	930	707	239	153	24	51	177	2,350	247
14	5,600	1,130	846	930	680	230	144	26	47	166	1,990	224
15	5,380	1,160	818	874	653	223	133	25	47	253	1,670	205
16	5,150	1,190	790	846	627	224	124	24	43	426	1,410	188
17	4,930	1,220	790	790	601	390	115	22	37	450	1,220	177
18	4,670	1,280	790	790	588	486	105	20	32	390	1,050	180
19	4,410	1,310	762	874	575	524	97	19	28	342	902	174
20	4,080	1,340	734	846	562	512	88	18	25	342	762	169
21	3,780	1,310	734	818	549	474	83	17	28	366	694	174
22	3,450	1,280	707	790	524	438	81	16	36	543	627	166
23	3,160	1,250	707	762	512	414	81	17	41	930	536	151
24	2,900	1,220	734	762	499	390	77	20	44	1,020	474	134
25	2,670	1,220	734	818	486	366	75	38	46	874	402	122
26	2,490	1,250	734	846	462	342	73	69	53	818	366	114
27	2,310	1,280	734	818	438	309	68	48	137	930	320	104
28	2,200	1,280	734	762	414	288	66	34	366	1,100	288	102
29	2,060	1,220	734	734	-	267	64	30	366	1,340	261	193
30	1,950	1,190	707	707	-	247	62	36	378	1,310	253	366
31	1,810	-	707	680	-	232	-	54	-	1,220	267	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	143,930	6,660	1,810	4,643	2.33	2.69
November	37,207	1,740	930	1,240	.623	.70
December	26,607	1,160	707	858	.431	.50
Calendar year 1937	819,642	11,100	288	2,246	1.13	15.52
January	24,511	930	680	791	.397	.46
February	20,403	1,160	414	729	.366	.38
March	10,368	524	223	334	.168	.19
April	4,050	217	62	135	.068	.08
May	1,056	69	16	34.1	.017	.02
June	2,302	378	25	76.7	.039	.04
July	15,904	1,340	166	513	.258	.30
August	43,742	4,080	253	1,411	.709	.82
September	7,514	549	102	250	.126	.14
Water year 1937-38	337,594	6,660	16	925	.465	6.32

Suwannee River at Ellaville, Fla.

Location.- Water-stage recorder, lat. 30°23', long. 83°10', in sec. 24, T. 1 S., R. 11 E., at Ellaville, 200 feet upstream from Seaboard Railway bridge, 200 feet downstream from Withlacoochee River, and a quarter of a mile upstream from bridge on U. S. Highway 90. Zero of gage is 27.70 feet above mean sea level.

Drainage area.- 6,580 square miles.

Records available.- January 1927 to September 1938.

Average discharge.- 11 years, 6,608 second-feet.

Extremes.- Maximum discharge during year, 12,100 second-feet Oct. 8, computed on basis of discharge at station at Branford (gage height, about 13.1 feet); minimum, 1,400 second-feet June 23 (gage height, 2.52 feet).

1927-38: Maximum discharge, 73,000 second-feet Aug. 20, 1928 (gage height, 37.1 feet); minimum, 1,000 second-feet June 30, 1935 (gage height, 2.05 feet).

Remarks.- Records excellent except those for period of missing gage heights, Oct. 4-21, which were computed on basis of records for station at Branford and are good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 26 to July 28)

2.5	1,480	6.0	5,520	11.0	10,000
3.0	2,080	7.0	6,430	12.0	11,000
5.0	4,480	9.0	8,230	13.0	12,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,700	5,120	5,120	4,360	3,760	2,920	2,680	2,140	1,660	2,020	2,920	2,380
2	10,600	5,020	5,020	4,240	3,880	2,920	2,620	2,080	1,600	1,960	2,980	2,320
3	10,700	4,920	4,920	4,240	4,120	2,920	2,560	2,080	1,540	1,960	2,860	2,260
4	10,900	4,700	4,810	4,120	4,120	2,860	2,500	2,020	1,540	1,900	2,980	2,200
5	11,300	4,590	4,700	4,120	4,120	2,860	2,440	1,960	1,480	1,780	2,980	2,260
6	11,700	4,360	4,590	4,000	4,240	2,800	2,440	1,960	1,470	1,720	3,100	2,380
7	12,000	4,240	4,480	4,000	4,240	2,740	2,380	1,900	1,450	1,660	3,520	2,380
8	12,100	4,120	4,360	3,880	4,240	2,680	2,380	1,840	1,470	1,660	4,480	2,380
9	12,000	4,000	4,240	3,760	4,240	2,620	2,380	1,840	1,600	1,600	5,020	2,260
10	11,800	3,880	4,240	3,760	4,120	2,560	2,320	1,840	1,600	1,600	5,020	2,200
11	11,500	3,880	4,120	3,760	4,000	2,560	2,320	1,780	1,600	1,600	5,120	2,140
12	11,200	3,880	4,120	3,760	3,880	2,500	2,320	1,780	1,600	1,660	5,120	2,080
13	10,900	4,000	4,000	3,760	3,760	2,440	2,440	1,720	1,600	1,600	5,120	2,080
14	10,500	4,120	4,000	3,880	3,520	2,440	2,500	1,720	1,600	1,600	5,020	2,020
15	10,100	4,240	4,000	3,880	3,520	2,380	2,560	1,660	1,540	1,600	4,810	1,960
16	9,850	4,240	3,880	3,880	3,400	2,380	2,680	1,660	1,480	1,720	4,590	1,960
17	9,490	4,480	3,880	3,760	3,280	2,500	2,740	1,600	1,470	1,780	4,240	1,900
18	9,130	4,810	3,760	3,760	3,280	2,860	2,860	1,600	1,450	1,840	3,880	1,840
19	8,770	5,120	3,760	3,760	3,160	3,100	2,860	1,600	1,430	1,840	3,640	1,840
20	8,410	5,320	3,760	3,760	3,100	3,280	2,920	1,540	1,410	1,780	3,400	1,960
21	8,050	5,420	3,640	3,760	3,040	3,280	2,860	1,540	1,440	1,780	3,280	1,960
22	7,690	5,620	3,640	3,760	3,040	3,280	2,740	1,540	1,410	1,900	3,100	1,960
23	7,330	5,620	3,640	3,760	2,980	3,280	2,680	1,540	1,400	2,020	3,040	1,960
24	6,970	5,620	3,760	3,760	2,980	3,400	2,620	1,480	1,430	2,320	2,980	1,900
25	6,700	5,520	3,880	3,760	2,920	3,400	2,500	1,480	1,460	2,440	2,920	1,900
26	6,520	5,520	4,000	3,760	2,920	3,280	2,440	1,480	1,540	2,440	2,800	1,840
27	6,250	5,420	4,120	3,880	2,920	3,280	2,320	1,540	1,660	2,500	2,680	1,780
28	6,070	5,420	4,240	3,880	2,920	3,160	2,260	1,540	1,780	2,620	2,560	1,840
29	5,800	5,320	4,240	3,880	-	2,980	2,200	1,480	1,960	2,740	2,440	2,020
30	5,520	5,220	4,360	3,880	-	2,860	2,200	1,540	2,020	2,920	2,380	2,320
31	5,320	-	4,360	3,760	-	2,740	-	1,720	-	2,920	2,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	285,870	12,100	5,320	9,222	1.40	1.61
November	143,740	5,620	3,880	4,791	.728	.81
December	129,640	5,120	3,640	4,182	.636	.73
Calendar year 1937	2,758,650	25,100	2,740	7,558	1.15	15.59
January	120,280	4,360	3,760	3,880	.590	.68
February	99,700	4,240	2,920	3,561	.541	.56
March	89,260	3,400	2,380	2,879	.438	.50
April	75,720	2,920	2,200	2,524	.384	.43
May	53,200	2,140	1,480	1,716	.261	.30
June	46,690	2,020	1,400	1,556	.236	.26
July	61,480	2,920	1,600	1,983	.301	.35
August	111,360	5,120	2,380	3,592	.546	.63
September	62,280	2,380	1,780	2,076	.316	.35
Water year 1937-38	1,279,220	12,100	1,400	3,505	.533	7.21

Suwannee River at Branford, Fla.

Location.- Wire-weight gage, lat. 29°57', long. 82°56', in sec. 17 or 20, T. 6 S., R. 14 E., on highway bridge at Branford. Zero of gage is 4.45 feet above mean sea level (unadjusted).

Drainage area.- 7,090 square miles.

Records available.- July 1931 to September 1938.

Extremes.- Maximum discharge observed during year, 12,100 second-feet Oct. 9-11; maximum gage height observed, 15.01 feet Oct. 9; minimum discharge observed, 2,100 second-feet June 25 (gage height, 3.22 feet).

1931-38: Maximum discharge observed, 24,100 second-feet Mar. 1, 1933 (gage height, 21.96 feet); minimum observed, 1,760 second-feet many days in December 1931 and January 1932; minimum gage height, 2.34 feet June 7, 1935.

Maximum stage known, 32.0 feet about Aug. 26, 1928, from floodmarks (discharge, 65,000 second-feet, computed on basis of measured crest flow at station at Ellaville).

Remarks.- Records good. Gage read once daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.0	2,000	9.0	6,090
4.0	2,520	10.0	6,900
5.0	3,140	12.0	8,800
6.0	3,810	14.0	10,900
7.0	4,530	16.0	13,400
8.0	5,290		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,100	7,080	6,090	5,130	4,760	3,950	3,600	2,880	2,360	2,640	3,400	3,460
2	11,000	6,810	6,010	5,130	4,760	3,880	3,530	2,880	2,360	2,640	3,530	3,460
3	11,000	6,650	5,930	5,130	4,830	3,950	3,400	2,820	2,300	2,700	3,530	3,400
4	11,100	6,570	5,930	5,130	4,980	3,880	3,400	2,820	2,300	2,640	3,530	3,340
5	11,400	6,410	5,850	5,060	4,980	3,880	3,270	2,760	2,250	2,640	3,530	3,340
6	11,600	6,330	5,770	5,060	5,060	3,810	3,270	2,760	2,250	2,520	3,670	3,340
7	11,900	6,090	5,690	5,060	5,130	3,810	3,270	2,700	2,200	2,470	3,880	3,340
8	12,000	6,010	5,610	5,060	5,130	3,740	3,270	2,700	2,200	2,470	4,090	3,340
9	12,100	5,850	5,450	4,980	5,130	3,600	3,270	2,640	2,200	2,420	4,530	3,340
10	12,100	5,770	5,450	4,980	5,130	3,600	3,140	2,580	2,150	2,470	5,060	3,270
11	12,100	5,770	5,450	4,900	5,130	3,600	3,080	2,580	2,200	2,420	5,290	3,880
12	11,900	5,690	5,290	4,980	5,060	3,530	3,080	2,520	2,250	2,470	5,450	3,140
13	11,700	5,610	5,290	4,900	4,980	3,460	3,080	2,520	2,250	2,470	5,450	3,140
14	11,500	5,610	5,210	4,900	4,830	3,400	3,140	2,520	2,250	2,470	5,530	3,080
15	11,300	5,610	5,130	4,900	4,760	3,400	3,200	2,520	2,200	2,470	5,530	3,010
16	11,000	5,610	5,130	4,900	4,600	3,400	3,200	2,470	2,200	2,470	5,450	3,010
17	10,700	5,690	5,130	4,980	4,530	3,530	3,270	2,420	2,150	2,470	5,290	3,010
18	10,600	5,770	5,130	4,980	4,380	3,460	3,340	2,420	2,150	2,580	5,130	2,940
19	10,400	5,930	4,980	4,900	4,380	3,600	3,400	2,420	2,150	2,640	4,900	2,880
20	10,100	6,010	4,980	4,830	4,300	3,740	3,400	2,360	2,150	2,580	4,760	2,880
21	9,800	6,090	4,900	4,830	4,230	3,880	3,460	2,360	2,200	2,580	4,530	2,880
22	9,600	6,250	4,830	4,830	4,160	3,950	3,460	2,300	2,200	2,580	4,380	2,880
23	9,400	6,330	4,830	4,830	4,090	3,950	3,340	2,250	2,150	2,640	4,300	2,880
24	9,000	6,330	4,830	4,760	4,020	3,950	3,270	2,300	2,150	2,640	4,230	2,820
25	8,700	6,410	4,900	4,830	3,950	3,950	3,200	2,300	2,100	2,880	4,160	2,880
26	8,400	6,410	4,900	4,760	3,950	4,020	3,140	2,300	2,420	3,010	4,020	2,820
27	8,200	6,330	4,980	4,760	3,950	4,020	3,080	2,300	2,470	3,080	3,950	2,760
28	7,800	6,330	5,060	4,830	3,950	3,950	3,010	2,300	2,470	3,140	3,810	2,820
29	7,710	6,250	5,060	4,760	-	3,880	2,940	2,300	2,520	3,140	3,670	2,880
30	7,530	6,170	5,060	4,830	-	3,810	2,940	2,300	2,580	3,270	3,600	2,880
31	7,350	-	5,130	4,830	-	3,670	-	2,300	-	3,340	3,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	320,090	12,100	7,350	10,323	1.46	1.68
November	183,770	7,080	5,610	6,126	.864	.96
December	163,980	6,090	4,830	5,290	.746	.86
Calendar year 1937	3,034,350	22,700	3,400	8,313	1.17	15.88
January	152,740	5,130	4,760	4,927	.695	.80
February	129,140	5,130	3,950	4,612	.650	.68
March	116,250	4,020	3,400	3,750	.529	.61
April	97,450	3,600	2,940	3,248	.458	.51
May	77,600	2,880	2,250	2,503	.353	.41
June	67,780	2,580	2,100	2,259	.319	.36
July	82,950	3,340	2,420	2,676	.377	.43
August	135,780	5,530	3,400	4,380	.618	.71
September	93,100	3,880	2,760	3,103	.438	.49
Water year 1937-38	1,620,630	12,100	2,100	4,440	.626	8.50

Suwannee River near Bell, Fla.

Location.- Water-stage recorder, lat. 29°48', long. 82°55', in sec. 17, T. 8 S., R. 14 E., at Rock Bluff Ferry, 4½ miles northwest of Bell and 10 miles downstream from Santa Fe River. Zero of gage is 2.75 feet above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Drainage area.- 9,260 square miles.

Records available.- June 1932 to September 1938.

Extremes.- Maximum discharge during year, 16,000 second-feet Oct. 9-11; maximum gage height, 11.98 feet Oct. 10; minimum discharge, 3,630 second-feet June 24, 25; minimum gage height, 2.11 feet June 25.

1932-38: Maximum discharge, 24,800 second-feet Apr. 20-23, 1937; maximum gage height, 15.53 feet Apr. 22, 1937; minimum discharge, 2,950 second-feet June 26, 28, 1935 (gage height, 1.25 feet).

Flood of 1928 (crest about Aug. 28) reached a stage of 25.9 feet, from floodmarks (discharge, 70,000 second-feet, computed on basis of measured crest flow at station at Ellaville and inflow of Santa Fe River).

Remarks.- Records excellent except those for periods of missing gage heights, Mar. 4-14, June 21 to July 7, July 15-22, which were computed on basis of weekly observed gage heights and records for station at Branford and are good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.0	3,540	6.0	7,650	10.0	12,900
3.0	4,440	7.0	8,850	11.0	14,400
4.0	5,440	8.0	10,200	12.0	16,000
5.0	6,540	9.0	11,500		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,100	10,000	8,610	7,420	7,090	6,100	5,660	4,740	3,990	4,640	5,440	5,660
2	14,100	9,890	8,490	7,420	6,980	5,990	5,660	4,640	4,080	4,640	5,550	5,550
3	14,100	9,630	8,370	7,420	6,980	6,100	5,550	4,640	4,080	4,640	5,550	5,550
4	14,200	9,370	8,250	7,420	7,200	6,100	5,240	4,640	3,900	4,540	5,550	5,440
5	14,600	9,240	8,250	7,310	7,420	6,100	5,140	4,640	3,900	4,440	5,550	5,440
6	15,000	8,980	8,250	7,420	7,530	5,990	5,240	4,540	3,810	4,350	5,660	5,440
7	15,400	8,850	8,130	7,530	7,530	5,880	5,240	4,540	3,900	4,350	6,100	5,440
8	15,700	8,610	8,010	7,420	7,650	5,880	5,240	4,440	3,810	4,260	6,210	5,440
9	15,800	8,490	7,890	7,310	7,650	5,770	5,240	4,440	3,810	4,170	6,650	5,440
10	16,000	8,370	7,890	7,310	7,650	5,770	5,040	4,350	3,810	4,260	7,200	5,440
11	15,800	8,370	7,650	7,420	7,650	5,770	4,840	4,260	3,900	4,170	7,650	5,340
12	15,700	8,370	7,650	7,420	7,530	5,660	4,840	4,260	3,900	4,260	7,890	5,240
13	15,500	8,250	7,530	7,310	7,420	5,550	4,940	4,260	3,900	4,260	8,010	5,140
14	15,200	8,130	7,530	7,310	7,310	5,440	4,940	4,350	3,900	4,260	8,130	5,140
15	15,000	8,130	7,530	7,310	7,200	5,440	5,040	4,260	3,810	4,260	8,130	5,140
16	14,700	8,130	7,420	7,310	7,090	5,440	5,040	4,080	3,720	4,350	8,010	5,040
17	14,400	8,370	7,530	7,310	6,870	5,660	5,040	4,080	3,720	4,350	7,890	5,040
18	14,100	8,250	7,530	7,310	6,760	5,440	5,140	4,080	3,720	4,440	7,650	5,040
19	14,000	8,370	7,420	7,310	6,760	5,550	5,240	3,990	3,720	4,440	7,530	4,940
20	13,600	8,490	7,200	7,200	6,650	5,660	5,240	3,990	3,720	4,540	7,200	4,840
21	13,400	8,490	7,090	7,200	6,540	5,880	5,240	3,900	3,720	4,440	6,980	4,840
22	13,000	8,610	7,090	7,200	6,320	5,880	5,340	3,900	3,810	4,440	6,870	4,740
23	12,800	8,610	7,200	7,090	6,320	5,990	5,240	3,900	3,720	4,440	6,760	4,740
24	12,500	8,610	7,090	7,200	6,320	5,990	5,040	3,900	3,630	4,540	6,650	4,740
25	12,100	8,730	6,980	7,310	6,210	5,990	4,940	3,900	3,630	4,740	6,540	4,740
26	11,800	8,850	7,090	7,090	6,100	5,880	4,940	3,990	4,440	4,940	6,540	4,740
27	11,500	8,850	7,090	6,980	6,210	5,990	4,840	3,900	4,440	5,040	6,320	4,640
28	11,200	8,850	7,200	6,980	6,100	5,880	4,840	3,900	4,440	5,040	6,210	4,740
29	10,900	8,730	7,200	6,980	-	5,880	4,840	3,990	4,540	5,140	5,990	4,940
30	10,500	8,610	7,200	7,090	-	5,770	4,740	3,990	4,640	5,240	5,880	4,840
31	10,300	-	7,310	7,090	-	5,660	-	3,990	-	5,340	5,770	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	427,000	16,000	10,300	13,774	1.49	1.72
November	261,230	10,000	8,130	8,708	.940	1.05
December	235,670	8,610	6,980	7,602	.821	.95
Calendar year 1937	3,976,690	24,800	5,240	10,895	1.18	15.97
January	225,400	7,530	6,980	7,271	.785	.90
February	195,040	7,650	6,100	6,966	.752	.78
March	180,080	6,100	5,440	5,809	.627	.72
April	163,550	5,660	4,740	5,118	.553	.62
May	130,480	4,740	3,900	4,209	.455	.52
June	118,110	4,640	3,630	3,937	.425	.47
July	140,960	5,340	4,170	4,547	.491	.57
August	208,060	8,130	5,440	6,712	.725	.84
September	153,440	5,660	4,640	5,115	.552	.62
Water year 1937-38	2,429,020	16,000	3,630	6,655	.719	9.76

Alapaha River near Alapaha, Ga.

Location.- Staff gage, lat. 31°23', long. 83°10', at bridge on State Highway 50, 2 miles east of Alapaha, Berrien County, and 6 miles upstream from Willacoochee River.

Drainage area.- 644 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 1,060 second-feet Apr. 15 (gage height, 8.63 feet); minimum observed, 0.4 second-foot Sept. 26, 27 (gage height, 0.16 foot).
1937-38: Maximum discharge observed, 2,030 second-feet (revised) July 31, 1937 (gage height, 10.02 feet); minimum, that of Sept. 26, 27, 1938.

Remarks.- Records fair. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-30)

0.1	0.1	1.5	38	6.0	430
.3	1.4	2.0	66	7.0	580
.6	5.6	3.0	134	8.0	798
.9	12.8	4.0	219	9.0	1,305
1.2	23.6	5.0	316		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	228	237	256	228	266	126	91	2.0	41	158	9.3
2	60	237	237	246	228	201	119	84	4.1	30	150	6.4
3	57	228	210	246	237	158	105	84	57	22	134	5.3
4	57	150	192	256	306	142	91	78	24	16.0	119	3.2
5	52	119	174	237	360	112	75	75	15.4	17.4	142	2.4
6	46	105	166	228	349	105	66	69	14.4	26	192	2.1
7	38	98	158	219	306	119	66	63	14.4	31	338	1.7
8	36	91	150	210	237	119	105	57	16.0	26	406	1.3
9	33	84	150	201	210	112	219	52	18.2	21	430	1.2
10	32	78	158	192	183	105	210	44	24	16.4	382	2.9
11	30	78	166	183	166	98	219	36	32	52	256	1.2
12	27	98	166	183	158	84	430	30	30	18.5	201	1.0
13	24	134	166	192	150	75	694	25	38	11.7	166	.9
14	22	166	174	192	134	69	1,000	22	25	11.4	150	1.0
15	18.9	210	174	192	126	60	1,060	16.7	19.6	15.7	126	1.2
16	15.7	286	166	201	119	57	950	13.4	18.5	32	105	2.9
17	12.5	338	158	228	112	72	950	10.0	18.2	38	237	3.9
18	10.8	306	158	256	105	166	905	7.6	49	44	237	3.9
19	9.3	276	158	256	105	174	865	6.0	66	33	201	7.2
20	11.4	228	166	256	105	201	718	5.1	134	31	166	6.6
21	20	183	174	237	98	246	580	4.4	142	31	112	3.6
22	29	174	183	219	91	266	442	3.3	150	27	84	2.3
23	44	210	201	219	91	246	327	2.6	112	20	66	1.3
24	49	256	266	219	105	219	256	2.2	78	16.7	52	.8
25	46	266	296	228	112	219	201	1.8	57	28	38	.5
26	46	256	276	237	112	256	166	2.5	63	41	26	.4
27	66	246	286	228	126	266	150	2.2	84	36	20	.4
28	78	246	306	237	183	246	134	2.1	78	28	17.1	2.0
29	75	237	316	246	-	219	119	1.8	69	38	13.4	36
30	72	237	286	246	-	183	105	1.8	57	91	11.4	15.4
31	126	-	266	219	-	158	-	1.8	-	126	18.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	1,306.6	126	9.3	42.1	0.065	0.07
November	5,849	338	78	195	.303	.34
December	6,340	316	150	205	.318	.37
Calendar year						
January	6,965	256	183	225	.349	.40
February	4,842	360	91	173	.269	.28
March	5,019	266	57	162	.252	.29
April	11,453	1,060	66	382	.593	.66
May	895.3	91	1.8	28.9	.045	.05
June	1,509.8	150	2.0	50.3	.078	.09
July	1,016.8	126	11.4	32.8	.051	.06
August	4,754.8	430	11.4	153	.238	.27
September	128.3	36	.4	4.28	.0066	.007
Water year 1937-38	50,079.6	1,060	.4	137	.213	2.89

Alapaha River at Statenville, Ga.

Location.- Staff gage, lat. 30°40', long. 83°01', at bridge on State Highway 94, a quarter of a mile west of Statenville, Echols County.

Drainage area.- 1,400 square miles.

Records available.- January to June 1921, December 1931 to September 1938.

Extremes.- Maximum discharge observed during year, 1,130 second-feet Sept. 30 (gage height, 6.40 feet); minimum observed, 38 second-feet May 21, 22.
1921, 1931-38: Maximum discharge observed, 6,580 second-feet Apr. 14, 1937 (gage height, 22.84 feet); minimum observed, 17 second-feet Dec. 21, 28-31, 1931.
Maximum stage known, 28.5 feet Apr. 30 or May 1, 1928 (discharge not determined).

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	636	186	475	567	475	266	542	266	84	119	555	134
2	684	225	475	567	521	266	320	235	65	105	577	134
3	636	225	452	544	521	256	320	225	60	112	577	134
4	684	215	452	544	521	320	266	205	55	112	513	119
5	684	277	430	544	498	342	235	195	54	105	471	119
6	684	320	430	498	521	320	205	167	54	98	471	119
7	684	298	408	498	521	298	205	149	54	91	555	119
8	590	266	386	475	544	266	186	149	54	75	577	134
9	521	266	364	452	567	246	186	167	52	73	555	112
10	452	225	320	430	590	235	176	132	57	68	599	98
11	430	235	342	430	521	225	149	123	63	91	643	91
12	430	298	364	408	475	225	158	115	65	91	688	84
13	320	320	364	430	430	215	256	100	66	91	780	73
14	320	298	364	452	386	205	320	100	70	91	855	78
15	320	298	364	452	364	205	386	63	68	181	805	98
16	320	277	364	430	342	176	567	74	65	173	621	68
17	266	364	364	430	320	452	708	90	64	165	492	58
18	266	386	364	430	298	475	880	86	63	165	389	78
19	246	430	364	452	277	452	980	63	66	173	329	91
20	246	780	364	452	298	452	1,000	43	69	112	309	181
21	215	636	364	475	277	452	1,000	38	98	215	349	289
22	205	613	342	475	256	452	980	38	105	309	309	309
23	205	567	364	498	256	452	980	39	105	429	289	233
24	215	498	452	498	256	452	880	43	181	429	251	173
25	205	498	498	498	256	475	780	44	224	450	224	134
26	205	475	544	498	266	452	636	49	224	450	198	119
27	186	498	590	498	277	408	521	44	270	513	206	105
28	176	521	590	498	277	364	430	43	215	513	206	105
29	176	544	613	475	-	364	364	38	165	555	198	369
30	186	521	613	452	-	364	320	39	134	432	165	980
31	186	-	544	475	-	364	-	107	-	534	142	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,579	684	176	374	0.267	0.31
November	11,560	780	186	385	.275	.31
December	13,324	613	320	430	.307	.35
Calendar year 1937	518,024	6,560	158	1,419	1.01	13.76
January	14,825	567	408	478	.341	.39
February	11,111	590	256	397	.284	.30
March	10,496	475	176	339	.242	.28
April	14,736	1,000	149	491	.351	.39
May	3,269	266	38	105	.075	.09
June	2,969	270	52	99.0	.071	.08
July	7,180	555	68	232	.166	.19
August	13,898	855	142	448	.320	.37
September	4,938	980	58	165	.118	.13
Water year 1937-38	119,885	1,000	38	328	.234	3.19

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Big Creek at Lakeland, Ga.

Location.- Staff gage, lat. 31°03', long. 83°04', at bridge on State Highway 31 at Lakeland, Lanier County, 1½ miles upstream from Alapaha River.

Drainage area.- 162 square miles.

Records available.- April 1937 to September 1938 (discontinued).

Extremes.- Maximum discharge observed during period April to September 1937, 670 second-feet Sept. 24 (gage height, 8.02 feet); minimum observed, 4.8 second-feet June 24, 28, 30 (gage height, 0.08 foot).

Maximum discharge observed during water year 1937-38, 80 second-feet Dec. 24, 25; maximum gage height, 2.64 feet Dec. 25; minimum discharge, 0.3 second-foot Aug. 27, Sept. 1, 13-17; minimum gage height, -0.42 foot Sept. 14.

Remarks.- Records poor. Discharge for Mar. 14 interpolated. Gage read twice daily.

Discharge, in second-feet, 1937-38

1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	291	14	5.5	205	40
2							-	324	14	7.5	241	37
3							-	241	16	13	214	37
4							-	181	22	43	124	31
5							-	205	21	30	64	13
6							-	173	40	15	46	8.5
7							-	106	37	14	40	8
8							-	85	20	12	37	6.5
9							-	64	14	13	21	7
10							-	56	24	10	16	60
11							-	49	17	6	12	60
12							-	60	13	6.5	40	144
13							-	40	13	12	46	181
14							-	31	13	13	158	130
15							-	31	11	12	158	72
16							-	34	11	10	144	64
17							-	49	11	37	95	30
18							-	32	13	40	85	32
19							-	19	9	34	52	56
20							-	34	6	24	52	85
21							-	26	6	16	95	485
22							-	14	6.5	16	72	582
23							90	14	5.5	18	56	616
24							52	26	4.8	26	36	670
25							52	37	5.5	26	30	652
26							189	43	10	25	26	348
27							144	30	6	28	28	137
28							112	28	4.8	43	40	37
29							130	40	5	60	49	30
30							250	32	4.8	56	46	24
31							-	21	-	90	40	-

Discharge, in second-feet, of Big Creek at Lakeland, Ga., 1937-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	8.5	43	30	31	13	3.6	1.0	1.4	0.5	4.0	0.4
2	36	9	40	31	31	11	4.6	.6	1.3	.6	2.4	.5
3	37	8.5	37	34	36	14	4.2	.6	1.0	.6	1.6	.9
4	40	7	37	31	37	13	5	.7	1.7	.6	1.0	1.0
5	40	6.5	28	30	40	12	4.4	.6	1.9	.9	1.4	1.9
6	37	6	21	26	40	11	4.2	.6	.7	.6	.5	1.3
7	26	4.8	17	22	37	14	5	.9	.6	.9	1.2	.5
8	24	4	17	18	37	20	6	1.4	.7	1.0	2.6	.4
9	22	3.5	28	11	40	22	6.5	1.7	.7	.7	3.4	.6
10	17	4.4	30	7.5	20	21	8.5	1.6	.6	.6	3.0	.5
11	13	7	32	6	16	18	6.5	2.0	.6	.9	2.8	.5
12	9.5	16	34	6	19	13	5	1.0	.6	1.6	3.0	.4
13	9	19	34	8.5	16	12	4.8	.6	.5	2.0	2.6	.3
14	8.5	49	31	9	13	14	4.0	.7	.6	1.4	2.4	.3
15	10	49	25	16	11	15	4.0	2.0	1.0	.6	1.9	.3
16	12	46	22	22	12	13	3.4	2.8	.6	.5	1.7	.3
17	11	40	22	19	11	56	3.8	2.4	.6	.6	2.4	.3
18	8.5	37	24	18	14	72	2.4	1.9	1.0	1.9	3.0	1.2
19	6.5	37	29	19	16	60	2.4	1.4	1.3	2.0	2.8	2.6
20	6	43	32	20	16	34	1.7	1.7	2.4	3.4	.5	64
21	6	46	37	19	18	31	2.2	1.2	2.2	2.2	.5	34
22	7	46	43	24	16	26	1.2	1.6	2.4	3.2	.4	7.5
23	7.5	46	52	28	16	21	3.4	1.9	1.7	5	.6	6
24	7.5	49	80	26	14	21	16	3.0	1.6	9.5	.6	3.5
25	7.5	49	80	49	16	14	24	3.5	1.3	13	.5	3.0
26	6.5	49	34	49	19	6.5	11	3.0	1.7	11	.4	2.4
27	6	49	32	46	13	6	5	2.2	1.6	18	.3	3.0
28	6.5	49	32	46	14	5.5	1.2	1.7	1.6	10	.4	1.7
29	6	49	36	43	-	5	.6	1.7	1.6	12	.5	76
30	6.5	49	26	37	-	4.8	.5	2.2	.6	10	.4	34
31	8	-	24	32	-	3.8	-	1.9	-	7.5	.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
April 23-30, 1937	1,019	250	52	127	0.784	0.23
May	2,416	324	14	77.9	.481	.55
June	397.9	40	4.8	13.3	.082	.09
July	761.5	90	5.5	24.6	.152	.18
August	2,368	241	12	76.4	.472	.54
September	4,683	670	6.5	156	.963	1.07
Water year						
October 1937	476.0	40	6	15.4	.095	.11
November	886.2	49	3.5	29.5	.182	.20
December	1,059	80	17	34.2	.211	.24
Calendar year						
January 1938	783.0	49	6	25.3	.156	.18
February	619	40	11	22.1	.136	.14
March	602.6	72	3.8	19.4	.120	.14
April	155.1	24	.5	5.17	.032	.04
May	50.1	3.5	.6	1.62	.010	.01
June	36.1	2.4	.5	1.20	.0074	.008
July	129.3	19	.5	4.17	.026	.03
August	49.2	4.0	.3	1.59	.0098	.01
September	249.3	76	.3	8.31	.051	.06
Water year 1937-38	5,094.9	80	.3	14.0	.086	1.168

Withlacoochee River near Quitman, Ga.
(Previously published as Withlacoochee River at Blue Springs, Ga.)

Location.- Wire-weight gage, lat. 30°47', long. 83°27', at bridge on U. S. Highway 84, 500 feet upstream from Tiger Creek, 900 feet downstream from Atlantic Coast Line Railroad bridge, a quarter of a mile east of Blue Springs station, 4 miles upstream from Piscola Creek, and 6 miles east of Quitman, Brooks County. Present datum of gage is 5 feet higher than that formerly used.

Drainage area.- 1,560 square miles (revised).

Records available.- October 1920 to March 1921, September 1928 to December 1931, June 1937 to September 1938.

Extremes.- Maximum discharge observed during period June to September 1937, 3,760 second-feet Sept. 24 (gage height, 12.34 feet); minimum observed, 52 second-feet June 25 (gage height, 1.93 feet).

Maximum discharge observed during water year 1937-38, 1,380 second-feet Nov. 21 (gage height, 6.13 feet); minimum observed, 11 second-feet Sept. 27 (gage height, 1.84 feet).

1928-31, 1937-38: Maximum discharge observed, 18,000 second-feet (revised) Mar. 20, 1929 (gage height, 24.8 feet, present datum); minimum observed, 11 second-feet Oct. 27, 28, Nov. 22, 1931, Sept. 27, 1938.

Maximum stage known, 28.34 feet, present datum, Aug. 17, 1928 (discharge, 42,200 second-feet).

Remarks.- Records good above 200 second-feet and fair below. Gage read twice daily.

Rating table, June 9, 1937 to Sept. 30, 1938 (gage height, in feet and discharge, in second-feet)
(Shifting-control method used May 1 to Sept. 28)

1.5	6	4.0	545	9.0	2,460
1.8	34	5.0	915	10.0	2,800
2.1	78	6.0	1,330	11.0	3,180
2.5	150	7.0	1,740	12.0	3,610
3.0	255	8.0	2,120	13.0	4,110

Discharge, in second-feet, 1937-38

1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									-	450	685	480
2									-	292	915	615
3									-	180	1,080	510
4									-	141	995	420
5									-	114	995	360
6									-	103	955	915
7									-	89	720	510
8									-	91	450	360
9									109	109	305	318
10									98	94	230	268
11									80	96	230	220
12									72	114	255	190
13									103	123	330	160
14									103	141	330	141
15									80	230	280	150
16									67	255	345	242
17									123	390	510	450
18									160	650	545	580
19									150	755	580	545
20									85	755	615	755
21									65	835	650	2,590
22									60	755	650	2,840
23									64	755	685	3,340
24									62	795	615	3,760
25									53	685	420	3,380
26									56	580	292	2,980
27									65	450	230	2,660
28									59	420	268	2,190
29									82	685	242	1,280
30									420	755	242	650
31									-	615	390	-

Discharge, in second-feet, of Withlacoochee River near Quitman, Ga., 1937-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	545	242	795	915	685	450	268	109	25	123	150	53
2	545	255	795	795	685	450	242	105	19	160	160	59
3	590	220	755	720	720	450	220	98	20	141	141	50
4	580	180	685	685	755	450	190	91	21	101	114	43
5	545	150	615	650	875	420	190	85	20	82	98	35
6	480	141	580	615	915	360	200	72	25	65	114	43
7	420	132	545	590	955	305	210	65	105	50	420	42
8	390	132	510	545	915	268	190	64	268	44	375	44
9	330	123	480	510	835	242	170	62	255	40	318	35
10	280	114	510	480	755	230	190	59	170	35	420	31
11	242	141	510	480	650	220	101	48	112	35	615	26
12	210	220	510	480	545	200	480	44	62	38	755	21
13	180	305	480	545	430	190	615	42	47	43	835	20
14	160	390	450	545	430	170	720	38	38	65	685	20
15	150	450	450	545	375	160	835	40	54	76	545	18
16	132	545	450	545	330	180	915	32	32	70	390	17
17	132	875	420	545	305	480	955	30	31	50	280	17
18	123	1,080	450	590	280	650	955	26	29	42	220	23
19	123	1,240	450	545	268	720	835	25	27	43	220	107
20	114	1,380	450	545	268	755	580	23	25	44	170	35
21	114	1,380	480	545	280	795	375	18	27	47	230	32
22	107	1,330	480	590	268	875	268	17	44	65	330	34
23	107	1,240	510	590	268	915	220	15	32	85	360	31
24	132	1,080	795	590	280	955	180	15	26	73	330	23
25	160	955	875	650	292	955	160	18	30	85	242	18
26	150	955	915	795	360	875	141	25	53	98	160	16
27	160	915	955	795	420	755	132	20	180	107	96	12
28	150	875	1,040	795	450	580	123	18	230	91	76	24
29	150	835	1,080	755	-	480	123	105	180	89	58	280
30	160	835	1,080	720	-	390	123	109	123	132	47	420
31	190	-	995	685	-	318	-	37	-	150	60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 8-30, 1937	2,216	420	53	101	0.065	0.05
July	12,502	835	89	403	.258	.30
August	16,034	1,080	230	517	.331	.38
September	33,859	3,760	141	1,129	.724	.81
Water year						
October 1937	7,841	580	107	253	.162	.19
November	18,715	1,380	114	624	.400	.45
December	20,095	1,080	420	648	.415	.48
Calendar year						
January 1938	19,330	915	480	624	.400	.46
February	14,634	955	268	523	.335	.35
March	15,243	955	160	492	.315	.36
April	10,896	955	101	363	.233	.26
May	1,555	109	15	50.2	.032	.04
June	2,289	268	19	76.3	.049	.05
July	2,369	160	35	76.4	.049	.06
August	9,014	835	47	291	.187	.22
September	1,629	420	12	54.2	.035	.04
Water year 1937-38	123,610	1,380	12	339	.217	2.96

Withlacoochee River near Pinetta, Fla.

Location.- Chain gage, lat. 30°36', long. 83°16', in sec. 6, T. 2 N., R. 11 E., on highway bridge, a quarter of a mile west of Bellville and 5 miles east of P'netta.

Drainage area.- 2,220 square miles.

Records available.- December 1931 to September 1938.

Extremes.- Maximum discharge observed during year, 2,900 second-feet Nov. 20 (gage height, 11.43 feet); minimum observed, 152 second-feet Sept. 13, 16; minimum gage height observed, 6.74 feet Sept. 13.

1931-38: Maximum discharge, 14,900 second-feet Apr. 14, 1937 (gage height, 28.32 feet); minimum discharge observed, 94 second-feet Nov. 26, Dec. 2, 3, 1934, Jan. 2, 1935 (gage height, 6.50 feet).

Maximum stage known, 36.75 feet sometime in August 1928, from floodmarks (discharge, 35,000 second-feet, computed on basis of records for station near Quitman, Ga.).

Remarks.- Records good. Gage read once daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

6.7	141	9.0	921
7.0	213	10.0	1,240
7.3	315	11.0	1,930
7.6	451	11.4	2,900
8.0	653		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,930	476	1,520	1,380	1,240	811	653	296	277	427	277	200
2	1,860	526	1,450	1,330	1,170	811	601	277	243	427	315	200
3	1,580	601	1,380	1,380	1,170	811	551	277	228	380	296	213
4	1,580	576	1,310	1,310	1,170	757	526	277	186	357	296	213
5	1,520	501	1,310	1,240	1,240	757	501	260	174	296	403	200
6	1,450	451	1,240	1,170	1,310	705	501	243	174	260	451	186
7	1,310	403	1,170	1,100	1,380	653	476	243	186	243	526	186
8	1,240	427	1,100	1,040	1,380	627	501	228	296	200	601	186
9	1,170	427	1,100	979	1,240	576	501	228	336	186	551	186
10	1,170	451	1,100	979	1,170	551	501	213	357	186	501	186
11	1,100	476	1,100	979	1,100	526	501	213	380	174	653	162
12	921	526	1,040	979	979	526	627	200	357	174	757	162
13	811	601	1,040	979	921	501	757	200	315	186	865	152
14	705	757	979	979	865	476	921	200	260	228	811	162
15	705	921	979	979	811	451	979	200	243	260	653	162
16	653	1,040	979	979	757	476	979	186	228	243	601	152
17	653	1,650	979	1,040	705	576	1,100	186	213	213	551	162
18	601	2,280	979	1,040	705	757	1,240	186	200	186	427	162
19	601	2,620	921	1,040	653	979	1,170	186	186	186	403	200
20	576	2,900	921	979	653	1,170	979	174	174	174	403	357
21	526	2,620	921	979	653	1,310	811	174	174	186	403	260
22	501	2,280	979	921	653	1,380	653	174	186	186	403	213
23	501	2,210	1,100	921	653	1,380	551	174	200	200	427	200
24	526	2,140	1,240	979	653	1,450	476	162	213	213	427	186
25	526	2,070	1,380	1,040	653	1,310	427	162	213	228	427	186
26	526	1,860	1,450	1,100	705	1,170	380	162	228	243	357	213
27	526	1,720	1,450	1,170	757	1,040	357	174	243	243	296	243
28	476	1,650	1,450	1,240	757	979	336	174	315	243	260	277
29	451	1,580	1,380	1,240	-	921	315	213	403	243	243	315
30	451	1,580	1,380	1,240	-	811	315	296	427	243	213	705
31	476	-	1,380	1,240	-	705	-	296	-	260	200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	27,622	1,930	451	891	0.401	0.46
November	38,320	2,900	403	1,277	.575	.64
December	36,707	1,520	921	1,184	.533	.61
Calendar year 1937	807,558	14,700	234	2,212	.996	13.53
January	34,001	1,380	921	1,097	.494	.57
February	26,103	1,380	653	932	.420	.44
March	25,953	1,450	451	837	.377	.43
April	19,186	1,240	315	640	.288	.32
May	6,634	296	162	214	.096	.11
June	7,615	427	174	254	.114	.13
July	7,474	427	174	241	.109	.13
August	13,997	865	200	452	.204	.24
September	6,587	705	152	220	.099	.11
Water year 1937-38	250,199	2,900	152	685	.309	4.19

Santa Fe River at Worthington, Fla.

Location.- Staff gage, lat. 29°55', long. 82°26', in sec. 32, T. 6 S., R. 19 E., at bridge on State Highway 49, a quarter of a mile south of Worthington and 1 mile downstream from New River. Zero of gage is 42.91 feet above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Records available.- November 1931 to September 1938.

Extremes.- Maximum discharge observed during year, 7,100 second-feet Oct. 4 (gage height, 20.65 feet); minimum observed, 3.3 second-feet June 19; minimum gage height observed, 7.47 feet May 23.

1931-38: Maximum discharge, 17,500 second-feet June 17, 1934 (gage height, 24.83 feet, from floodmarks); minimum discharge observed, 1.3 second-feet May 17, June 1, 1932; minimum gage height observed, 7.03 feet June 15, 1935.

Remarks.- Records good. Gage read once daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 7 to June 11 and June 30 to July 28)

7.4	2.4	10.0	190	16.0	1,310
7.6	5.3	11.0	302	17.0	1,850
7.8	12	12.0	425	18.0	2,840
8.0	22	13.0	561	19.0	4,280
8.5	59	14.0	730	20.0	5,940
9.0	99	15.0	972	20.6	7,100

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,240	243	302	170	519	133	43	10	75	160	302	99
2	3,540	221	290	232	730	115	41	10	59	103	290	115
3	6,700	210	278	491	1,030	115	43	9.6	47	63	278	124
4	7,100	210	266	710	1,100	115	49	8.0	41	45	221	326
5	5,940	180	290	772	1,160	107	43	7.5	25	41	232	326
6	4,600	170	278	890	1,060	107	41	6.9	29	37	656	290
7	3,400	160	243	916	944	103	37	7.2	25	29	944	314
8	2,600	160	232	890	772	99	35	7.5	20	45	1,240	314
9	2,170	151	221	730	656	91	41	8.4	25	63	1,310	278
10	1,720	133	210	656	451	83	45	8.8	32	83	1,000	243
11	1,350	190	210	547	477	83	38	8.8	27	180	772	190
12	1,160	326	190	519	425	75	34	8.8	22	142	656	133
13	1,030	326	180	477	386	75	29	9.2	14	133	561	103
14	864	302	170	451	326	67	28	9.2	10	133	519	79
15	772	278	160	425	302	63	27	9.2	8.8	160	451	55
16	674	232	151	210	266	59	22	8.8	6.6	151	386	51
17	622	266	151	180	243	160	20	8.8	5.3	115	243	48
18	561	266	151	362	221	221	19	9.2	5.8	87	210	45
19	591	254	151	350	210	232	16	8.4	3.3	71	160	43
20	591	254	151	350	278	210	9.6	8.0	3.9	79	133	43
21	519	221	151	350	210	160	22	8.4	9.6	103	115	45
22	491	200	151	326	190	115	15	8.8	17	124	160	37
23	438	180	160	326	170	115	16	8.8	16	124	133	32
24	412	170	278	302	170	99	14	10	13	124	115	28
25	374	160	278	338	170	91	13	14	8.8	124	83	32
26	350	278	266	326	151	75	12	39	151	142	75	34
27	338	350	243	314	124	67	11	180	290	190	59	37
28	326	399	232	290	133	63	10	87	386	200	55	39
29	302	412	210	278	-	63	10	59	278	273	59	51
30	290	326	190	254	-	55	9.6	55	210	399	87	75
31	266	-	190	266	-	51	-	151	-	412	83	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	51,331	7,100	266	1,656		
November	7,228	412	133	241		
December	6,624	302	151	214		
Calendar year 1937	205,582	7,900	10	563		
January	13,698	916	170	442		
February	12,874	1,160	124	460		
March	3,267	232	51	105		
April	793.2	49	9.6	26.4		
May	793.3	180	6.9	25.6		
June	1,864.1	386	3.3	62.1		
July	4,140	412	29	134		
August	11,588	1,310	55	374		
September	3,629	326	28	121		
Water year 1937-38	117,829.6	7,100	3.3	323		

Santa Fe River near High Springs, Fla.

Location.- Water-stage recorder, lat. 29°51', long. 82°37', in sec. 29, T. 7 S., R. 17 E., at bridge on State Highway 5A, 150 feet upstream from Atlantic Coast Line Railroad bridge and 2 miles northwest of High Springs. Zero of gage is 25.78 feet above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Records available.- January 1931 to September 1938.

Extremes.- Maximum discharge during year, 4,610 second-feet Oct. 6, 7; maximum gage height, 8.85 feet Oct. 7; minimum discharge, 209 second-feet June 19, 20, 22-25 (gage height, 1.17 feet).
1931-38: Maximum discharge, 11,800 second-feet June 18, 1934 (gage height, 14.90 feet); minimum, 71 second-feet about June 27, 1935 (gage height, 0.46 foot).

Remarks.- Records excellent.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 13-30)

1.1	188	4.0	1,470
1.3	250	5.0	2,020
1.6	358	6.0	2,640
2.0	525	7.0	3,300
2.5	744	8.0	4,000
3.0	973	8.9	4,700

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,520	950	744	564	722	568	411	313	277	390	590	590
2	1,580	926	722	590	789	568	415	302	284	378	612	568
3	2,080	903	722	612	903	564	386	298	270	368	612	590
4	2,900	880	700	678	1,040	551	386	298	257	343	612	590
5	3,790	857	700	766	1,040	542	386	298	250	316	612	634
6	4,440	812	678	857	1,260	529	390	295	244	302	634	656
7	4,610	812	656	950	1,320	512	386	291	240	291	744	656
8	4,360	789	656	973	1,270	504	390	288	237	284	1,020	678
9	4,000	766	656	997	1,240	504	378	284	237	277	1,420	678
10	3,720	744	634	1,020	1,220	504	358	277	231	274	1,640	656
11	3,300	766	634	1,020	1,140	491	358	277	231	284	1,690	634
12	2,960	744	612	973	1,100	474	362	270	231	302	1,520	612
13	2,640	766	612	926	997	465	354	270	231	309	1,420	590
14	2,380	766	612	926	950	465	354	274	231	320	1,370	564
15	2,200	766	590	903	926	457	350	267	228	328	1,270	542
16	2,020	766	590	880	857	465	350	257	218	339	1,200	512
17	1,860	744	590	857	834	478	339	257	215	343	1,100	495
18	1,740	722	590	857	789	474	339	253	212	339	1,020	474
19	1,690	722	568	812	789	491	339	250	212	328	950	478
20	1,580	722	555	812	744	508	343	250	212	328	857	465
21	1,520	700	555	789	722	516	335	250	218	335	812	444
22	1,470	678	559	789	700	508	343	247	212	343	834	432
23	1,370	678	568	789	700	495	328	244	218	350	834	423
24	1,320	656	555	789	678	482	320	250	212	350	903	411
25	1,270	656	568	789	656	465	313	253	209	350	857	411
26	1,220	678	568	766	634	457	313	247	240	354	766	406
27	1,170	678	590	766	634	453	313	244	253	366	722	406
28	1,120	700	590	744	590	436	313	264	313	366	678	427
29	1,070	722	568	744	-	423	313	277	370	411	634	427
30	1,020	744	568	722	-	419	313	270	390	440	612	440
31	997	-	568	722	-	415	-	264	-	504	590	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	68,917	4,610	997	2,223		
November	22,813	950	656	760		
December	19,078	744	555	615		
Calendar year 1937	366,013	4,610	269	1,003		
January	25,382	1,020	564	819		
February	25,244	1,320	590	902		
March	15,183	568	415	490		
April	10,578	415	313	353		
May	8,379	313	244	270		
June	7,383	390	209	246		
July	10,602	504	274	342		
August	29,135	1,690	590	940		
September	15,889	678	406	530		
Water year 1937-38	258,583	4,610	209	708		

Santa Fe River near Fort White, Fla.

Location.- Water-stage recorder, lat. 29°51', long. 82°42', in sec. 28, T. 7 S., R. 16 E., 2 miles upstream from county highway bridge on road between Williford and Fort White and 4 miles south of Fort White. Zero of gage is 21.28 feet above mean sea level (from benchmark of Corps of Engineers, U. S. Army).

Records available.- October 1927 to January 1930, June 1932 to September 1938.

Extremes.- Maximum discharge during year, 4,730 second-feet Oct. 7, 8 (gage height, 6.00 feet); minimum, 954 second-feet June 10-20 (gage height, 0.85 foot).
1927-30, 1932-38: Maximum discharge, 11,400 second-feet June 20, 1934 (gage height, 11.04 feet); minimum, 670 second-feet June 4, 5, 1932; minimum gage height, 0.58 foot June 26-28, July 5, 1935.

Remarks.- Records excellent.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 6 to Feb. 22)

0.8	908	3.0	2,560
1.0	1,090	4.0	3,250
1.5	1,500	6.0	4,730
2.0	1,860		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,350	1,760	1,500	1,380	1,540	1,380	1,180	1,040	1,000	1,240	1,380	1,380
2	2,350	1,720	1,500	1,420	1,580	1,380	1,180	1,040	1,010	1,240	1,420	1,340
3	2,630	1,720	1,460	1,460	1,650	1,380	1,130	1,040	1,000	1,180	1,420	1,340
4	3,110	1,680	1,460	1,500	1,790	1,340	1,130	1,040	982	1,180	1,420	1,380
5	3,770	1,650	1,460	1,500	1,860	1,340	1,130	1,040	972	1,130	1,380	1,380
6	4,360	1,650	1,460	1,650	1,930	1,300	1,130	1,040	963	1,130	1,460	1,420
7	4,730	1,610	1,420	1,720	2,000	1,300	1,130	1,030	982	1,130	1,500	1,420
8	4,730	1,580	1,420	1,760	2,000	1,300	1,130	1,030	972	1,090	1,650	1,420
9	4,580	1,580	1,420	1,790	2,000	1,300	1,130	1,030	972	1,090	1,930	1,420
10	4,360	1,580	1,420	1,790	1,930	1,300	1,130	1,020	963	1,090	2,140	1,420
11	4,060	1,580	1,420	1,790	1,930	1,260	1,130	1,020	954	1,090	2,210	1,420
12	3,840	1,580	1,420	1,790	1,860	1,260	1,130	1,010	954	1,130	2,140	1,380
13	3,550	1,580	1,420	1,760	1,790	1,260	1,130	1,010	954	1,130	2,070	1,340
14	3,320	1,580	1,380	1,760	1,760	1,260	1,090	1,010	954	1,130	2,000	1,340
15	3,110	1,580	1,380	1,720	1,720	1,260	1,090	1,000	963	1,130	2,000	1,300
16	2,900	1,580	1,380	1,720	1,680	1,260	1,090	1,000	963	1,130	1,930	1,300
17	2,770	1,540	1,380	1,720	1,650	1,260	1,090	991	954	1,180	1,860	1,260
18	2,630	1,500	1,380	1,680	1,610	1,260	1,090	991	954	1,180	1,790	1,260
19	2,560	1,500	1,380	1,650	1,580	1,260	1,080	991	963	1,130	1,720	1,260
20	2,420	1,500	1,380	1,650	1,540	1,260	1,080	991	963	1,130	1,650	1,240
21	2,350	1,500	1,380	1,610	1,500	1,260	1,070	982	991	1,180	1,610	1,240
22	2,280	1,460	1,380	1,610	1,500	1,260	1,080	972	972	1,180	1,610	1,240
23	2,210	1,420	1,380	1,610	1,460	1,260	1,060	963	991	1,180	1,610	1,180
24	2,140	1,460	1,380	1,610	1,460	1,260	1,050	982	982	1,180	1,650	1,180
25	2,070	1,460	1,380	1,610	1,420	1,240	1,050	1,000	963	1,180	1,610	1,180
26	2,000	1,460	1,380	1,580	1,420	1,240	1,040	991	1,070	1,180	1,540	1,180
27	2,000	1,460	1,420	1,580	1,420	1,240	1,040	982	1,080	1,180	1,500	1,180
28	1,930	1,460	1,420	1,580	1,380	1,240	1,040	991	1,130	1,240	1,460	1,180
29	1,860	1,500	1,380	1,580	-	1,240	1,040	1,000	1,180	1,240	1,420	1,180
30	1,860	1,500	1,380	1,540	-	1,180	1,040	1,000	1,240	1,260	1,420	1,180
31	1,700	-	1,380	1,540	-	1,180	-	991	-	1,300	1,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	90,530	4,730	1,700	2,920		
November	46,730	1,760	1,420	1,558		
December	43,700	1,500	1,380	1,410		
Calendar year 1937	648,420	4,730	1,020	1,776		
January	50,660	1,790	1,380	1,634		
February	46,960	2,000	1,380	1,677		
March	39,520	1,380	1,180	1,275		
April	32,910	1,180	1,040	1,097		
May	31,218	1,040	963	1,007		
June	29,991	1,240	954	1,000		
July	36,160	1,300	1,090	1,166		
August	51,880	2,210	1,380	1,674		
September	38,940	1,420	1,180	1,298		
Water year 1937-38	539,199	4,730	954	1,477		

Ichatucknee Springs near Hildreth, Fla.

Location.- Lat. 29°58', long. 82°47', in sec. 23, T. 6 S., R. 15 E., at bridge on State Highway 5A, 1 mile east of Hildreth and about 2 miles upstream from confluence with Santa Fe River.

Records available.- 1917, 1929-30 (a single measurement in each year), January 1931 to September 1938 (discharge measurements).

Extremes.- Maximum discharge measured during year, 361 second-feet Aug. 11; minimum measured, 297 second-feet June 15.
1931-38: Maximum discharge measured, 428 second-feet Mar. 14, 1931; minimum measured, 243 second-feet Aug. 20, 1935.

Remarks.- Discharge measurements made about once monthly at highway bridge about 4 miles below head of springs.

Discharge measurements, in second-feet, water year October 1937 to September 1938

Oct. 25	347	Apr. 22	309
Nov. 24	323	May 26	320
Dec. 15	343	June 15	297
Jan. 14	332	July 13	319
Feb. 3	330	Aug. 11	361
Mar. 4	335	Sept.15	324

OCHLOCKONEE RIVER BASIN

Ochlockonee River near Thomasville, Ga.

Location.- Wire-weight gage, lat. 30°52', long. 84°31', at bridge on U. S. Highway 84, 2 miles upstream from Atlantic Coast Line Railroad bridge, 4 miles upstream from Barnetts Creek, 5 miles northwest of Thomasville, Thomas County, and 6 miles downstream from Little Ochlockonee River.

Drainage area.- 550 square miles.

Records available.- August 1937 to September 1938.

Extremes.- Maximum discharge observed during period August to September 1937, 4,270 second-feet Sept. 21 (gage height, 17.59 feet), from rating curve extended above 2,500 second-feet; minimum 78 second-feet Sept. 15 (gage height, 2.15 feet).
Maximum discharge observed during water year 1937-38, 1,430 second-feet Nov. 15 (gage height, 9.34 feet); minimum observed, 4.9 second-feet Sept. 28 (gage height, 0.92 foot).

Remarks.- Records fair.

Rating table, Aug. 11, 1937, to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 12 to Sept. 5, Sept. 16-30, 1938)

0.8	3.3	3.0	165	10.0	1,620
1.0	8.5	4.0	295	12.0	2,220
1.3	20	5.0	460	14.0	2,880
1.6	37	6.0	660	16.0	3,620
2.0	65	8.0	1,100	18.0	4,440
2.5	110				

Discharge, in second-feet, 1937-38

1937

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	600	11	500	115	21	424	3,740
2	-	480	12	870	115	22	295	3,860
3	-	372	13	914	110	23	201	3,280
4	-	325	14	1,000	126	24	165	2,740
5	-	253	15	958	91	25	131	2,060
6	-	201	16	892	100	26	201	1,270
7	-	189	17	804	227	27	177	782
8	-	227	18	720	295	28	201	540
9	-	201	19	580	388	29	1,100	406
10	-	153	20	500	1,050	30	1,120	325
						31	848	-

Discharge, in second-feet, of Ochlockonee River near Thomasville, Ga.,--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	201	580	372	540	325	142	65	50	267	78	14
2	540	201	560	340	760	281	96	57	43	267	142	12
3	782	189	520	372	826	253	142	46	54	201	115	13
4	848	153	424	442	782	227	177	44	54	153	86	20
5	740	131	372	424	660	189	253	41	372	105	69	44
6	620	115	388	406	580	165	267	37	620	82	65	17
7	500	110	406	356	442	153	201	35	660	65	86	14
8	388	105	406	340	372	153	165	33	520	54	165	13
9	325	100	406	325	388	153	356	38	340	44	214	12
10	267	100	388	310	340	142	480	33	267	39	153	11
11	240	189	388	295	295	142	600	32	227	39	165	9.9
12	227	680	372	295	267	131	640	32	165	46	126	9.9
13	201	1,100	356	340	240	120	600	29	100	27	96	9.9
14	177	1,400	325	388	227	115	500	29	91	76	96	9.9
15	177	1,400	325	372	214	100	388	31	82	31	57	9.6
16	165	1,270	310	340	201	136	340	38	65	34	42	7.9
17	142	1,220	310	325	189	640	253	30	54	41	54	8.2
18	142	1,250	372	295	189	700	189	28	40	42	40	7.9
19	153	1,270	442	310	189	700	153	25	86	33	35	29
20	189	1,200	442	295	201	640	115	22	86	35	27	19
21	295	1,030	424	295	214	1,080	100	18	82	36	33	7.0
22	325	892	356	295	214	1,170	110	17	73	29	31	5.9
23	295	782	442	281	201	720	136	17	69	39	25	5.6
24	281	700	804	295	295	560	153	18	100	43	20	6.5
25	267	640	892	520	424	460	142	28	214	42	16	7.0
26	253	660	870	580	480	388	131	48	580	54	15	5.4
27	227	680	782	580	442	340	110	50	600	44	15	5.1
28	214	720	660	500	372	281	96	86	388	54	16	8.8
29	253	680	520	406	-	227	82	78	310	57	16	61
30	240	640	460	356	-	201	69	131	281	73	16	22
31	201	-	442	356	-	165	-	82	-	86	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 11-31, 1937	12,601	1,120	131	600	1.09	0.85
September	24,621	3,860	91	821	1.49	1.66
October 1937	10,014	848	142	323	.587	.68
November	19,808	1,400	100	660	1.20	1.34
December	14,744	892	310	476	.865	1.00
January 1938	11,406	580	281	368	.669	.77
February	10,544	826	189	377	.685	.71
March	11,057	1,170	100	357	.649	.75
April	7,186	640	69	240	.436	.49
May	1,298	131	17	41.9	.076	.09
June	6,673	660	40	222	.404	.45
July	2,198	267	27	70.9	.129	.15
August	2,131	214	15	68.7	.125	.14
September	425.5	61	5.1	14.2	.026	.03
Water year 1937-38	97,484.5	1,400	5.1	267	.485	6.60

Ochlockonee River near Havana, Fla.

Location.- Wire-weight gage, lat. 30°33', long. 84°19', in sec. 24, T. 2 N., R. 2 W., at bridge on State Highway 1, three-quarters of a mile upstream from Seaboard Railway bridge, and 5 miles southeast of Havana.

Drainage area.- 1,020 square miles.

Records available.- December 1928 to September 1938.

Average discharge.- 10 years, 969 second-feet.

Extremes.- Maximum discharge observed during year, 2,440 second-feet Nov. 17, 18; maximum gage height observed, 21.63 feet Nov. 18; minimum discharge observed, 66 second-feet Sept. 16-18; minimum gage height observed, 11.85 feet Sept. 17, 18.

1928-38: Maximum discharge, 15,300 second-feet Mar. 19, 1929 (gage height, 30.3 feet, from graph drawn on basis of daily gage readings), from rating curve extended above 10,000 second-feet; minimum discharge observed, 24 second-feet Nov. 14, 15, 17, 1933; minimum gage height observed, 11.51 feet Oct. 31, Nov. 2, 3, 1934.

Maximum stage known, 31.7 feet, from floodmarks, Aug. 17 or 18, 1928 (discharge, 19,500 second-feet, from rating curve extended above 10,000 second-feet).

Remarks.- Records good. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,550	598	1,550	935	770	887	535	240	255	430	255	82
2	1,220	535	1,190	839	863	726	472	240	225	370	287	82
3	1,470	514	1,090	816	1,060	640	451	225	195	335	370	82
4	1,790	472	1,040	816	1,240	556	430	195	188	319	514	98
5	1,990	472	985	911	1,300	514	430	188	150	287	451	225
6	2,100	430	911	935	1,270	493	472	172	136	255	390	165
7	2,060	390	887	887	1,170	514	514	165	172	210	816	210
8	1,920	370	887	839	1,040	451	514	158	410	172	1,110	188
9	1,700	352	911	770	935	430	535	188	556	143	935	136
10	1,380	335	911	726	839	390	556	165	577	123	704	116
11	1,110	390	935	704	770	370	662	158	493	116	577	104
12	960	640	887	682	704	352	770	158	451	150	451	92
13	985	960	839	704	661	335	863	143	514	130	370	82
14	770	1,520	816	726	598	319	887	130	472	130	319	76
15	704	1,880	770	793	556	303	839	130	335	136	287	71
16	640	2,220	748	839	535	352	726	123	255	110	271	66
17	619	2,440	726	793	514	911	598	116	210	130	303	66
18	598	2,440	748	748	493	1,140	556	110	172	136	370	66
19	598	2,360	770	726	472	1,170	472	110	150	123	319	87
20	619	2,280	863	682	472	1,610	410	104	143	165	255	87
21	640	2,240	911	682	493	1,440	352	104	225	172	210	116
22	770	2,130	863	661	514	1,220	370	98	390	180	172	165
23	935	1,990	839	640	493	1,300	370	92	271	180	150	123
24	960	1,790	1,010	640	535	1,640	410	87	225	150	143	98
25	887	1,610	1,220	793	682	1,760	430	85	195	158	130	87
26	793	1,470	1,380	911	863	1,440	390	82	180	186	116	82
27	726	1,380	1,470	1,040	960	985	352	82	210	319	110	98
28	682	1,330	1,490	1,060	960	816	335	82	514	370	104	98
29	619	1,330	1,380	1,040	-	704	287	104	726	370	92	287
30	598	1,330	1,220	935	-	640	271	110	556	370	87	335
31	619	-	1,040	816	-	577	-	195	-	287	82	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	33,012	2,100	598	1,065	1.04	1.20
November	38,198	2,440	335	1,273	1.25	1.40
December	31,287	1,550	726	1,009	.989	1.14
Calendar year 1937	540,780	9,820	165	1,482	1.45	19.73
January	25,089	1,060	640	809	.793	.91
February	21,762	1,300	472	777	.762	.79
March	24,985	1,760	303	806	.790	.91
April	15,279	887	271	509	.499	.56
May	4,339	240	82	140	.137	.16
June	9,551	726	136	318	.312	.35
July	6,714	430	110	217	.213	.25
August	10,750	1,110	82	347	.340	.39
September	3,670	335	66	122	.120	.13
Water year 1937-38	224,636	2,440	66	615	.603	8.19

Ochlockonee River near Bloxham, Fla.

Location.- Water-stage recorder, lat. 30°23', long. 84°39', in sec. 29, T. 1 S., R. 4 W., 1,000 feet downstream from dam and 1 mile west of Bloxham.

Drainage area.- 1,660 square miles.

Records available.- June 1926 to September 1938.

Average discharge.- 12 years, 1,572 second-feet.

Extremes.- Maximum discharge during year, 4,500 second-feet Oct. 1 (gage height, 10.88 feet); minimum, 16 second-feet Sept. 27 (gage height, -1.43 feet); minimum daily discharge, 88 second-feet Sept. 21.
1926-38: Maximum discharge, 19,900 second-feet Aug. 19, 1928 (gage height, 21.4 feet) from rating curve extended above 10,000 second-feet; no flow Sept. 21, 22, 1929, and several days in 1931.

Remarks.- Records fair. Discharge for periods of missing gage heights, Nov. 29 to Dec. 5, Jan. 2-7, Aug. 4-8 computed from hourly readings of tailwater gage at power plant. Flow regulated by operation of power plant 1,000 feet upstream from station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,400	957	2,148	2,270	2,160	1,680	1,990	206	145	1,520	728	651
2	4,050	1,170	2,090	1,980	1,450	1,650	1,690	108	670	1,040	768	663
3	3,560	1,240	2,060	2,290	1,250	1,640	610	126	538	418	900	498
4	3,460	1,170	1,840	2,200	1,240	1,650	1,810	121	350	250	911	96
5	3,460	1,800	961	2,050	1,120	1,570	1,940	98	426	1,100	1,110	424
6	2,960	1,750	1,830	2,030	750	613	1,960	109	800	894	996	712
7	3,460	814	1,540	2,000	1,120	1,720	1,610	116	862	708	1,010	734
8	3,460	914	1,200	1,620	2,010	1,860	1,490	177	822	590	1,520	644
9	3,460	1,460	1,470	1,220	2,510	1,660	1,220	537	736	320	2,280	680
10	3,460	825	1,840	1,560	2,470	1,660	410	638	331	290	2,360	646
11	3,420	1,380	1,920	1,570	1,840	1,580	1,160	370	148	210	2,390	170
12	3,420	1,360	315	1,660	1,570	1,280	1,210	136	680	144	2,170	503
13	2,970	1,550	1,440	1,540	773	840	1,480	605	528	144	1,750	357
14	2,570	1,280	1,570	1,660	1,660	1,600	1,320	438	596	310	676	367
15	2,590	1,850	1,680	1,140	1,850	1,660	1,310	589	747	244	953	344
16	1,100	2,310	1,540	658	1,880	1,380	1,060	156	648	202	1,450	334
17	588	3,150	1,520	1,480	1,740	1,640	212	151	308	148	1,080	143
18	2,220	3,150	1,980	1,600	1,620	1,830	1,260	496	627	620	941	92
19	2,830	3,050	953	1,590	1,180	2,040	1,600	573	123	642	1,190	108
20	2,490	3,140	1,670	1,610	413	1,320	1,420	438	382	740	951	98
21	2,300	3,240	1,710	1,540	1,550	2,170	1,380	352	694	668	621	88
22	2,130	3,150	1,580	1,410	1,630	2,250	982	174	866	738	923	110
23	920	3,150	1,800	704	1,640	2,240	646	193	1,010	484	984	90
24	508	3,200	1,830	1,740	1,660	1,940	241	291	834	198	1,360	376
25	1,070	3,150	1,630	2,070	1,620	2,070	839	304	570	683	718	296
26	2,180	3,150	1,750	2,120	1,490	2,140	878	110	524	962	815	206
27	2,460	3,100	1,890	2,060	503	1,250	866	106	878	997	656	186
28	1,500	2,650	2,280	1,790	1,520	1,860	948	138	976	966	356	203
29	1,230	2,400	2,350	1,730	-	1,980	892	494	1,490	842	628	880
30	932	2,130	2,390	880	-	2,000	1,150	124	1,560	974	634	918
31	743	-	2,320	2,010	-	1,990	-	140	-	298	650	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	75,901	4,400	508	2,448	1.47	1.70
November	63,640	3,240	814	2,121	1.28	1.43
December	53,097	2,390	315	1,713	1.03	1.19
Calendar year 1937	904,242	16,100	315	2,477	1.49	20.25
January	51,782	2,290	658	1,670	1.01	1.16
February	42,219	2,510	413	1,508	.908	.95
March	53,163	2,250	613	1,715	1.03	1.19
April	35,584	1,990	212	1,186	.714	.80
May	8,614	638	98	278	.167	.19
June	19,869	1,560	123	662	.399	.45
July	18,344	1,520	144	592	.357	.41
August	34,479	2,390	356	1,112	.670	.77
September	11,626	918	88	388	.234	.26
Water year 1937-38	468,318	4,400	88	1,283	.773	10.50

Chattahoochee River near Gainesville, Ga.

Location.- Staff gage, lat. 34°20', long. 83°52', at Shallow Ford Bridge, half a mile downstream from State Highway 53, 4 miles downstream from Little River, 4½ miles northwest of Gainesville, Hall County, and 5 miles above Chestatee River.
Drainage area.- 573 square miles.
Records available.- April 1937 to December 1938 (discontinued). June 1901 to December 1903 at site 3 miles upstream.
Extremes.- Maximum gage height observed during water year 1937-38, 18.10 feet July 22 (discharge not determined); minimum discharge, 505 second-feet Oct. 1, 17 (gage height, 2.12 feet).
Maximum discharge observed during period Oct. 31 to Dec. 31, 1938, 3,730 second-feet Nov. 5 (gage height, 7.90 feet); minimum discharge, 392 second-feet Nov. 30 (gage height, 2.70 feet).
1901-03, 1937-38: Maximum gage height observed, 28.4 feet Dec. 29, 1901, former site and datum; minimum discharge, 350 second-feet July 2, 1902 (gage height, 2.0 feet, former site and datum).
Remarks.- Records fair below 5,000 second-feet and poor above. Possibly some regulation from small dams above station. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	528	950	690	895	895	740	1,710	1,100	895	635	1,320	715
2	528	950	640	950	790	690	2,460	1,040	995	635	1,260	715
3	528	950	690	695	740	740	1,440	995	1,040	635	1,780	715
4	1,540	895	640	840	740	840	1,210	995	945	715	1,580	895
5	1,740	895	640	790	740	740	1,100	2,140	895	805	1,320	1,100
6	1,300	840	640	840	740	840	1,100	1,510	805	635	1,850	1,710
7	840	840	572	1,180	740	1,000	2,220	1,040	805	675	1,580	1,100
8	740	790	595	1,000	690	790	5,380	1,210	945	760	1,440	895
9	640	790	640	895	690	740	4,130	1,320	1,040	715	1,640	805
10	640	790	640	840	690	1,880	2,070	1,040	1,260	895	1,640	760
11	640	840	572	895	690	1,610	1,710	995	995	760	1,320	715
12	640	950	572	895	640	1,180	1,510	945	805	555	1,260	715
13	595	895	595	840	640	1,060	1,440	945	760	555	1,210	715
14	640	790	595	790	640	1,000	1,380	1,040	715	555	1,160	760
15	640	740	572	790	640	1,180	1,320	1,100	715	760	1,040	675
16	550	740	572	790	640	6,160	1,260	945	675	595	1,040	635
17	528	740	740	740	640	3,530	1,260	895	715	635	995	635
18	572	740	1,000	740	640	1,440	1,380	850	760	635	945	675
19	9,340	790	840	740	640	1,210	1,320	895	895	850	895	675
20	3,050	740	740	840	740	2,380	1,320	895	1,260	3,060	850	635
21	1,420	640	690	790	740	1,580	1,920	850	1,850	7,880	850	675
22	1,240	640	640	790	640	895	1,580	850	1,040	15,000	850	635
23	1,180	640	790	790	840	1,320	1,380	805	945	7,460	805	635
24	1,060	640	1,180	840	1,300	1,210	1,260	805	760	10,600	805	595
25	1,000	640	950	1,240	950	1,380	1,210	850	760	4,130	760	595
26	1,060	640	950	895	790	1,040	1,130	805	895	2,000	805	595
27	4,430	790	895	840	740	1,040	1,160	805	715	2,380	760	595
28	1,420	895	1,300	740	740	995	1,100	805	715	1,640	760	595
29	1,180	840	1,120	740	-	945	1,040	995	635	1,440	715	595
30	1,120	740	950	740	-	945	1,040	1,210	675	1,380	760	595
31	1,000	-	895	790	-	945	-	1,100	-	1,260	805	-

Discharge, in second-feet, October to December 1938

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	595	445	515	11	515	555	515	21	445	760	428
2	555	428	515	12	515	555	515	22	445	635	428
3	555	410	515	13	480	515	515	23	445	635	410
4	555	428	555	14	480	515	480	24	445	595	445
5	555	2,300	555	15	480	515	480	25	480	595	555
6	515	1,040	555	16	480	635	480	26	445	595	555
7	515	635	515	17	445	850	445	27	445	515	1,710
8	515	595	515	18	480	635	445	28	445	515	715
9	515	635	480	19	445	945	445	29	410	515	595
10	515	595	515	20	445	1,260	428	30	392	515	555
								31	428	-	515

Monthly discharge, in second-feet, October 1937 to December 1938

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1937	42,329	9,340	528	1,365	2.38	2.74
November	23,760	950	640	792	1.38	1.54
December	23,545	1,300	572	760	1.33	1.53
January 1938	26,380	1,240	740	851	1.49	1.72
February	20,745	1,300	640	741	1.29	1.34
March	42,045	6,160	690	1,356	2.37	2.73
April	49,570	5,380	1,040	1,652	2.88	3.21
May	31,775	2,140	805	1,025	1.79	2.06
June	26,910	1,850	635	897	1.57	1.75
July	69,235	15,000	555	2,233	3.90	4.50
August	34,800	1,850	715	1,123	1.96	2.26
September	22,355	1,710	595	745	1.30	1.45
Water year 1937-38	413,449	15,000	528	1,133	1.98	26.83
October 1938	14,980	595	392	483	.843	.97
November	20,366	2,300	410	679	1.18	1.32
December	16,894	1,710	410	545	.951	1.10
Calendar year 1938	376,055	15,000	392	1,030	1.80	24.41

Chattahoochee River near Vinings, Ga.

Location.- Water-stage recorder, lat. 33°52', long. 84°27', at Pace Ferry Bridge, 1 mile southeast of Vinings, Cobb County, 1 mile downstream from Rotten Wood Creek, 2½ miles upstream from Peachtree Creek, and 8 miles northwest of Atlanta. Prior to Mar. 9, 1937, staff gage at same site and datum.

Drainage area.- 1,450 square miles.

Records available.- August 1928 to December 1931, November 1936 to September 1938.

Extremes.- Maximum discharge observed during period November 1936 to September 1937, 25,300 second-feet Jan. 4 (gage height, 18.10 feet), from rating curve extended above 16,000 second-feet; minimum discharge, 706 second-feet Sept. 20 (gage height, 2.22 feet).

Maximum discharge during water year 1937-38, 18,300 second-feet July 24 (gage height, 14.12 feet); minimum, 396 second-feet Sept. 18 (gage height, 1.73 feet).

1928-31, 1936-38: Maximum discharge, 28,700 second-feet Sept. 28, 1939 (gage height, 18.84 feet), from rating curve extended above 20,000 second-feet; minimum, 372 second-feet Aug. 30, 1931 (gage height, 1.42 feet).

Remarks.- Records fair during periods of twice-daily gage readings, Nov. 15, 1936, to Mar. 8, 1937, Jan. 7-14, 1938, and good for remainder of time. Discharge for period of missing gage heights, July 14-17, 1937, computed on basis of records for station at Gainesville. Considerable diurnal fluctuation caused by operation of Morgan Falls hydroelectric plant, 9½ miles above station. Gage-height record prior to Mar. 9, 1937, furnished by Corps of Engineers, U. S. Army.

Rating table, Nov. 15, 1936 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

1.7	360	4.0	2,630	12.0	14,900
2.0	540	6.0	5,600	14.0	18,170
2.5	930	8.0	8,600	16.0	21,570
3.0	1,420	10.0	11,700	19.0	26,930

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	1,170	11,900	5,300	3,880	2,770	9,820	2,300	2,110	1,920	4,100
2		-	1,270	20,600	5,150	3,720	2,700	4,850	2,300	1,640	1,420	2,340
3		-	1,530	23,500	4,700	3,280	2,630	4,250	2,110	1,530	1,480	2,110
4		-	1,530	25,100	4,100	3,420	2,630	3,950	2,110	1,530	1,270	1,750
5		-	1,640	19,200	3,650	3,200	3,880	4,850	2,110	1,930	1,640	2,110
6		-	1,420	7,700	3,500	3,050	5,000	5,300	2,050	2,370	1,870	2,440
7		-	3,720	4,700	3,500	3,120	4,700	3,950	1,990	1,990	1,580	1,810
8		-	5,150	5,300	3,280	3,420	8,140	3,420	1,870	2,110	1,370	1,750
9		-	4,400	4,850	7,400	3,420	10,900	3,200	1,990	2,440	1,480	2,500
10		-	2,180	4,100	11,900	3,120	6,350	3,120	1,870	1,870	1,640	1,580
11		-	1,930	4,100	10,600	2,980	4,400	2,980	1,990	1,580	1,990	1,480
12		-	1,930	3,720	8,150	2,910	3,880	2,840	1,930	1,480	2,110	1,320
13		-	2,300	3,500	4,100	2,840	3,650	2,910	1,750	1,420	1,930	1,270
14		-	1,870	3,280	4,700	2,910	3,350	2,840	1,750	1,420	1,420	1,220
15		1,700	1,750	3,500	4,100	3,200	3,350	2,770	1,750	1,360	1,640	1,220
16		2,110	1,750	3,420	3,580	3,650	3,650	2,630	1,870	1,360	1,320	1,120
17		1,320	2,110	3,580	3,350	3,350	3,350	2,560	2,500	1,400	1,370	1,110
18		1,320	2,370	4,250	3,280	3,120	2,910	2,500	2,370	1,290	1,320	1,100
19		1,270	10,700	9,500	3,280	3,200	2,840	2,440	2,300	1,170	1,080	1,060
20		1,270	10,400	13,000	5,150	3,800	2,770	2,440	2,180	1,210	984	1,030
21		1,270	4,550	9,800	11,400	3,650	2,770	2,440	1,990	1,200	1,000	1,000
22		1,270	3,950	4,850	10,100	3,500	3,120	2,560	1,750	1,170	1,480	975
23		1,270	3,580	3,720	5,900	3,200	2,980	2,440	1,640	1,120	3,420	939
24		1,370	2,560	5,450	4,850	3,120	3,360	2,300	1,580	1,420	2,840	939
25		1,270	2,560	5,000	4,250	3,350	5,600	2,240	1,580	1,530	3,950	914
26		1,270	2,300	5,300	4,100	3,500	5,900	2,300	1,420	1,420	3,580	906
27		1,270	2,050	5,000	3,720	3,200	3,880	2,240	1,480	1,480	2,240	898
28		1,120	1,930	4,700	4,100	2,980	3,420	2,300	1,480	1,220	2,240	984
29		1,170	3,350	4,850	-	2,910	11,500	2,240	2,940	1,270	2,560	975
30		1,120	5,000	5,000	-	2,770	16,500	2,110	2,840	1,480	2,180	898
31		-	8,150	4,250	-	2,770	-	2,110	-	2,010	3,950	-

Peak discharge.- Apr. 9 (5 p.m.) 12,200 sec.-ft.; Apr. 30 (5 p.m.) 18,500 sec.-ft.

Discharge, in second-feet, of Chattahoochee River near Vinings, Ga., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	922	1,870	1,700	1,990	1,520	1,490	5,760	2,020	2,170	1,350	2,600	1,270
2	906	1,810	1,640	2,110	1,730	1,410	10,300	1,980	2,070	1,310	2,770	1,210
3	1,070	1,700	1,480	1,990	1,510	1,490	6,650	2,140	2,280	1,240	2,720	1,170
4	1,990	1,700	1,530	1,870	1,500	1,600	4,080	2,050	2,250	1,210	3,650	1,420
5	3,280	1,640	1,480	1,700	1,460	1,740	3,130	2,020	1,850	1,380	3,080	1,650
6	3,280	1,640	1,480	1,640	1,480	1,710	3,090	4,180	1,740	1,460	2,810	2,440
7	2,300	1,580	1,370	1,930	1,420	1,910	6,350	2,910	1,580	1,380	2,860	2,790
8	1,700	1,530	1,420	2,050	1,420	1,880	8,750	2,280	1,980	1,260	2,960	1,970
9	1,420	1,480	1,420	1,930	1,380	1,640	11,200	2,430	1,950	1,490	2,780	1,620
10	1,320	1,480	1,320	1,810	1,350	2,820	9,050	2,500	2,560	1,320	2,700	1,410
11	1,220	1,420	1,320	1,870	1,350	3,820	4,850	1,990	2,550	1,510	2,760	1,490
12	1,200	1,530	1,220	1,810	1,340	3,060	3,910	1,900	2,160	1,380	2,560	1,260
13	1,270	1,700	1,270	1,750	1,340	2,280	3,470	1,840	1,650	1,150	2,090	1,250
14	1,270	1,640	1,320	1,500	1,320	1,980	3,160	1,860	1,520	1,080	2,180	1,240
15	1,180	1,480	1,270	1,570	1,310	1,920	2,920	2,010	1,450	1,150	2,030	1,230
16	1,160	1,420	1,270	1,550	1,300	6,040	2,780	1,990	1,390	1,210	1,820	1,180
17	1,110	1,420	1,320	1,480	1,280	11,200	2,620	1,750	1,420	1,160	1,790	1,120
18	1,580	1,370	1,480	1,450	1,280	8,000	2,530	1,670	1,950	1,030	1,620	1,080
19	6,280	1,370	1,870	1,520	1,350	3,960	3,040	1,660	2,130	1,300	1,610	1,020
20	12,000	1,370	1,750	1,380	1,420	5,150	2,780	1,620	2,510	1,860	1,590	1,020
21	6,720	1,370	1,580	1,440	1,470	5,450	3,430	1,600	2,950	4,220	1,540	972
22	3,500	1,370	1,420	1,460	1,370	3,960	3,870	1,700	3,110	7,850	1,460	964
23	2,770	1,420	1,640	1,380	1,710	3,280	3,200	1,600	2,650	15,100	1,440	893
24	2,500	1,420	1,870	1,560	2,020	3,140	2,800	1,530	1,990	16,800	1,410	930
25	2,110	1,370	1,870	1,670	2,440	2,780	2,560	1,510	1,830	15,400	1,300	966
26	2,240	1,420	1,810	2,020	1,800	2,520	2,410	1,580	2,080	10,900	1,290	870
27	4,100	1,530	1,810	1,730	1,630	2,490	2,300	1,510	2,250	6,200	1,300	879
28	5,150	1,810	1,870	1,580	1,550	2,540	2,190	1,530	1,680	4,750	1,310	942
29	2,770	1,870	2,440	1,500	-	2,240	2,110	1,680	1,470	3,460	1,260	942
30	2,300	1,810	2,180	1,440	-	2,140	2,060	1,660	1,370	2,910	1,180	993
31	1,990	-	1,990	1,530	-	2,400	-	2,340	-	2,690	1,200	-

Peak discharge.- Apr. 2 (10 a.m.) 11,400 sec.-ft.; Apr. 10 (1 a.m.) 12,500 sec.-ft.

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October 1936	-	-	-	-	-	-
November 15-30	21,390	2,110	1,120	1,337	0.922	0.55
December	101,100	10,700	1,170	3,261	2.25	2.59
Calendar year						
January 1937	236,720	25,100	3,280	7,636	5.27	6.08
February	151,190	11,900	3,280	5,400	3.72	3.87
March	100,540	3,880	2,770	3,243	2.24	2.58
April	142,880	16,500	2,630	4,763	3.28	3.66
May	98,900	9,820	2,110	3,190	2.20	2.54
June	59,790	2,940	1,420	1,993	1.37	1.53
July	48,530	2,440	1,120	1,565	1.08	1.24
August	60,274	3,950	984	1,944	1.34	1.54
September	44,348	4,100	898	1,478	1.02	1.14
Water year						
October 1937	82,608	12,000	906	2,665	1.84	2.12
November	46,540	1,870	1,370	1,551	1.07	1.19
December	49,410	2,440	1,220	1,594	1.10	1.27
Calendar year 1937	1,121,730	25,100	898	3,073	2.12	28.76
January 1938	52,210	2,110	1,380	1,684	1.16	1.34
February	42,050	2,440	1,280	1,502	1.04	1.08
March	98,060	11,200	1,410	3,163	2.18	2.51
April	127,420	11,200	2,060	4,247	2.93	3.27
May	61,040	4,180	1,510	1,969	1.36	1.57
June	60,540	3,110	1,370	2,018	1.39	1.55
July	116,510	16,800	1,030	3,758	2.59	2.99
August	63,470	3,650	1,180	2,047	1.41	1.63
September	38,191	2,790	870	1,273	.878	.98
Water year 1937-38	838,049	16,800	870	2,296	1.58	21.50

Chattahoochee River at West Point, Ga.

Location.- Water-stage recorder, lat. 32°53', long. 85°11', just downstream from Oseligee Creek and 1 mile upstream from West Point, Troup County. Zero of gage is 550.23 feet above mean sea level (datum of Corps of Engineers, U. S. Army).

Drainage area.- 3,550 square miles.

Records available.- January 1912 to September 1938. July 1896 to December 1910 at site three-quarters of a mile downstream.

Average discharge.- 40 years (1896-1910, 1912-38), 5,854 second-feet.

Extremes.- Maximum discharge during year, 63,900 second-feet Apr. 9 (gage height, 20.22 feet); minimum daily discharge, 1,190 second-feet Sept. 24, 28.
1896-1910, 1912-38: Maximum discharge, 134,000 second-feet Dec. 10, 1919 (gage height, 30.0 feet), by computation of flow over day; minimum, 224 second-feet Sept. 12, 1925 (gage height, 1.64 feet).

Remarks.- Records good except those for periods of missing gage heights, Nov. 29 to Dec. 1, Sept. 22-30, which were computed on basis of gage-height record at U. S. Weather Bureau gage 1 mile downstream and are fair. Slight diurnal fluctuation caused by operation of power plants upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting control method used Oct. 1 to Mar. 31)

2.5	1,120	8.0	11,090	16.0	38,000
3.0	1,850	10.0	16,190	18.0	48,800
4.0	3,420	12.0	22,350	20.0	62,300
6.0	7,000	14.0	29,400		

Discharge, in second-feet, water year October 1937 to September 1938

D.y	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,820	3,420	3,020	3,420	3,020	2,860	20,900	4,610	3,500	2,540	3,840	1,880
2	1,980	3,180	2,940	3,340	3,020	2,780	46,500	5,510	4,790	2,380	4,440	2,150
3	2,150	3,020	2,780	3,340	2,940	2,700	42,100	4,440	6,620	2,300	11,500	2,620
4	3,020	2,860	2,700	3,180	3,020	2,700	22,900	4,020	4,610	2,300	6,050	2,620
5	6,620	2,780	2,620	3,260	2,860	2,780	11,500	4,970	4,020	2,150	4,970	2,150
6	5,870	2,780	2,700	3,180	2,780	2,860	9,030	6,810	3,590	2,220	4,790	2,780
7	5,330	2,700	2,620	3,840	2,700	3,100	26,700	5,510	3,100	2,300	4,270	3,260
8	4,440	2,700	2,540	4,180	2,700	3,100	46,300	6,240	3,180	2,300	4,440	3,500
9	3,260	2,700	2,540	3,930	2,620	3,100	57,300	4,790	4,180	2,300	4,440	2,860
10	2,700	2,700	2,540	3,760	2,620	3,180	31,000	4,440	4,440	3,260	4,790	2,780
11	2,460	2,940	2,460	3,500	2,540	4,790	22,700	4,180	4,440	3,100	4,100	2,150
12	2,380	3,760	2,380	3,500	2,540	5,510	12,900	3,930	5,150	2,700	3,680	1,980
13	2,220	3,760	2,460	3,340	2,460	5,330	8,370	3,500	4,790	2,460	4,020	1,920
14	2,220	3,180	2,460	3,180	2,540	4,020	7,190	3,420	3,420	2,150	3,420	1,780
15	2,380	3,020	2,460	3,100	2,540	3,500	6,620	3,340	2,780	2,300	3,260	1,820
16	2,220	2,940	2,460	2,940	2,460	6,050	6,050	3,340	2,620	2,220	2,940	1,760
17	2,150	2,780	2,540	2,940	2,460	13,200	5,690	3,420	2,460	2,000	2,860	1,700
18	2,460	2,700	2,860	2,860	2,460	16,800	5,510	3,260	2,860	2,000	2,620	1,580
19	7,770	2,700	2,780	2,860	2,940	15,900	5,510	3,100	3,260	2,860	2,540	1,520
20	10,900	2,700	2,860	2,780	3,100	12,000	5,690	3,020	8,370	7,570	2,300	1,480
21	14,300	2,700	3,180	2,860	2,940	11,800	7,190	2,940	9,570	6,620	2,300	1,370
22	12,000	2,620	2,860	2,780	2,700	10,400	8,170	2,860	5,510	6,430	2,150	1,260
23	6,240	2,620	3,420	2,780	2,860	8,370	7,380	2,940	4,790	8,290	2,150	1,260
24	4,610	2,460	4,270	3,180	3,500	8,970	6,240	3,260	4,790	15,400	2,000	1,190
25	3,930	2,540	4,100	3,590	3,840	7,190	5,510	3,100	4,270	19,500	1,940	1,260
26	3,680	2,700	3,760	3,420	3,930	5,870	4,970	3,100	4,970	18,600	1,880	1,260
27	6,050	2,860	3,680	3,340	3,500	5,150	4,790	3,420	5,150	16,200	1,840	1,260
28	6,810	2,940	3,340	3,340	3,020	4,790	4,440	3,100	4,270	8,570	2,380	1,190
29	7,770	3,020	3,260	3,020	-	5,150	4,270	3,100	3,420	7,190	3,590	1,400
30	5,330	3,020	3,420	2,860	-	4,610	4,100	3,590	2,860	4,790	2,620	1,260
31	4,020	-	3,680	2,940	-	4,440	-	3,930	-	4,180	2,080	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	149,090	14,300	1,820	4,809	1.35	1.56
November	86,800	3,760	2,460	2,893	.815	.91
December	91,690	4,270	2,380	2,958	.833	.96
Calendar year 1937	2,309,680	48,700	1,810	6,328	1.78	24.19
January	100,540	4,180	2,780	3,243	.914	1.05
February	80,610	3,930	2,460	2,879	.811	.84
March	193,000	16,800	2,700	6,226	1.75	2.02
April	457,520	57,300	4,100	15,250	4.30	4.80
May	121,190	6,810	2,860	3,909	1.10	1.27
June	131,780	9,570	2,460	4,393	1.24	1.38
July	169,180	19,500	2,000	5,457	1.54	1.78
August	110,200	11,500	1,840	3,555	1.00	1.15
September	57,000	3,500	1,190	1,900	.535	.60
Water year 1937-38	1,748,600	57,300	1,190	4,791	1.35	18.32

Peak discharge.- Apr. 2 (12 p.m.) 50,100 sec.-ft.; Apr. 9 (4 a.m.) 63,900 sec.-ft.

202922 O—40——15

Chattahoochee River at Columbus, Ga.

Location.- Water-stage recorder, lat. 32°27'45", long. 84°59'45", at Central of Georgia Railroad bridge in Columbus, Muscogee County, half a mile downstream from Eagle and Phoenix Dam and 1½ miles downstream from City Mills Dam. Zero of gage is 185.25 feet above mean sea level.

Drainage area.- 4,670 square miles.

Records available.- August 1929 to September 1938. December 1912 at site 800 feet upstream.

Extremes.- Maximum discharge during year, 81,700 second-feet Apr. 9 (gage height, 37.6 feet); minimum, 1,270 second-feet Aug. 27 (gage height, 0.81 foot); minimum daily discharge, 1,510 second-feet Sept. 25.

1912, 1929-38: Maximum discharge, 84,700 second-feet Apr. 9, 1936 (gage height, 38.24 feet); minimum, 294 second-feet Oct. 23, Nov. 14, 1931 (gage height, 0.06 foot); minimum daily discharge, 480 second-feet Oct. 31, 1931.

Maximum stage known, 53.2 feet, present datum, Mar. 15, 1929 (discharge not determined).

Remarks.- Records good except those for periods of missing gage heights, Mar. 9-15, July 20 to Aug. 11, which were computed on basis of partial gage-height records and records for stations at West Point and Columbia, Ala., and are fair. Gage heights for Apr. 8, July 10, 11, 16-18, and Aug. 21, 22 partly estimated. Flow regulated by power plants upstream and Bartlett Ferry Reservoir (capacity 134,000 acre-feet); all minima are affected by this regulation.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.8	1,270	4.0	4,200	12.0	15,700	25.0	40,200	38.0	83,700
2.0	2,230	6.0	6,700	16.0	22,300	30.0	53,500		
3.0	3,150	9.0	11,000	20.0	29,600	35.0	70,300		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,500	6,980	3,550	4,560	4,200	4,090	12,400	3,770	4,090	5,920	9,000	2,770
2	1,830	6,980	3,550	4,680	4,200	4,090	45,300	4,160	4,560	3,650	9,000	2,860
3	1,670	6,700	4,800	4,200	4,200	4,200	51,100	6,980	5,400	2,320	11,500	2,770
4	2,150	6,700	5,040	4,320	4,200	4,090	30,800	6,980	6,440	2,500	9,000	1,670
5	2,590	6,700	6,700	4,200	4,090	2,590	14,700	7,260	5,040	3,550	7,200	2,230
6	2,590	4,440	6,700	4,440	2,820	1,870	17,200	8,800	4,320	2,950	6,600	2,860
7	2,950	3,550	4,920	6,180	3,430	3,150	48,000	7,400	4,440	2,950	4,500	3,450
8	3,350	3,250	4,320	5,400	4,200	4,200	65,300	6,180	4,320	2,950	5,000	3,980
9	3,150	3,450	4,440	3,670	4,200	4,200	79,200	6,440	4,200	2,770	6,500	3,980
10	2,320	3,450	4,320	4,320	4,200	4,200	54,900	6,980	5,160	2,410	6,500	3,980
11	3,150	3,550	4,320	5,920	4,200	3,500	29,000	6,980	5,660	3,760	6,500	1,900
12	3,350	3,650	4,320	6,570	4,090	2,300	20,700	7,120	4,680	4,090	6,440	2,500
13	3,550	3,550	4,440	6,570	2,280	1,800	10,800	7,120	4,320	3,980	4,800	2,860
14	4,130	3,350	4,440	4,800	2,800	2,800	8,940	7,120	5,160	4,090	3,550	2,860
15	3,980	3,350	4,320	4,560	4,200	4,000	8,520	5,280	5,660	3,870	5,040	2,860
16	3,450	3,350	4,320	2,860	4,090	8,960	8,380	5,280	5,400	2,680	4,560	2,860
17	2,410	3,450	4,440	3,490	4,090	8,520	7,260	5,040	4,200	2,410	4,320	2,320
18	2,950	3,450	3,450	4,320	3,760	7,960	7,120	4,680	3,650	3,050	4,200	2,500
19	8,180	3,450	2,320	4,200	2,130	14,300	7,400	4,440	2,680	3,450	4,200	2,320
20	7,120	3,450	3,050	4,200	1,710	16,200	7,540	4,200	4,440	5,000	3,980	2,770
21	11,200	3,450	3,650	4,200	2,990	13,500	9,080	3,870	7,540	8,400	2,230	2,770
22	15,700	3,350	3,870	3,870	4,090	12,800	13,600	2,580	6,840	7,800	2,950	2,860
23	9,220	3,450	4,920	2,500	4,200	10,700	9,650	3,200	6,700	7,000	3,650	2,860
24	6,440	3,450	4,680	3,640	4,200	10,400	8,380	4,320	6,570	11,000	3,650	2,410
25	6,180	3,450	4,440	4,320	3,650	9,800	8,100	4,320	6,440	15,000	2,950	1,510
26	6,980	3,550	3,780	4,200	3,150	6,840	7,400	4,200	5,660	22,000	2,770	2,410
27	7,260	3,550	3,550	4,200	2,860	6,570	7,260	4,200	5,530	19,000	1,870	2,860
28	7,120	3,550	4,200	4,200	3,210	6,310	7,260	3,980	6,570	12,000	1,630	2,860
29	6,980	3,450	5,530	4,200	-	7,120	7,260	2,670	6,440	9,500	2,500	2,770
30	6,840	3,550	6,310	2,560	-	6,980	6,180	3,250	6,440	8,600	2,860	2,230
31	6,700	-	4,800	3,460	-	6,980	-	4,090	-	7,500	2,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	157,990	15,700	1,670	5,096	1.09	1.26
November	121,600	6,980	3,250	4,053	.868	.97
December	137,490	6,700	2,320	4,435	.950	1.10
Calendar year 1937	3,033,620	52,000	1,600	8,311	1.78	24.19
January	134,810	6,570	2,500	4,349	.931	1.07
February	101,440	4,200	1,710	3,623	.776	.81
March	205,020	16,200	1,800	6,614	1.42	1.64
April	618,730	79,200	6,180	20,620	4.42	4.93
May	162,890	8,800	2,580	5,255	1.13	1.30
June	158,550	7,540	2,680	5,285	1.13	1.26
July	196,150	22,000	2,320	6,327	1.35	1.56
August	152,310	11,500	1,630	4,913	1.05	1.21
September	81,840	3,980	1,510	2,728	.584	.65
Water year 1937-38	2,228,820	79,200	1,510	6,106	1.31	17.76

Peak discharge.- Apr. 2 (10 p.m.) 53,800 sec.-ft.

Chattahoochee River at Columbia, Ala.

Location.- Water-stage recorder, lat. 31°17', long. 85°07', in T. 4 N., R. 2° E., at bridge on State Highway 52, a quarter of a mile downstream from Central of Georgia Railway bridge and half a mile east of Columbia.

Drainage area.- 8,040 square miles.

Records available.- July 1928 to September 1938.

Average discharge.- 10 years, 11,050 second-feet.

Extremes.- Maximum discharge during year, 91,500 second-feet Apr. 11 (gage height, 44.7 feet); minimum, 2,660 second-feet Sept. 20 (gage height, 4.10 feet).
1928-38: Maximum discharge, 203,000 second-feet Mar. 18, 1929 (gage height, 56.05 feet), from rating curve extended above 115,000 second-feet; minimum, 1,220 second-feet Oct. 26, 1931 (gage height, 1.79 feet).

Remarks.- Records good. For description of regulation see records for station at Columbus, Ga.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1-23)

Oct. 1 to Apr. 10, June 23 to Sept. 30

4.0	2,570	24.0	32,400
6.0	4,490	28.0	40,600
8.0	6,720	32.0	49,700
10.0	9,220	36.0	60,700
13.0	13,360	40.0	73,200
16.0	18,100	43.0	84,000
20.0	25,000	45.0	93,000

Apr. 11 to June 22

6.0	3,700	14.0	15,000
8.0	6,150	16.0	18,200
10.0	9,000		
12.0	12,000		

Note.- Same as preceding table above 17.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,790	8,180	5,680	8,180	5,350	4,690	8,960	10,500	4,840	7,680	10,800	4,290
2	4,190	8,050	5,570	7,080	6,010	5,020	14,300	9,000	5,740	7,440	9,610	4,290
3	4,490	8,180	5,350	7,800	6,480	5,790	36,600	6,710	6,150	6,600	11,600	4,590
4	3,890	8,050	5,570	8,050	6,360	5,790	49,400	8,560	7,270	4,690	11,200	4,490
5	3,890	7,920	6,720	7,200	6,240	5,680	50,400	9,900	7,980	3,690	14,600	4,190
6	4,390	7,920	7,440	6,840	6,240	5,570	35,200	10,000	7,690	3,690	10,400	3,990
7	4,910	7,440	8,570	7,680	6,010	4,390	37,300	11,000	6,010	4,390	9,350	4,390
8	4,800	6,680	8,310	11,800	4,910	3,690	71,200	11,200	5,480	3,990	9,350	4,910
9	5,020	4,910	7,200	11,200	5,350	4,590	85,600	9,900	5,480	3,790	8,180	5,240
10	5,350	4,800	7,680	8,830	6,010	5,570	90,000	9,000	5,740	3,890	8,440	5,680
11	4,910	6,450	7,560	6,960	6,010	5,680	90,000	8,850	5,480	3,890	8,700	5,790
12	4,290	14,000	6,960	7,200	5,900	5,680	79,500	9,000	6,290	3,690	7,680	5,350
13	4,190	16,300	6,600	8,700	5,790	5,350	56,200	9,000	6,710	5,350	8,310	3,790
14	4,490	10,600	6,360	8,960	5,680	4,090	29,800	9,000	6,150	6,010	7,800	3,490
15	4,690	8,440	6,360	8,440	4,390	3,490	16,600	9,000	5,480	6,600	6,600	4,090
16	5,020	7,080	6,360	6,960	4,690	5,530	14,600	8,710	6,150	6,600	5,680	4,190
17	5,130	7,200	6,240	6,240	5,790	26,300	13,600	6,710	6,150	5,680	6,840	4,290
18	4,910	6,600	6,480	5,240	5,790	30,100	12,400	6,850	5,480	5,350	6,480	4,090
19	5,240	6,360	6,240	5,900	6,010	21,800	12,000	6,290	4,720	3,790	6,010	3,490
20	7,970	6,600	5,350	6,480	5,900	17,500	12,300	5,870	4,250	5,350	5,680	3,020
21	11,500	6,600	4,590	6,480	4,800	21,500	14,800	5,610	4,030	9,730	5,460	3,110
22	10,600	6,240	4,910	6,480	4,290	20,300	23,900	5,220	6,990	13,800	5,020	3,690
23	15,400	6,010	6,360	6,360	5,130	17,500	28,100	4,600	9,610	16,200	3,990	3,690
24	14,400	5,790	10,400	6,010	6,840	15,500	24,300	3,500	8,700	16,500	4,390	3,890
25	9,480	5,790	11,500	6,010	7,200	15,200	17,400	4,960	8,180	25,500	4,910	3,690
26	7,800	5,790	9,350	7,320	6,960	13,700	14,400	6,430	7,920	36,500	4,910	3,390
27	8,440	5,900	8,050	7,320	6,010	11,300	12,600	6,150	8,440	42,800	4,290	4,800
28	9,220	6,120	6,600	6,600	5,240	9,610	11,700	5,740	8,050	32,000	4,390	6,010
29	9,220	6,010	6,480	6,240	-	8,830	11,200	5,870	8,050	22,500	3,290	5,790
30	8,700	5,790	6,840	6,120	-	8,960	11,100	5,740	7,920	14,400	2,930	5,020
31	8,310	-	8,050	6,120	-	9,090	-	4,030	-	12,200	3,690	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	208,630	15,400	3,790	6,730	0.837	0.96
November	220,800	16,300	4,800	7,360	.915	1.02
December	215,730	11,500	4,590	6,959	.816	1.00
Calendar year 1937	4,515,640	56,100	2,940	12,370	1.54	20.90
January	226,800	11,800	5,240	7,316	.910	1.05
February	161,380	7,200	4,290	5,764	.717	.75
March	327,790	30,100	3,490	10,570	1.31	1.51
April	985,460	90,000	8,960	32,850	4.09	4.56
May	232,900	11,200	3,500	7,513	.934	1.08
June	197,130	9,610	4,030	6,571	.817	.91
July	344,290	42,800	3,690	11,110	1.38	1.59
August	220,680	14,600	2,930	7,115	.835	1.02
September	130,730	6,010	3,020	4,358	.542	.60
Water year 1937-38	3,472,220	90,000	2,930	9,513	1.18	16.05

Apalachicola River near River Junction, Fla.

Location.- Water-stage recorder, lat. 30°45', long. 84°51', in sec. 5, T. 3 N., R. 6 W., at Louisville & Nashville Railroad bridge, 1 mile downstream from confluence of Flint and Chattahoochee Rivers and 1½ miles west of town of River Junction. Zero of gage is 44.85 (revised) feet above mean sea level (general adjustment of 1929).

Drainage area.- 17,100 square miles.

Records available.- December 1928 to September 1938.

Average discharge.- 10 years, 22,110 second-feet.

Extremes.- Maximum discharge during year, 108,000 second-feet Apr. 13 (gage height, 22.88 feet); minimum, 8,450 second-feet Sept. 22, 23, 27; minimum gage height, 0.64 foot Sept. 23.

1928-38: Maximum discharge, 293,000 second-feet Mar. 20, 1929 (gage height, 34.70 feet), from rating curve extended above 200,000 second-feet; minimum 5,120 second-feet Nov. 5, 11, 1931; minimum gage height, -1.70 feet Nov. 5, 1931.

Remarks.- Records excellent.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.6	8,450	9.0	28,900	17.0	58,600
1.0	9,130	10.0	33,200	18.0	64,500
2.0	11,100	12.0	37,700	19.0	71,400
3.0	13,400	13.0	41,000	20.0	79,400
4.5	17,200	14.0	44,600	21.0	88,000
6.0	20,900	15.0	49,000	22.0	98,000
7.5	24,800	16.0	53,400	22.9	108,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,300	18,400	16,200	19,900	15,200	13,600	16,400	26,500	12,400	16,900	*29,200	*8,960
2	11,500	18,400	16,200	19,200	14,400	13,200	18,400	23,800	13,600	16,600	*25,400	*9,860
3	12,000	18,400	16,600	17,900	15,400	13,400	27,200	20,900	14,600	16,200	*21,700	*9,860
4	12,200	18,200	16,400	18,400	15,600	13,900	42,000	16,900	15,400	14,900	*23,800	*10,200
5	11,300	17,400	15,400	17,900	15,600	13,900	51,200	19,900	16,400	13,200	*23,000	*10,000
6	11,300	16,900	15,400	16,900	15,400	14,200	52,500	20,400	17,200	11,700	*24,000	*9,310
7	12,000	16,400	16,900	16,600	15,200	13,600	47,200	20,400	16,600	11,700	*20,600	*9,310
8	12,700	15,600	17,900	18,200	14,600	14,900	51,200	21,400	15,200	12,000	19,400	*9,860
9	13,200	13,900	17,400	21,200	13,400	11,700	61,500	21,700	14,900	11,700	19,400	*10,600
10	13,400	12,900	16,400	20,400	14,200	12,200	75,400	21,200	14,900	11,300	18,200	*10,600
11	13,400	13,200	16,600	18,900	14,600	12,700	89,000	20,200	14,600	11,100	18,600	*11,100
12	12,900	16,600	17,400	18,200	14,400	12,700	102,000	19,900	14,200	11,100	18,400	11,100
13	12,200	23,500	17,600	18,600	14,200	12,700	107,000	19,600	14,600	11,100	17,200	10,200
14	11,500	24,300	16,900	19,900	13,600	12,200	99,100	19,200	15,200	11,500	16,900	9,310
15	11,500	21,400	16,400	19,900	13,200	11,100	78,600	18,900	14,600	12,400	16,600	9,130
16	11,700	19,900	16,200	18,600	12,200	11,100	64,500	*16,400	14,200	13,200	*14,200	9,490
17	12,000	19,900	15,900	17,400	12,400	17,400	*58,600	*17,600	14,600	12,900	*12,900	9,490
18	12,200	20,200	15,600	16,400	12,900	32,300	*54,900	*15,400	14,900	12,000	*14,400	9,860
19	12,400	19,600	15,600	15,400	12,900	34,000	*50,300	*16,200	14,200	11,300	*14,200	9,670
20	13,400	19,400	15,400	15,900	13,400	29,700	*42,800	*15,600	13,400	11,100	13,200	8,790
21	17,400	18,900	14,400	16,200	13,600	27,800	*38,700	15,200	12,900	12,900	12,400	8,620
22	20,400	18,200	13,900	15,600	12,900	29,500	*34,300	14,600	12,900	18,200	12,000	8,620
23	21,700	17,400	14,600	15,400	12,700	28,400	39,000	14,200	15,900	21,700	11,500	8,620
24	25,700	16,900	16,400	15,400	13,900	27,000	41,000	13,400	17,600	*23,500	10,800	8,620
25	24,600	16,600	19,600	15,400	15,400	26,500	38,400	12,400	17,200	*24,800	10,600	8,620
26	21,700	16,600	20,600	15,900	15,900	26,500	34,000	13,600	16,900	*32,900	10,800	8,620
27	20,200	16,400	19,400	16,600	15,400	24,800	31,100	14,200	17,200	*41,700	10,800	8,620
28	20,900	16,400	19,400	16,200	14,600	23,000	29,700	13,900	17,600	*47,700	*10,400	9,670
29	21,200	16,400	18,600	15,400	-	22,500	28,900	13,400	17,200	*44,200	*10,400	10,800
30	19,900	16,400	18,900	15,200	-	20,400	27,600	13,400	17,200	*39,400	*9,310	10,800
31	18,900	-	19,400	15,200	-	18,900	-	13,400	-	*32,600	*8,620	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	476,700	25,700	11,300	15,380	0.899	1.04
November	534,700	24,300	12,900	17,820	1.04	1.16
December	523,600	20,600	13,900	16,890	.988	1.14
Calendar year 1937	9,488,000	74,500	10,500	25,990	1.52	20.63
January	538,300	21,200	15,200	17,360	1.02	1.18
February	397,200	15,900	12,200	14,190	.830	.86
March	595,800	34,000	11,100	19,220	1.12	1.29
April	1,534,500	107,000	18,400	51,150	2.99	3.34
May	547,800	26,500	12,400	17,670	1.03	1.19
June	458,300	17,600	12,400	15,280	.894	1.00
July	593,500	47,700	11,100	19,140	1.12	1.29
August	498,950	29,200	8,620	16,090	.941	1.08
September	288,310	11,100	8,620	9,610	.562	.63
Water year 1937-38	6,987,640	107,000	8,620	19,140	1.12	15.20

*Gage height missing; discharge computed from gage heights based on U. S. Weather Bureau once-daily gage readings at highway bridge half a mile upstream.

Sweetwater Creek near Austell, Ga.

Location.- Water-stage recorder, lat. 33°46', long. 84°37', at Blair Bridge, 3 miles southeast of Austell, Cobb County, and about 5½ miles upstream from mouth. Prior to Nov. 29, 1937, staff gage at same site and datum.

Drainage area.- 246 square miles.

Records available.- March 1937 to September 1938. May 1904 to December 1905 and November to December 1913 at site 2½ miles upstream.

Extremes.- Maximum discharge during year, 6,640 second-feet Apr. 9 (gage height, 16.18 feet); minimum, 26 second-feet Sept. 26 (gage height, 0.24 foot).
1904-5, 1913, 1937-38: Maximum discharge, that of Apr. 9, 1938; minimum, that of Sept. 28, 1938.

Remarks.- Records above 50 second-feet are good; those for period of missing gage heights, July 29 to Aug. 17, and days of partly-estimated gage heights, Aug. 26, 27, Sept. 13, 14, 17, 18 (computed on basis of records for Little Tallapoosa River at Carrollton), and those below 50 second-feet are fair. Gage read twice daily Oct. 1 to Nov. 29 and Sept. 19-26.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 28

0.8	83	7.0	1,983
1.1	131	9.0	2,730
1.5	217	10.0	3,180
2.0	347	12.0	4,240
3.0	650	14.0	5,360
5.0	1,295	16.0	6,520

Nov. 29 to Sept. 30

0.2	23	1.4	187
.5	47	2.0	347
.9	93		

Note.- Same as preceding table above 2.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	183	142	167	209	161	1,700	189	293	102	76	57
2	97	172	138	194	183	152	3,280	231	324	96	255	53
3	131	172	134	194	169	159	3,540	246	390	92	510	164
4	405	162	134	172	163	169	2,070	197	338	86	480	98
5	650	162	138	159	161	159	634	216	211	85	270	73
6	682	162	146	161	159	197	557	318	165	83	137	67
7	526	162	129	373	157	226	1,160	249	142	78	110	100
8	217	151	127	341	148	180	2,900	214	268	129	98	59
9	162	151	136	259	142	159	6,230	244	293	106	118	55
10	151	151	134	216	142	590	4,630	234	236	120	300	52
11	141	162	122	224	142	698	1,620	194	301	98	320	48
12	131	162	122	224	140	495	588	169	211	79	180	44
13	131	172	129	201	138	312	495	165	165	68	125	41
14	162	162	136	185	138	239	435	165	129	66	101	41
15	151	151	136	178	138	228	390	159	111	109	90	55
16	131	151	133	169	136	1,350	367	144	104	100	84	47
17	113	151	150	165	133	2,730	341	134	119	78	77	40
18	172	151	206	165	133	2,620	324	131	141	117	69	36
19	938	151	189	172	201	1,130	367	131	142	78	60	36
20	906	151	154	183	221	1,330	353	125	330	150	57	34
21	810	151	140	169	169	1,390	450	118	265	206	54	29
22	292	141	134	167	148	842	465	201	192	169	52	27
23	266	141	199	165	276	588	370	244	150	257	50	27
24	229	141	310	214	465	650	304	140	125	510	47	28
25	206	141	259	312	315	542	276	133	201	390	44	29
26	254	162	204	257	226	420	257	222	284	206	41	26
27	714	217	187	201	197	450	239	298	234	146	48	29
28	526	194	218	174	178	604	231	290	174	115	60	32
29	319	174	206	167	-	420	216	180	125	93	176	32
30	241	154	183	172	-	341	206	199	108	66	95	34
31	206	-	172	192	-	377	-	239	-	80	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,146	938	86	327	1.33	1.53
November	4,808	217	141	160	.650	.73
December	5,047	310	122	163	.663	.76
Calendar year						
January	6,292	373	159	203	.825	.95
February	5,127	465	133	183	.744	.77
March	19,908	2,730	152	642	2.61	3.01
April	34,995	6,230	206	1,166	4.74	5.29
May	6,119	318	118	197	.801	.92
June	6,271	390	104	209	.850	.95
July	4,178	510	66	135	.549	.63
August	4,248	510	41	137	.557	.64
September	1,493	164	26	49.8	.202	.23
Water year 1937-38	108,632	6,230	26	298	1.21	16.41

Flint River near Griffin, Ga.

Location.- Wire-weight gage, lat. 33°14', long. 84°26', at bridge on State Highway 16, 1½ miles downstream from Shoal Creek, 5½ miles upstream from Line Creek, and 10 miles west of Griffin, Spalding County. Prior to Aug. 25 staff gage at same site, datum 3 feet higher.

Drainage area.- 272 square miles.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 5,200 second-feet Apr. 3 (gage height, 12.97 feet, present datum); minimum observed, 26 second-feet Sept. 24, 27 (gage height, 2.47 feet).

1937-38: Maximum discharge observed, that of Apr. 3, 1938; minimum observed, that of Sept. 24, 27, 1938.

Flood of Mar. 14 or 15, 1929, reached a stage of 17.9 feet, floodmarks located by observer, (discharge, not determined).

Remarks.- Records fair. Gage read twice daily. Discharge interpolated Aug. 24.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.0	12	6.0	325	10.0	1,620
2.5	27	7.0	470	11.0	2,450
3.0	49	8.0	670	12.0	3,650
4.0	114	9.0	1,040	13.0	5,200
5.0	205				

Note.- Gage heights are referred to datum established Aug. 25, 1938.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	250	175	185	195	156	910	185	130	205	114	49
2	82	195	165	195	185	147	4,070	227	138	130	122	44
3	99	175	165	205	165	147	5,030	185	205	114	216	44
4	156	165	156	195	175	147	3,130	165	175	106	325	52
5	165	165	165	195	165	147	1,690	175	165	99	262	82
6	138	165	175	175	165	165	990	227	130	85	156	69
7	130	165	165	410	165	185	2,260	185	99	82	122	106
8	122	165	156	440	165	165	2,770	185	122	82	114	92
9	106	156	165	367	156	165	3,790	175	250	106	122	85
10	99	165	165	325	147	185	3,010	147	325	195	122	72
11	99	175	165	299	147	216	1,920	130	410	205	130	57
12	92	205	156	274	147	227	1,040	122	700	122	122	52
13	92	227	156	238	147	274	620	114	790	106	138	49
14	99	216	156	238	147	274	485	114	339	106	99	44
15	99	205	165	227	147	195	367	114	156	700	85	44
16	99	185	165	205	147	353	325	106	122	205	78	49
17	99	195	165	195	138	700	299	99	99	205	69	44
18	165	175	175	195	138	645	274	99	92	175	66	39
19	1,690	165	175	185	185	645	274	92	99	205	60	35
20	2,170	175	175	185	205	870	274	92	238	700	54	33
21	1,300	185	175	185	185	600	440	85	395	645	54	31
22	1,040	165	165	185	175	470	520	82	286	455	52	29
23	830	165	250	185	175	455	425	78	205	500	49	27
24	485	165	395	205	250	500	440	78	185	645	46	27
25	262	165	367	238	250	381	410	85	175	540	44	27
26	227	175	299	216	238	299	274	92	147	425	39	27
27	367	195	299	216	227	262	227	106	274	299	39	27
28	440	195	250	205	185	227	205	99	485	205	46	35
29	381	195	216	185	-	205	185	114	910	147	46	39
30	353	185	205	175	-	216	175	114	645	130	49	54
31	325	-	195	185	-	216	-	130	-	114	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	11,889	2,170	78	384	1.41	1.63
November	5,469	250	156	182	.669	.75
December	6,121	395	156	197	.724	.83
Calendar year						
January	7,113	440	175	229	.842	.97
February	4,936	250	138	176	.647	.67
March	9,839	870	147	317	1.17	1.35
April	36,829	5,030	175	1,228	4.51	5.03
May	4,001	227	78	129	.474	.55
June	8,491	910	92	283	1.04	1.16
July	8,038	700	82	259	.952	1.10
August	3,089	325	39	100	.368	.42
September	1,464	106	27	48.8	.179	.20
Water year 1937-38	107,279	5,030	27	294	1.08	14.66

Flint River near Culloden, Ga.

Location.- Wire-weight gage, lat. 32°43', long. 84°13', at bridge on U. S. Highway 19, 4 miles upstream from Auchumpkee Creek, 5 miles downstream from Swift Creek, and 13 miles southwest of Culloden, Monroe County. Prior to May 11 staff gage at the same site and datum.

Drainage area.- 1,890 square miles.

Records available.- July 1928 to December 1931, March 1937 to September 1938. July 1911 to May 1923 at site 2½ miles downstream.

Average discharge.- 15 years (1911-22, 1928-31, 1937-38), 2,667 second-feet.

Extremes.- Maximum discharge observed during year, 37,500 second-feet Apr. 9 (gage height, 28.6 feet); minimum observed, 220 second-feet Sept. 22-24 (gage height, 1.47 feet).
1911-23, 1928-31, 1937-38: Maximum discharge observed, 92,000 second-feet Mar. 15, 1929 (gage height, 38.40 feet); minimum observed, 92 second-feet Oct. 4, 6, 7, 1931 (gage height, 0.94 feet).

Remarks.- Records fair. Discharge for periods of missing gage heights, Oct. 23-26, Apr. 28-30, June 28, computed on basis of records for stations near Griffin and at Montezuma. Gage read once daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 9

2.0	500	10.0	7,000	23.0	27,400
3.0	980	13.0	10,700	24.0	29,900
4.0	1,580	16.0	15,000	25.0	32,600
6.0	3,050	19.0	19,800	26.0	35,600
8.0	4,870	22.0	25,200	27.0	38,800

Apr. 10 to Sept. 30

1.4	195	4.0	1,480
2.0	425	6.0	2,980
3.0	900	8.0	4,870

Note.- Same as preceding table above 8.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	500	1,220	980	1,220	1,100	930	6,010	2,040	1,480	1,360	900	385
2	500	1,100	930	1,280	1,160	930	21,700	2,110	1,240	900	1,060	470
3	880	1,100	930	1,400	1,160	930	25,200	2,260	2,500	800	1,300	515
4	980	1,040	930	1,280	1,100	880	19,500	2,110	1,830	700	1,480	515
5	1,220	980	930	1,220	1,040	880	15,900	900	1,360	650	1,900	538
6	1,340	980	930	1,160	1,040	880	10,200	4,370	900	605	1,760	950
7	1,220	680	980	2,730	980	880	29,900	2,500	950	605	1,550	700
8	880	830	980	3,130	980	830	24,100	1,690	950	605	1,000	605
9	780	830	980	2,570	980	880	37,500	1,830	1,620	560	1,000	605
10	590	780	980	1,990	930	930	26,500	1,480	1,830	605	950	515
11	590	830	930	1,850	930	980	18,800	1,300	2,820	1,189	900	560
12	590	980	930	1,850	930	980	9,660	1,180	2,980	1,550	800	425
13	590	1,280	930	1,580	930	980	5,570	1,120	3,790	950	700	365
14	568	1,400	880	1,460	930	980	3,790	1,120	2,260	1,480	800	365
15	545	1,160	880	1,400	930	980	3,070	1,120	1,970	3,160	750	365
16	568	1,100	880	1,340	880	6,560	2,660	1,000	1,120	2,580	700	345
17	545	1,100	880	1,280	880	7,910	2,260	900	850	2,260	900	305
18	1,400	980	880	1,280	880	4,470	2,180	900	800	1,120	650	325
19	6,560	980	930	1,220	930	3,830	2,420	850	750	850	538	285
20	9,270	980	930	1,220	1,280	4,190	2,420	800	750	3,070	492	285
21	7,670	980	930	1,220	1,220	3,740	5,790	850	1,760	6,780	470	248
22	5,680	930	880	1,220	1,160	3,050	5,900	800	1,970	5,900	448	220
23	3,500	930	1,520	1,160	1,040	2,810	5,570	750	1,690	4,970	425	220
24	2,200	930	4,280	1,220	1,220	2,650	3,520	750	1,120	6,340	405	220
25	1,300	930	3,050	1,460	1,340	2,650	2,900	800	1,360	6,120	385	223
26	1,500	930	2,490	1,400	1,280	2,570	2,340	800	2,110	5,370	365	223
27	2,270	1,040	1,850	1,340	1,100	1,920	1,830	900	3,340	3,340	345	248
28	2,060	1,100	1,580	1,160	1,040	1,580	1,700	900	2,500	1,900	365	265
29	1,920	1,100	1,460	1,100	-	1,460	1,600	1,240	1,690	1,300	515	285
30	1,780	1,040	1,400	1,040	-	1,340	1,500	1,480	1,550	1,120	470	305
31	1,710	-	1,220	1,040	-	1,280	-	1,620	-	1,000	448	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	61,706	9,270	500	1,991	1.05	1.21
November	30,440	1,400	780	1,015	.537	.60
December	39,260	4,280	880	1,266	.670	.77
Calendar year						
January	45,820	3,130	1,040	1,478	.782	.90
February	29,370	1,340	880	1,049	.555	.58
March	65,860	7,910	830	2,125	1.12	1.29
April	301,990	37,500	1,500	10,066	5.33	5.95
May	42,470	4,370	750	1,370	.725	.84
June	51,840	3,790	750	1,728	.914	1.02
July	69,730	6,780	560	2,249	1.19	1.37
August	24,771	1,900	345	799	.423	.49
September	11,880	950	220	396	.209	.23
Water year 1937-38	775,137	37,500	220	2,124	1.12	15.25

Flint River at Montezuma, Ga.

Location.- Wire-weight gage, lat. 32°18', long. 84°03', at bridge on State Highway 26 and 49, half a mile downstream from Buck Creek and 1 mile west of Montezuma, Macon County. Zero of gage is 257.4 feet above mean sea level.

Drainage area.- 2,900 square miles.

Records available.- July 1930 to June 1933, October 1934 to September 1938. January 1905 to December 1909 and January 1911 to December 1912 at site 1½ miles upstream.

Extremes.- Maximum discharge observed during year, 42,300 second-feet Apr. 11 (gage height, 21.0 feet); minimum observed, 760 second-feet Sept. 24 (gage height, 1.06 feet).
1930-33, 1934-38: Maximum discharge observed, 54,600 second-feet (revised) Apr. 12, 1936 (gage height, 22.85 feet); minimum observed, 455 second-feet Oct. 21, 28, 1931; minimum gage height observed, 0.28 foot Oct. 22, 1935.
Maximum stage known, 27.4 feet Mar. 17, 1929 (discharge not determined).

Remarks.- Records good above 4,000 second-feet and fair below. Some regulation by power plants upstream. Records collected by Crisp County Power Commission under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	2,600	2,080	2,400	2,270	2,080	2,400	3,390	2,810	2,810	2,530	1,360
2	1,100	2,200	2,010	2,460	2,340	1,950	3,700	3,460	2,880	2,530	2,670	1,260
3	1,140	2,080	1,830	2,530	2,270	1,890	6,460	4,020	2,950	2,200	2,740	1,100
4	1,530	1,890	1,830	2,530	2,270	1,770	9,960	4,020	3,090	1,950	2,810	1,200
5	1,710	1,770	1,830	2,530	2,080	1,770	21,900	3,860	3,160	1,830	2,880	1,420
6	1,890	1,590	1,950	2,460	2,200	1,770	24,100	3,540	2,950	1,650	2,950	1,310
7	2,010	1,830	1,950	2,530	2,140	1,770	26,800	4,690	2,340	1,590	3,240	1,480
8	1,950	1,830	1,950	3,160	2,140	1,770	26,800	4,690	2,200	1,650	3,540	1,590
9	1,530	1,650	2,010	4,260	2,010	1,830	34,200	4,350	3,780	1,480	2,950	1,530
10	1,310	1,590	2,140	4,440	1,950	1,830	39,700	3,940	4,690	1,420	2,530	1,420
11	1,420	1,830	2,080	3,940	1,950	1,830	41,700	3,320	3,940	1,420	2,340	1,420
12	1,200	2,080	2,140	3,160	1,830	1,830	34,200	2,880	4,350	2,010	2,140	1,530
13	1,200	2,530	2,140	3,020	1,890	1,830	23,200	2,670	5,470	2,460	1,830	1,260
14	1,200	2,880	1,950	2,880	2,010	1,890	16,500	2,400	5,200	2,080	1,710	1,200
15	1,200	2,950	1,890	2,670	1,890	1,890	12,000	2,340	4,940	2,340	1,770	1,140
16	1,040	2,460	1,890	2,600	1,830	2,010	8,630	2,460	4,020	2,400	1,710	1,140
17	1,100	2,340	1,830	2,600	1,830	3,940	5,630	2,270	2,600	3,390	1,650	1,040
18	1,200	2,080	1,770	2,400	1,630	6,010	4,860	2,140	2,010	3,540	1,770	995
19	1,650	1,890	1,950	2,340	1,770	7,360	4,260	2,080	1,830	2,670	1,770	1,140
20	2,670	1,950	2,010	2,340	1,950	8,390	4,100	2,010	1,950	2,740	1,360	1,040
21	4,690	1,950	1,950	2,270	2,270	7,910	4,180	1,830	2,740	3,620	1,360	995
22	5,920	1,950	1,890	2,200	2,140	6,550	4,780	1,770	3,320	5,030	1,480	995
23	6,850	1,950	2,140	2,460	2,140	5,650	6,650	1,830	3,540	5,920	1,310	995
24	7,360	1,890	3,390	2,400	2,140	4,940	7,580	1,710	3,390	6,460	1,310	805
25	6,280	1,890	5,030	2,400	2,270	4,520	7,690	1,710	2,810	6,850	1,200	850
26	3,540	1,890	5,650	2,530	2,340	4,180	6,750	1,770	2,600	7,580	1,140	1,040
27	3,020	1,950	5,290	2,530	2,200	3,780	5,030	1,950	3,390	8,030	995	1,100
28	3,090	2,010	4,100	2,460	2,140	3,390	4,100	1,890	4,020	7,580	1,140	1,310
29	3,240	2,080	3,240	2,270	-	3,020	3,700	2,010	4,440	5,830	1,310	1,200
30	3,090	2,080	2,740	2,140	-	2,810	3,320	2,270	3,390	3,700	1,360	1,140
31	2,880	-	2,530	2,200	-	2,600	-	2,670	-	2,880	1,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	79,050	7,360	1,040	2,550	0.879	1.01
November	61,660	2,950	1,590	2,055	.709	.79
December	77,180	5,650	1,770	2,490	.859	.99
Calendar year 1937	1,548,950	20,900	1,040	4,244	1.46	19.86
January	83,110	4,440	2,140	2,681	.924	1.07
February	58,090	2,340	1,770	2,075	.716	.75
March	104,760	8,390	1,770	3,379	1.17	1.35
April	405,090	41,700	2,400	13,503	4.66	5.20
May	85,940	4,690	1,710	2,772	.956	1.10
June	100,800	5,470	1,830	3,360	1.16	1.29
July	107,640	8,030	1,420	3,472	1.20	1.38
August	60,915	3,540	995	1,965	.678	.78
September	36,005	1,590	805	1,200	.414	.46
Water year 1937-38	1,260,230	41,700	805	3,453	1.19	16.17

Flint River at Oakfield, Ga.

Location.- Water-stage recorder, lat. 31°46', long. 83°59', at Georgia Southwestern & Gulf Railroad bridge, 1 mile southwest of Oakfield, Worth County.

Drainage area.- 3,860 square miles.

Records available.- January 1930 to June 1933, October 1934 to September 1938.

Extremes.- Maximum discharge during year, 34,900 second-feet Apr. 13 (gage height, 24.4 feet); minimum, 855 second-feet Oct. 3, 4, Sept. 15 (gage height, 1.90 feet).
1930-33, 1934-38: Maximum discharge, 44,000 second-feet (revised) Apr. 15, 1936 (gage height, 27.2 feet), from rating curve extended above 31,000 second-feet; minimum, 320 second-feet July 14, 1930 (gage height, 0.98 foot).
Maximum stage known, 35.1 feet Jan. 20, 1925, from floodmarks.

Remarks.- Records good except those for periods of missing gage heights, Feb. 12, 15-17, May 14-21, Aug. 27, which were computed on basis of records for station at Albany and are fair. Extensive regulation from operation of power plant at Crisp County Power Commission dam 8 miles upstream. Records collected by Crisp County Power Commission, under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.0	930	12.0	13,200	21.0	26,900
3.0	1,760	14.0	16,150	22.0	28,850
4.0	2,710	16.0	19,150	23.0	31,150
6.0	5,040	18.0	22,150	24.0	33,800
8.0	7,600	20.0	25,250	25.0	36,750
10.0	10,350				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,630	3,950	2,820	3,150	3,260	3,150	2,850	5,040	2,930	3,830	4,060	1,480
2	1,540	3,150	2,820	2,710	2,930	3,150	6,380	3,320	2,510	3,710	7,920	1,460
3	1,000	2,610	2,820	2,820	2,610	3,150	15,200	3,020	3,590	3,590	3,110	1,470
4	1,080	2,710	2,610	2,460	2,710	3,150	6,280	2,980	3,590	3,590	1,760	1,460
5	1,540	2,410	2,360	2,360	2,930	3,040	3,480	3,000	2,930	3,590	2,910	1,450
6	1,850	2,080	2,610	3,260	2,710	2,820	3,610	3,270	3,480	3,590	2,960	1,580
7	3,040	1,980	2,410	4,070	2,930	2,360	8,100	3,260	3,370	3,590	3,720	1,500
8	1,980	1,980	2,030	2,820	2,930	2,160	19,500	5,230	2,360	2,820	3,170	1,490
9	2,460	1,800	2,410	3,830	2,930	2,160	25,400	4,610	2,360	2,310	4,860	1,480
10	2,160	2,160	3,150	5,040	2,930	2,160	26,600	4,240	2,510	2,160	3,900	1,440
11	1,900	2,260	4,670	4,550	2,120	2,160	29,500	4,240	3,590	2,080	2,510	1,340
12	1,670	3,260	3,150	5,040	2,120	2,120	32,400	4,070	3,590	1,900	2,570	1,420
13	1,670	3,370	3,040	4,550	2,210	2,160	34,100	3,130	3,150	1,940	1,760	1,430
14	1,500	3,370	2,360	3,710	2,710	2,160	33,000	3,000	3,590	1,900	1,630	1,420
15	1,540	3,480	2,080	3,590	2,300	2,160	28,400	2,900	3,590	1,940	2,510	1,390
16	1,580	3,590	2,310	3,480	2,100	2,560	21,800	2,900	3,710	2,160	2,570	1,440
17	1,370	3,590	2,310	3,590	2,200	2,490	12,100	2,900	3,830	2,360	2,630	1,400
18	1,370	3,480	2,510	3,260	2,930	2,490	4,740	3,100	3,710	2,120	2,700	1,430
19	2,710	3,040	2,930	2,820	3,590	1,300	7,450	3,200	3,590	3,590	2,680	1,400
20	3,480	2,510	2,930	2,930	3,480	1,480	6,780	3,200	3,590	2,970	2,710	1,380
21	3,370	2,080	2,820	2,930	3,480	2,330	6,800	2,900	3,370	3,210	3,260	1,380
22	4,370	2,410	2,710	2,710	3,370	2,860	5,870	2,610	3,830	2,320	2,610	1,390
23	6,690	2,610	2,820	2,930	3,370	5,510	5,610	2,410	3,710	2,200	2,030	1,360
24	6,300	2,710	2,610	4,190	3,260	6,660	6,030	2,310	3,710	5,470	1,900	1,240
25	6,560	2,510	3,260	3,040	3,260	4,510	7,120	2,360	3,710	8,000	1,850	1,240
26	6,820	2,710	6,170	2,710	3,260	6,130	9,040	2,310	3,370	12,500	1,720	1,200
27	6,300	2,510	5,790	2,820	3,260	9,200	8,900	2,310	3,710	10,000	1,600	1,240
28	3,950	2,410	6,430	3,150	3,150	4,210	6,150	2,310	3,710	8,200	1,500	1,420
29	3,260	3,370	5,660	3,040	-	2,940	3,140	2,310	3,830	6,670	1,490	1,420
30	3,260	2,820	4,670	2,930	-	2,930	5,300	2,310	3,830	7,370	1,460	1,540
31	3,590	-	3,830	3,150	-	2,900	-	2,820	-	7,130	1,480	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	91,540	6,820	1,000	2,953	0.765	0.88
November	82,920	3,950	1,800	2,764	.716	.80
December	101,100	6,430	2,030	3,261	.845	.97
Calendar year 1937	1,903,600	16,800	1,000	5,215	1.35	18.35
January	103,640	5,040	2,360	3,343	.866	1.00
February	81,040	3,590	2,100	2,894	.750	.78
March	98,560	9,200	1,300	3,179	.824	.95
April	391,630	34,100	2,850	13,050	3.38	3.77
May	97,570	5,230	2,310	3,147	.815	.94
June	102,350	3,830	2,360	3,412	.884	.99
July	128,810	12,500	1,900	4,155	1.08	1.24
August	83,540	7,920	1,460	2,695	.698	.80
September	42,290	1,580	1,200	1,410	.365	.41
Water year 1937-38	1,404,990	34,100	1,000	3,849	.997	13.53

Flint River at Albany, Ga.

Location.- Water-stage recorder, lat. 31°36', long. 84°09', at Georgia Northern Railway bridge in Albany, Dougherty County. Zero of gage is 150.03 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 5,230 square miles.

Records available.- September 1929 to September 1938. February 1897 to June 1921 (gage heights only prior to January 1902) at site 700 feet downstream.

Average discharge.- 27 years (1902-20, 1929-38), 6,428 second-feet.

Extremes.- Maximum discharge during year, 39,800 second-feet Apr. 14 (gage height, 25.77 feet); minimum, 172 second-feet Dec. 3 (gage height, 0.94 foot); minimum daily discharge, 896 second-feet Oct. 3.

1897-1921, 1929-38: Maximum gage height, 32.4 feet, former site and datum (U. S. Weather Bureau gage), Mar. 25, 1897 (discharge not determined); minimum discharge, 58 second-feet Nov. 18, 1933 (gage height, 0.44 foot); minimum daily discharge, 327 second-feet Aug. 24, 1930.

Maximum stage known, 37.84 feet (present datum) Jan. 21, 1925 (discharge, 92,000 second-feet, from rating curve extended above 60,000 second-feet).

Remarks.- Records good. Flow regulated by operation of power plants upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.9	160	6.0	5,360	20.0	26,500
1.5	390	8.0	8,890	22.0	30,100
2.0	670	10.0	12,200	23.0	32,250
3.0	1,390	13.0	16,600	24.0	34,750
4.0	2,430	16.0	20,600	25.0	37,400
5.0	3,750	18.0	23,400	26.0	40,400

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,040	5,210	5,820	4,560	4,080	4,100	3,720	3,990	3,870	4,140	4,250	2,010
2	2,230	4,390	4,980	4,080	4,100	4,080	5,280	4,950	4,030	4,230	7,530	2,140
3	896	3,300	2,910	4,040	3,960	3,880	15,300	4,090	4,210	4,230	5,420	1,590
4	2,510	3,160	1,060	3,020	3,800	3,990	10,700	4,060	4,730	4,210	3,200	1,170
5	2,260	2,970	3,620	3,650	3,750	4,000	6,020	4,060	4,510	4,150	3,040	1,830
6	2,440	2,890	3,050	3,710	3,810	3,840	4,700	4,070	3,920	4,130	3,900	2,550
7	3,500	2,430	3,750	5,520	3,790	3,720	8,940	4,760	4,140	4,130	4,340	2,340
8	3,660	3,250	2,750	4,140	4,010	3,290	19,200	5,480	4,300	3,770	4,630	2,150
9	3,240	2,210	2,720	4,340	4,150	2,330	27,100	5,720	3,630	2,830	5,250	2,130
10	2,760	2,500	3,840	6,000	3,750	2,170	29,700	4,810	3,470	2,910	5,630	1,570
11	2,850	3,650	6,480	5,640	3,520	2,840	34,200	5,070	3,240	2,740	3,990	1,610
12	2,190	3,830	4,100	6,710	2,780	3,100	38,300	4,130	3,720	1,730	4,040	2,310
13	2,160	5,010	4,010	5,710	2,410	2,540	39,200	4,340	3,840	2,220	3,270	2,200
14	2,110	4,620	4,010	4,820	3,490	2,990	39,200	3,780	3,980	2,630	1,100	2,170
15	2,060	5,540	3,680	4,600	2,510	2,560	36,200	3,070	4,030	2,430	3,200	2,220
16	1,750	5,270	3,300	4,120	2,240	3,370	29,500	2,700	4,380	2,470	3,060	2,780
17	1,840	5,450	2,980	4,790	2,300	3,990	21,700	3,820	4,460	3,110	3,400	2,690
18	2,160	5,000	3,610	4,630	2,800	3,970	10,700	4,190	4,120	2,770	3,230	914
19	3,360	4,660	3,410	4,060	3,950	3,570	6,100	4,190	4,140	3,430	2,750	1,580
20	4,980	4,100	3,900	3,940	4,070	2,800	7,850	4,100	4,100	4,010	2,520	1,710
21	4,600	3,800	4,020	3,290	4,220	3,470	7,450	4,070	3,990	3,730	2,810	1,620
22	5,830	3,310	3,990	3,760	4,190	4,020	7,100	3,860	4,060	3,730	3,480	2,000
23	8,240	3,530	3,640	3,760	4,170	6,610	6,980	3,820	4,440	3,730	2,350	1,560
24	7,680	4,030	3,880	5,350	4,240	9,030	6,640	3,390	4,960	4,900	2,150	1,780
25	7,110	3,360	3,960	4,100	4,210	5,520	8,260	2,560	5,580	6,070	2,440	1,710
26	7,370	3,710	7,360	4,070	4,180	6,200	11,000	2,410	5,150	14,000	2,480	1,690
27	7,540	3,720	7,650	3,510	4,220	10,900	11,500	2,420	4,270	11,500	2,320	1,620
28	4,730	3,930	7,780	3,970	4,230	6,340	10,000	1,900	5,210	11,100	1,140	2,560
29	4,140	3,980	7,600	4,090	-	3,930	7,500	3,020	4,750	10,400	1,520	2,360
30	4,170	4,300	6,270	4,050	-	3,720	5,100	3,520	4,710	10,100	1,680	2,330
31	4,130	-	5,110	4,070	-	3,460	-	3,670	-	5,880	2,190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	116,536	8,240	896	3,759	0.719	0.83
November	117,310	5,540	2,210	3,910	.748	.83
December	135,240	7,780	1,060	4,363	.834	.96
Calendar year 1937	2,526,985	20,500	640	6,923	1.32	17.97
January	137,100	6,800	3,020	4,423	.846	.98
February	102,950	4,240	2,240	3,677	.703	.73
March	130,330	10,900	2,170	4,204	.804	.93
April	475,140	39,200	3,720	15,840	3.03	3.38
May	119,840	5,720	1,900	3,866	.739	.85
June	127,940	5,580	3,240	4,265	.815	.91
July	153,850	14,000	1,750	4,963	.949	1.09
August	102,310	7,530	1,100	3,300	.631	.73
September	58,894	2,780	914	1,963	.375	.42
Water year 1937-38	1,777,440	39,200	896	4,870	.931	12.64

Flint River at Bainbridge, Ga.

Location.- Water-stage recorder, lat. 30°55', long. 84°34', at Decatur County Memorial Bridge on U. S. Highway 84, in Bainbridge, Decatur County. Zero of gage is 58.06 feet above mean sea level.

Drainage area.- 7,350 square miles.

Records available.- January 1908 to December 1913, December 1928 to September 1938.

Extremes.- Maximum discharge during year, 36,200 second-feet Apr. 16 (gage height, 26.4 feet); minimum, 2,520 second-feet Sept. 20 (gage height, 4.48 feet).
1908-13, 1928-38: Maximum discharge, 83,200 second-feet Mar. 21, 1929 (gage height, 37.73 feet); minimum, 2,300 second-feet Dec. 7, 1931 (gage height, 3.80 feet).
Maximum stage known, 40.9 feet, present datum, Jan. 24, 1925 (discharge, 101,000 second-feet, from rating curve extended above 70,000 second-feet).

Remarks.- Records good. Gage heights for Oct. 24-26 and Nov. 21-25 determined from graph drawn on basis of daily gage readings. Some regulation from operation of power plants upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

4.0	2,120	14.0	12,900	23.0	27,800
5.0	2,920	16.0	15,700	24.0	30,000
6.0	3,820	18.0	18,800	25.0	32,400
8.0	5,740	20.0	22,200	26.0	35,000
10.0	7,900	22.0	25,800	27.0	37,900
12.0	10,300				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,640	6,690	6,580	7,680	6,140	5,940	5,640	9,340	5,740	6,580	9,220	3,370
2	4,360	7,020	7,460	7,130	6,140	5,840	5,540	7,570	5,940	6,360	7,350	3,460
3	4,270	6,690	7,240	6,580	6,140	5,740	6,500	6,020	6,250	6,140	8,260	3,460
4	4,000	5,940	6,580	6,470	6,140	5,640	11,700	7,350	6,250	6,040	7,900	3,460
5	4,090	5,540	4,450	5,940	6,040	5,640	11,300	7,130	6,580	5,940	6,250	3,010
6	4,450	5,340	5,340	5,940	5,940	5,640	8,980	7,020	6,580	5,740	5,740	2,920
7	4,450	5,140	5,540	6,040	5,840	5,540	7,680	6,910	6,250	5,640	6,360	3,460
8	5,040	4,940	5,840	6,910	5,840	5,440	9,700	7,240	6,250	5,640	6,470	3,730
9	5,340	4,940	5,540	6,470	5,940	5,340	15,100	7,790	6,360	5,540	8,580	3,550
10	5,140	4,740	5,340	6,470	6,040	4,540	19,800	8,140	5,840	4,840	6,690	3,550
11	4,940	4,640	5,940	7,900	5,840	4,270	23,300	7,460	5,640	4,640	7,680	3,370
12	4,740	5,540	7,350	7,570	5,640	4,450	28,200	7,350	5,240	4,540	6,250	3,100
13	4,540	5,940	6,910	8,140	5,140	4,740	29,800	6,910	5,540	4,000	6,040	3,280
14	4,270	6,910	6,470	7,790	4,740	4,450	32,900	6,800	5,540	3,820	5,540	3,640
15	4,180	7,790	6.470	7,240	5,040	4,540	35,300	6,360	5,640	4,180	4,450	3,550
16	4,090	8,380	6,140	6,800	5,040	4,540	35,900	5,940	5,740	4,180	4,270	3,460
17	3,910	8,500	5,740	6,690	4,540	4,940	34,500	5,140	5,940	4,090	4,940	3,820
18	4,090	8,380	5,640	6,800	4,450	5,540	30,200	5,740	5,940	4,540	4,940	3,820
19	4,000	8,140	5,840	6,800	4,540	5,740	21,200	6,140	5,840	4,540	5,040	3,460
20	4,940	7,790	5,740	6,360	5,440	5,840	13,500	6,140	5,740	4,640	4,640	2,600
21	6,040	6,910	6,040	6,140	5,640	5,340	12,400	6,140	5,740	5,240	4,360	3,280
22	6,690	6,250	6,140	5,740	5,740	5,540	11,900	6,040	5,640	5,240	4,270	3,010
23	7,240	6,250	6,140	5,940	5,840	5,940	11,500	5,940	5,740	5,240	4,740	3,100
24	8,500	6,800	6,040	5,940	5,940	7,020	11,100	5,640	5,940	5,340	4,360	3,010
25	8,620	6,800	6,040	6,690	5,940	8,860	10,700	5,640	6,250	5,840	4,000	3,010
26	8,620	6,360	6,250	6,470	5,940	7,570	11,300	4,940	6,690	8,020	4,000	3,010
27	8,860	6,360	7,790	6,250	5,940	7,570	12,600	4,740	6,690	11,100	4,000	2,920
28	8,980	6,360	8,740	5,940	5,940	9,820	13,200	4,640	6,140	11,300	3,820	3,010
29	7,680	6,470	8,980	5,940	-	8,380	12,500	4,450	6,690	11,300	3,460	3,370
30	6,910	6,470	9,220	6,140	-	6,580	10,800	4,740	6,690	11,200	3,100	3,820
31	6,800	-	8,500	6,140	-	5,940	-	5,240	-	11,100	3,190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	174,420	8,980	3,910	5,626	0.765	0.88
November	194,020	8,500	4,640	6,467	.880	.98
December	202,030	9,220	4,450	6,517	.887	1.02
Calendar year 1937	3,463,160	24,800	3,900	9,488	1.29	17.50
January	204,950	8,140	5,740	6,611	.899	1.04
February	157,530	6,140	4,450	5,626	.765	.80
March	182,910	9,820	4,270	5,900	.803	.93
April	502,740	35,900	5,540	16,760	2.28	2.54
May	198,640	9,340	4,450	6,408	.872	1.01
June	181,050	6,690	5,240	6,035	.821	.92
July	192,550	11,300	3,820	6,211	.845	.97
August	167,910	9,220	3,100	5,416	.737	.85
September	99,610	3,820	2,600	3,320	.452	.50
Water year 1937-38	2,458,360	35,900	2,600	6,735	.916	12.44

Potato Creek near Thomaston, Ga.

Location.- Water-stage recorder, lat. 32°54'15", long. 84°21'45", 300 feet downstream from State Highway 74 and Basin Creek, 1,000 downstream from Central of Georgia Railroad, 1 mile downstream from Ten Mile Creek, and 2½ miles northwest of Thomaston, Upson County.

Drainage area.- 186 square miles.

Records available.- July to September 1938.

Extremes.- Maximum discharge during period, 1,190 second-feet July 23 (gage height, 4.55 feet); minimum, 9.4 second-feet Sept. 21 (gage height, 2.44 feet).

Remarks.- Records good except those for period of missing gage heights, Aug. 19-30, which were computed on basis of records for Tobesofkee Creek near Macon and Sweetwater Creek near Austell and are fair. Some regulation caused by diversion of water for municipal and industrial supply at Thomaston.

Rating table, July 23 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

2.4	7	3.0	97	4.0	690
2.6	22	3.3	206	4.5	1,145
2.8	51	3.6	378	5.0	1,640

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										-	109	37
2										-	141	65
3										-	174	54
4										-	248	47
5										-	163	163
6										-	137	121
7										-	150	106
8										-	142	84
9										-	143	65
10										-	154	49
11										-	116	42
12										-	86	47
13										-	75	35
14										-	101	45
15										-	98	41
16										-	162	36
17										-	111	32
18										-	86	22
19										-	74	31
20										-	62	26
21										-	56	17.8
22										-	50	17.0
23										608	46	24
24										667	42	25
25										702	38	19.0
26										488	37	24
27										298	40	26
28										200	50	24
29										151	140	26
30										129	60	38
31										103	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October						
November						
December						
Calendar year						
January						
February						
March						
April						
May						
June						
July 23-31	3,346	702	103	372	2.00	0.67
August	3,151	248	37	102	.548	.63
September	1,388.8	163	17.0	46.3	.249	.28
Water year						

Ichawaynochaway Creek near Newton, Ga.

Location.- Wire-weight gage, lat. 31°15', long. 84°27', at bridge on State Highway 91, about 5 miles upstream from mouth and 12 miles southwest of Newton, Baker County.

Drainage area.- 1,040 square miles.

Records available.- August 1937 to September 1938. October 1920 to June 1921 at site 2 miles upstream.

Extremes.- Maximum discharge observed during period August to September 1937, 1,360 second-feet Aug. 17 (gage height, 4.13 feet); minimum daily discharge, 474 second-feet Sept. 28-30; minimum gage height, 1.89 feet Sept. 29.
Maximum discharge observed during water year 1937-38, 2,450 second-feet Nov. 15; maximum gage height observed, 9.20 feet Apr. 15 (caused by backwater); minimum daily discharge, 245 second-feet Sept. 24-27; minimum gage height, 1.13 feet Sept. 26-27.

Remarks.- Records fair. Discharge for periods of missing or doubtful gage heights, Oct. 10 to Nov. 1, Apr. 30, computed on basis of records for Spring Creek near Iron City. Discharge for period of backwater, Apr. 11-18, computed on basis of one discharge measurement. Gage read twice daily.

Rating table, Aug. 10, 1937 to Sept. 30, 1938, except period of backwater (gage height, in feet, and discharge, in second-feet)

1.0	200	3.0	860	5.0	1,810
1.5	350	3.5	1,075	6.0	2,340
2.0	505	4.0	1,310	7.0	2,900
2.5	670				

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1											-	985
2											-	1,120
3											-	1,260
4											-	1,310
5											-	1,310
6											-	1,210
7											-	1,120
8											-	1,030
9											-	940
10											505	820
11											571	780
12											604	740
13											571	705
14											604	670
15											820	637
16											1,160	604
17											1,360	538
18											1,310	538
19											1,030	538
20											900	571
21											820	604
22											780	604
23											740	604
24											820	571
25											900	538
26											1,080	538
27											985	505
28											1,030	474
29											1,080	474
30											1,080	474
31											940	-

Discharge, in second-feet, of Ichawaynochaway Creek near Newton, Ga., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	474	790	1,120	985	900	820	670	670	860	900	1,160	305
2	505	740	1,120	985	940	780	670	670	900	705	940	290
3	571	705	1,080	940	985	740	860	637	820	637	860	290
4	604	670	985	940	985	705	940	604	705	571	860	290
5	637	670	985	940	940	705	985	604	780	505	900	290
6	604	637	985	940	900	670	985	571	820	443	860	305
7	571	637	940	940	860	670	940	604	780	396	820	320
8	571	604	940	985	860	670	985	604	780	381	740	335
9	538	604	985	1,030	820	670	1,410	604	705	350	705	335
10	520	604	985	1,030	820	670	1,710	604	670	335	705	350
11	500	637	1,030	1,030	820	670	1,810	571	604	320	670	350
12	480	780	1,080	985	780	637	1,760	571	571	320	637	381
13	470	1,210	1,120	985	780	737	1,610	538	505	320	604	381
14	460	1,710	1,120	985	780	637	1,410	505	505	350	571	396
15	440	2,400	1,080	940	780	637	1,360	474	505	381	505	396
16	440	2,340	1,030	940	740	670	1,260	474	474	443	474	381
17	450	2,060	985	900	740	820	1,160	443	443	474	443	350
18	500	1,860	985	900	740	985	1,080	443	443	538	443	320
19	580	1,710	985	900	740	1,160	985	443	443	538	396	320
20	700	1,610	985	860	740	1,310	900	412	412	505	381	320
21	800	1,560	985	860	780	1,310	940	366	412	474	350	290
22	940	1,510	985	860	780	1,260	985	335	412	505	350	275
23	1,060	1,510	940	860	780	1,120	1,030	335	443	604	350	260
24	1,070	1,460	1,030	900	820	1,030	1,080	350	443	705	350	245
25	1,050	1,360	1,080	940	860	940	1,160	381	443	780	335	245
26	1,020	1,310	1,160	940	860	940	1,210	412	443	820	320	245
27	970	1,260	1,210	900	860	860	1,080	443	443	900	290	245
28	930	1,210	1,260	900	860	820	940	443	505	985	275	320
29	880	1,160	1,160	900	-	780	820	474	705	1,160	260	412
30	840	1,160	1,120	900	-	740	780	505	900	1,260	275	571
31	810	-	1,080	860	-	670	-	705	-	1,310	305	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
August 10-31, 1937	19,690	1,360	505	895	0.861	0.70
September	22,812	1,310	474	760	.731	.82
October	20,985	1,070	440	677	.651	.75
November	36,478	2,400	604	1,216	1.17	1.30
December	32,535	1,260	940	1,050	1.01	1.16
January 1938	28,960	1,030	860	934	.898	1.04
February	23,250	985	740	830	.798	.83
March	25,733	1,310	637	830	.798	.92
April	33,515	1,810	670	1,117	1.07	1.19
May	15,795	705	335	510	.490	.56
June	17,874	900	412	596	.573	.64
July	18,915	1,310	320	610	.587	.68
August	17,134	1,160	260	553	.532	.61
September	9,813	571	245	327	.314	.35
Water year 1937-38	280,987	2,400	245	770	.740	10.03

Spring Creek near Iron City, Ga.

Location.- Staff gage, lat. 31°03', long. 84°43', at county bridge 1½ miles downstream from Aycock Creek, 1½ miles upstream from Dry Creek, 5 miles north of Brinson, and 5½ miles northeast of Iron City, Seminole County.

Drainage area.- 520 square miles (revised).

Records available.- October 1920 to June 1921, June 1937 to September 1938.

Extremes.- Maximum discharge observed during period June to September 1937, 3,480 second-feet Sept. 4 (gage height, 13.90 feet); minimum, 149 second-feet Aug. 13 (gage height, 3.35 feet).

Maximum discharge observed during water year 1937-38, 3,160 second-feet Nov. 16 (gage height, 13.40 feet); minimum discharge, 30 second-feet Sept. 27, 28 (gage height, 1.63 feet).

1920-21, 1937-38: Maximum discharge, 5,160 second-feet Apr. 20, 1921 (gage height, 14.2 feet, former datum); minimum, that of Sept. 27, 28, 1938.

Remarks.- Records good. Discharge for Sept. 17-19, 1938 interpolated. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.6	28	6.0	428	10.0	1,420
2.0	51	7.0	575	12.0	2,330
3.0	119	8.0	760	14.0	3,550
4.0	200	9.0	1,070		

Discharge, in second-feet, 1937-38

1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									-	209	304	1,460
2									-	200	282	2,330
3									-	191	229	3,160
4									-	182	209	3,410
5									-	165	191	3,100
6									-	173	173	2,560
7									-	191	173	2,040
8									-	209	165	1,620
9									-	219	157	1,460
10									-	209	149	1,320
11									327	191	149	1,070
12									327	182	149	980
13									315	249	149	920
14									282	282	157	830
15									249	249	191	780
16									239	229	282	865
17									239	209	560	575
18									249	200	1,070	515
19									260	209	780	500
20									249	229	575	500
21									239	219	376	515
22									229	200	351	500
23									209	209	351	500
24									200	260	327	470
25									191	327	351	456
26									182	429	442	415
27									165	456	575	389
28									157	442	645	327
29									249	481	665	327
30									229	389	805	304
31									-	304	890	-

Discharge, in second-feet, of Spring Creek near Iron City, Ga., 1937-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	304	315	780	500	351	282	219	304	191	119	605	74
2	315	304	755	456	351	271	219	271	282	112	485	70
3	363	282	730	442	351	260	249	260	304	105	402	70
4	376	271	685	428	339	239	327	249	249	91	327	66
5	389	260	645	415	339	219	456	229	200	84	293	66
6	389	249	605	402	339	209	530	229	173	77	271	60
7	389	239	575	402	339	209	530	239	157	74	315	60
8	363	229	545	402	327	200	530	239	165	70	315	60
9	327	219	545	389	315	200	605	239	173	66	271	57
10	304	209	545	389	304	200	1,070	229	173	63	229	57
11	282	219	530	402	293	191	1,780	209	165	77	200	57
12	260	363	530	415	282	191	1,540	200	157	70	182	57
13	249	645	530	428	271	182	1,210	182	157	70	165	57
14	239	1,380	530	415	271	173	950	173	149	70	157	54
15	229	2,800	515	402	260	173	755	165	133	70	149	51
16	219	3,040	515	376	249	182	605	157	119	74	141	51
17	209	2,330	515	363	239	282	530	149	105	77	133	49
18	219	2,030	500	363	239	327	470	149	105	80	119	47
19	282	1,780	485	363	239	389	428	141	98	84	112	44
20	363	1,660	470	351	239	428	402	133	98	91	105	42
21	428	1,500	456	351	229	456	402	133	98	88	98	39
22	515	1,460	456	339	229	470	456	126	98	91	91	37
23	545	1,380	470	339	239	428	470	119	112	112	84	35
24	545	1,320	485	327	260	376	485	119	105	133	80	34
25	530	1,210	485	327	271	327	500	112	112	157	80	33
26	485	1,140	485	351	271	304	500	119	105	191	77	32
27	428	1,070	515	376	271	293	485	126	105	219	70	30
28	389	980	545	33	271	271	428	126	119	249	74	30
29	363	950	590	363	-	260	376	126	119	282	70	35
30	339	830	575	351	-	239	339	133	119	376	70	48
31	327	-	545	351	-	229	-	133	-	5?5	70	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 11-30, 1937	4,786	327	157	239	0.460	0.34
July	7,896	485	165	255	.490	.56
August	11,872	1,070	149	383	.737	.85
September	33,998	3,410	304	1,133	2.18	2.43
October	10,964	545	209	354	.681	.79
November	30,664	3,040	240	1,022	1.97	2.20
December	17,137	780	456	553	1.06	1.22
January 1938	11,941	500	327	385	.740	.85
February	7,978	351	229	285	.548	.57
March	8,460	470	173	273	.525	.61
April	17,846	1,780	219	595	1.14	1.27
May	5,518	304	112	178	.342	.39
June	4,445	304	98	148	.285	.32
July	4,037	515	63	130	.250	.29
August	5,840	605	70	188	.362	.42
September	1,502	74	30	50	.096	.11
Water year 1937-38	126,332	3,040	30	346	.665	9.04

Mosquito Creek at Chattahoochee, Fla.

Location.- Water-stage recorder, lat. 30°43', long. 84°49', in sec. 34, T. 3 N., R. 6 W., at Chattahoochee, 500 feet upstream from bridge on U. S. Highway 90 and 600 feet downstream from pumping plant and dam.
Drainage area.- 60 square miles (revised).
Records available.- March 1936 to September 1938.
Extremes.- Maximum discharge during year, 296 second-feet Mar. 18 (gage height, 5.33 feet); minimum daily discharge, 1.5 second-feet July 3.
1936-38: Maximum discharge, 1,310 second-feet Sept. 1, 1937 (gage height, 11.54 feet); minimum daily discharge, 0.4 second-foot Oct. 7, Nov. 8, 1936.
Remarks.- Records good above 40 second-feet and poor below. Marked diurnal regulation from pumping plant 600 feet upstream. Amount of water diverted at dam for supply of Florida State Hospital has not been measured but is estimated to be between one and two million gallons a day. It is believed that the loss of water from reservoir by seepage underground accounts for low run-off from this drainage area.
Revisions.- Figure of discharge for Jan. 1, 1937, has been revised to 28 second-feet, and that of monthly mean discharge for January 1937 to 35.8 second-feet, superseding figures published in Water-Supply Paper 822. Figures of monthly discharge in second-feet per square mile and run-off depth in inches for period April 1936 to September 1937 have been revised on basis of revised figure for drainage area and supersede those published in Water-Supply Papers 802 and 822.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.1	0.5	1.6	11	4.0	160
1.2	.7	2.0	28	5.0	260
1.3	1.9	2.5	56	5.3	296
1.4	4.5	3.0	87		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	38	65	26	84	47	30	62	38	20	77	4.0
2	53	36	44	53	87	47	13	59	38	13	74	36
3	77	57	44	80	80	31	29	22	6.0	1.5	41	47
4	80	56	5.7	80	47	21	41	11	25	13	68	22
5	84	15	62	68	47	44	19	16	36	18	30	6.9
6	80	33	59	50	47	44	24	15	17	9.2	17	16
7	71	10	50	50	68	44	26	22	26	3.2	56	4.8
8	59	29	47	47	38	44	56	3.7	6.6	1.7	77	28
9	44	38	47	50	28	44	101	41	17	1.7	65	4.8
10	44	26	47	47	44	44	143	41	36	9.2	77	24
11	44	87	50	41	47	44	59	18	1.9	19	41	6.9
12	44	136	50	27	47	20	44	1.9	22	1.9	44	12
13	44	160	50	62	12	19	41	8.6	29	4.2	5.4	8.2
14	41	90	50	47	38	44	41	77	18	4.5	29	3.5
15	44	71	38	50	41	41	38	17	36	4.0	21	11
16	44	56	26	50	44	62	8.6	6.6	1.7	14	12	11
17	24	71	44	44	44	143	24	1.9	1.8	16	36	9.2
18	33	74	65	44	24	248	32	16	1.9	24	16	17
19	101	71	71	44	44	115	26	8.6	1.7	11	13	10
20	188	74	74	44	44	68	23	18	11	17	3.7	65
21	108	56	44	44	44	68	41	1.7	38	21	3.7	47
22	68	41	44	44	44	65	65	20	50	41	11	13
23	44	47	53	47	47	44	77	23	41	38	4.2	13
24	65	44	47	50	53	47	44	21	30	56	26	12
25	56	47	77	84	101	59	36	26	9.2	62	12	15
26	44	56	74	101	84	38	23	23	17	74	20	24
27	36	44	53	80	47	2.4	30	4.0	50	87	16	10
28	33	56	44	56	14	30	26	21	65	87	4.5	18
29	38	56	44	44	-	41	17	15	71	71	7.5	47
30	38	65	44	13	-	41	17	2.4	41	65	15	101
31	38	-	18	59	-	44	-	30	-	59	18	-

Peak discharge.- March 18 (10 a.m.) 296 sec.-ft.

202922 O—40—16

Monthly discharge, in second-feet, of Mosquito Creek at Chattahoochee, Fla., 1936-38

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
April 1936	2,531.9	312	8.9	84.4	1.41	1.57
May	538.3	54	1.2	17.4	.290	.33
June	685.4	64	1.1	22.8	.380	.42
July	756.9	88	.8	24.4	.407	.47
August	2,824.4	327	8.4	91.1	1.52	1.75
September	926.7	48	1.3	30.9	.515	.57
Water year						
October 1936	1,467.6	248	.4	47.3	.788	.91
November	437.5	41	.4	14.6	.243	.27
December	1,289	108	16	41.6	.693	.80
Calendar year						
January 1937	1,109.5	84	2.7	35.8	.597	.69
February	1,797	160	3.0	64.2	1.07	1.11
March	2,101.8	238	2.8	67.8	1.13	1.30
April	4,028	492	53	134	2.23	2.49
May	2,978	344	19	92.8	1.55	1.79
June	1,726.9	332	4.6	57.6	.960	1.07
July	1,463.8	198	1.8	47.2	.787	.91
August	1,791	272	11	57.8	.963	1.11
September	4,852	1,160	41	162	2.70	3.01
Water year 1936-37	24,915.0	1,160	.4	68.3	1.14	15.46
October 1937	1,811	188	24	58.4	.973	1.12
November	1,740	160	10	58.0	.967	1.08
December	1,530.7	77	5.7	49.4	.823	.95
Calendar year 1937	26,829.7	1,160	2.7	73.5	1.23	16.63
January 1938	1,626	101	13	52.5	.875	1.01
February	1,389	101	12	49.6	.827	.86
March	1,693.4	248	2.4	54.6	.910	1.05
April	1,194.6	143	8.6	39.8	.663	.74
May	653.4	77	1.7	21.1	.352	.41
June	782.8	71	1.7	26.1	.435	.49
July	867.1	87	1.5	28.0	.467	.54
August	941.0	77	3.7	30.4	.507	.58
September	647.3	101	3.5	21.6	.360	.40
Water year 1937-38	14,876.3	248	1.5	40.8	.680	9.23

Econfina Creek near Bennett, Fla.

Location.- Staff gage, lat. 30°27', long. 85°33', in sec. 20, T. 1 S., R. 13 W., at county highway bridge, 1.5 miles southwest of Bennett.

Drainage area.- 150 square miles.

Records available.- November 1935 to September 1938.

Extremes.- Maximum discharge observed during year, 1,020 second-feet Nov. 13 (gage height 8.02 feet); minimum observed, 380 second-feet July 7-14; minimum gage height observed, 4.62 feet June 18.

1935-38: Maximum discharge observed, 2,950 second-feet Sept. 2, 1937 (gage height, 11.00 feet), from rating curve extended above 1,100 second-feet; minimum observed, 380 second-feet Nov. 11, 12, 23-26, 1935, June 26 to July 5, July 7, 8, 1936, July 7-14, 1938; minimum gage height observed, that of June 18, 1938.

Maximum stage known, 15.0 feet, from floodmarks (discharge not determined), date uncertain but probably sometime in March 1929.

Remarks.- Records excellent. Gage read once daily. Inclusion in discharge of large inflow of ground water results in excessive rate of run-off per square mile as based on surface-drainage area.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 11 to June 26)

4.6	368	6.0	562	7.5	874
5.0	413	6.5	648	8.0	1,020
5.5	486	7.0	752		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	530	472	515	472	458	418	405	418	444	418	486	418
2	562	472	515	486	458	418	405	418	418	405	486	418
3	578	472	500	515	458	418	405	405	418	405	486	418
4	562	472	500	515	444	418	392	405	405	392	472	472
5	546	472	500	486	444	418	392	405	405	392	444	530
6	546	472	515	486	431	418	392	431	405	392	431	486
7	530	458	515	486	431	418	405	444	405	380	444	500
8	515	458	500	486	431	418	405	444	418	380	546	546
9	515	472	515	472	431	418	515	500	444	380	630	486
10	515	546	515	458	418	418	530	472	515	380	578	472
11	515	930	500	458	418	405	458	444	472	380	515	444
12	500	990	500	472	418	405	431	418	458	380	472	431
13	500	960	486	486	418	405	418	418	431	380	444	431
14	500	730	486	486	418	405	418	418	418	380	472	431
15	500	595	486	472	418	405	418	418	405	392	486	431
16	486	595	486	458	418	405	418	405	392	458	458	458
17	486	798	500	458	418	612	418	405	392	405	444	431
18	500	688	562	458	418	688	418	405	392	392	444	431
19	578	630	562	458	444	562	418	405	405	405	431	418
20	668	612	515	458	472	458	418	405	458	418	418	418
21	688	595	500	458	458	444	418	405	486	486	418	405
22	578	578	486	458	431	431	472	392	562	444	418	405
23	530	546	500	444	431	418	500	392	472	486	418	405
24	515	546	612	458	530	418	458	392	418	546	418	405
25	515	530	595	500	500	431	444	418	405	515	418	405
26	500	546	530	486	458	418	418	418	486	530	418	418
27	530	546	500	444	431	405	418	418	648	648	458	418
28	500	546	486	444	418	405	418	431	578	708	458	418
29	500	546	486	444	-	405	431	418	530	595	444	431
30	472	515	472	444	-	405	418	418	458	562	418	444
31	472	-	472	444	-	405	-	405	-	530	418	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16,432	688	472	530	3.53	4.07
November	17,788	990	458	593	3.95	4.41
December	15,812	612	472	510	3.40	3.92
Calendar year 1937	205,377	2,950	444	563	3.75	50.91
January	14,550	515	444	469	3.13	3.61
February	12,321	530	418	440	2.93	3.05
March	13,515	688	405	436	2.91	3.36
April	12,874	515	392	429	2.86	3.19
May	12,990	500	392	419	2.79	3.22
June	13,543	648	392	451	3.01	3.36
July	13,964	708	380	450	3.00	3.46
August	14,291	630	418	461	3.07	3.54
September	13,224	546	405	441	2.94	3.28
Water year 1937-38	171,304	990	380	469	3.13	42.47

Choctawhatchee River near Newton, Ala.

Location.- Water-stage recorder, lat. 31°21', long. 85°37', in T. 4 N., R. 24 E., at bridge on U. S. Highway 231, 1,500 feet upstream from Hurricane Creek, 0.8 mile north of Newton, and 1 mile downstream from Atlantic Coast Line Railroad bridge. Prior to Sept. 8, 1938, wire-weight gage at same site and datum.

Drainage area.- 693 square miles.

Records available.- May 1935 to September 1938. June 1906 to August 1908 and October 1911 to August 1912 at site 260 feet upstream. November 1921 to September 1927 at site 800 feet upstream.

Extremes.- Maximum discharge during year, 9,650 second-feet Nov. 14 (gage height, 20.1 feet, from graph based on gage readings); minimum discharge observed, 147 second-feet July 8, 9, Sept. 25; minimum gage height observed, 2.28 feet July 8.
1906-8, 1911-12, 1921-27, 1935-38: Maximum discharge, 25,800 second-feet Jan. 20, 1936 (gage height, 29.5 feet, from graph based on gage readings); minimum discharge observed, 52 second-feet June 4, 1937 (gage height, 1.40 feet), caused by temporary regulation; minimum daily discharge, 104 second-feet June 4, 1937.
Maximum stage known, about 45 feet Mar. 15, 1929, present datum (discharge not determined).

Remarks.- Records good. Gage read twice daily or oftener prior to installation of water-stage recorder. Some regulation from operation of small gristmills upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.3	147	3.6	630	9.0	3,720
2.6	227	4.0	840	13.0	5,870
3.0	374	5.0	1,420	17.3	8,110

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	455	562	1,190	960	900	730	630	630	497	354	1,360	335
2	585	497	1,070	900	840	630	1,360	562	476	297	2,170	316
3	730	476	1,070	1,010	790	630	1,240	518	414	244	2,560	335
4	730	434	1,010	1,010	730	565	1,130	497	335	197	1,710	279
5	680	414	840	960	730	585	1,130	497	316	197	1,300	279
6	630	414	960	960	680	585	960	680	279	184	1,010	497
7	630	414	1,070	1,240	680	562	1,190	730	244	159	1,010	476
8	497	394	1,530	1,190	680	540	2,920	630	279	147	1,530	414
9	455	414	1,650	1,190	680	540	4,280	630	394	147	3,490	394
10	455	414	1,590	1,130	680	518	3,360	630	316	197	2,860	394
11	434	2,030	1,360	1,010	630	518	2,290	497	279	335	1,820	335
12	455	4,110	1,240	960	630	518	1,770	455	297	394	1,240	354
13	434	7,900	1,070	960	630	497	1,300	414	354	630	900	374
14	414	7,800	1,070	900	585	476	1,130	394	316	476	680	394
15	414	3,380	960	840	585	497	1,010	434	227	518	630	454
16	414	2,580	900	790	585	1,480	1,240	394	212	455	562	414
17	434	2,230	900	790	585	6,390	790	394	184	414	680	394
18	603	1,770	900	790	585	5,030	730	316	171	354	900	354
19	1,130	1,710	840	790	840	3,090	730	316	159	497	730	335
20	1,240	1,770	840	790	900	2,350	840	297	164	680	540	261
21	1,070	1,590	790	790	790	1,880	1,940	297	244	840	516	261
22	900	1,480	790	790	730	1,530	2,520	261	244	1,480	394	227
23	640	1,360	1,190	790	1,010	1,420	3,090	261	261	1,860	394	227
24	730	1,240	1,650	960	1,360	1,240	2,580	244	212	1,530	354	197
25	562	1,130	1,590	1,130	1,240	1,190	1,770	576	244	1,820	335	197
26	476	1,130	1,590	1,130	1,070	1,070	1,300	680	497	4,610	279	197
27	518	1,190	1,360	1,010	900	960	1,070	730	900	7,750	261	670
28	630	1,190	1,240	900	340	840	840	730	960	8,110	585	540
29	730	1,130	1,130	730	-	790	730	680	585	4,440	414	497
30	680	1,070	960	790	-	680	680	455	455	2,170	374	454
31	630	-	900	790	-	630	-	497	-	1,650	316	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	19,585	1,240	414	632	0.912	1.05
November	52,223	7,900	394	1,741	2.51	2.80
December	35,250	1,650	790	1,137	1.64	1.89
Calendar year 1937	441,084	13,800	104	1,208	1.74	23.67
January	28,980	1,240	730	935	1.35	1.56
February	21,885	1,360	585	782	1.13	1.18
March	36,981	6,390	476	1,257	1.81	2.09
April	46,570	4,280	630	1,552	2.24	2.50
May	15,326	730	244	494	.713	.82
June	10,535	960	159	351	.506	.56
July	43,156	8,110	147	1,392	2.01	2.32
August	31,926	3,490	261	1,030	1.49	1.72
September	10,815	670	197	360	.519	.58
Water year 1937-38	355,232	8,110	147	973	1.40	19.07

Choctawhatchee River at Caryville, Fla.

Location.- Water-stage recorder, lat. 30°47', long. 85°50', in sec. 10, T. 4 N., R. 16 W., at bridge on U. S. Highway 90, 300 feet downstream from Louisville & Nashville Railroad bridge and three-quarters of a mile west of Caryville. Zero of gage is 39.00 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 3,490 square miles.

Records available.- August 1929 to September 1938.

Extremes.- Maximum discharge during year, 30,100 second-feet Mar. 21, 22; maximum gage height, 13.03 feet Mar. 22; minimum discharge, 1,340 second-feet Sept. 26 (gage height, 1.21 feet).

1929-38: Maximum discharge, 56,600 second-feet Sept. 4, 1937 (gage height, 15.55 feet); minimum, 865 second-feet Oct. 28, 1931; minimum gage height, -0.27 foot June 30, 1935.

Maximum stage known, 27.1 feet Mar. 17, 1929, from U. S. Weather Bureau records and floodmarks (discharge, 206,000 second-feet, by slope-area method).

Remarks.- Records excellent.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.2	1,340	6.0	4,220	11.0	16,000
2.0	1,680	7.0	5,250	12.0	21,800
3.0	2,190	8.0	6,700	13.0	30,100
4.0	2,750	9.0	8,800		
5.0	3,410	10.0	11,800		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,480	3,870	6,060	5,380	4,600	4,700	5,510	4,810	3,790	2,810	18,300	2,190
2	3,480	3,640	5,770	5,140	4,810	4,310	5,380	4,310	3,480	2,360	14,200	2,080
3	3,710	3,480	5,380	5,140	4,700	4,040	6,740	3,960	3,200	2,080	11,100	2,080
4	4,220	3,340	5,140	5,380	4,500	3,790	8,100	3,640	3,140	1,920	9,900	2,080
5	4,810	3,140	4,920	5,510	4,220	3,710	8,560	3,480	2,940	1,770	10,200	1,970
6	5,380	3,000	4,920	5,510	4,130	3,710	7,780	3,560	2,580	1,680	9,600	1,970
7	5,250	2,940	5,140	5,380	4,040	3,640	6,700	4,040	2,360	1,890	8,100	2,240
8	4,600	2,880	5,380	5,770	3,960	3,560	6,540	4,500	2,410	1,800	7,060	2,460
9	4,040	2,880	5,250	6,380	3,870	3,410	8,130	5,140	2,750	1,420	7,260	2,300
10	3,710	2,880	5,380	6,700	3,790	3,340	11,400	5,510	3,140	1,420	7,660	2,080
11	3,870	3,860	6,060	6,880	3,710	3,270	15,100	5,140	3,340	1,890	7,880	2,240
12	4,040	6,690	6,540	6,540	3,640	3,200	17,200	4,400	3,070	2,440	7,880	2,460
13	3,710	10,200	6,380	6,220	3,560	3,140	17,700	3,640	2,580	3,140	7,260	2,140
14	3,410	13,300	6,060	5,900	3,480	3,070	17,200	3,270	2,300	3,200	5,860	1,970
15	3,270	16,000	5,770	5,640	3,410	3,000	15,100	3,070	2,140	3,070	5,030	1,820
16	3,200	19,500	5,510	5,380	3,410	3,360	12,000	3,000	1,970	2,750	4,400	2,080
17	3,140	19,500	5,250	5,030	3,410	5,560	8,850	2,940	1,770	2,880	3,960	2,520
18	3,140	17,700	5,140	4,810	3,340	9,000	6,470	2,750	1,640	3,070	3,640	2,360
19	4,380	15,100	5,030	4,700	3,640	13,700	5,510	2,580	1,540	2,940	3,640	2,140
20	6,090	13,300	5,030	4,700	4,500	22,000	5,030	2,460	1,590	3,140	3,480	1,970
21	7,660	11,100	4,810	4,600	5,250	29,200	4,920	2,410	1,920	3,270	3,140	1,640
22	8,800	10,200	4,600	4,500	5,380	30,100	4,810	2,300	2,190	4,280	2,810	1,590
23	8,560	9,060	4,700	4,400	5,030	27,400	7,460	2,190	2,190	5,250	2,630	1,500
24	7,260	8,100	5,380	4,400	5,140	23,600	9,060	2,140	1,920	5,770	2,410	1,420
25	5,780	7,260	6,700	4,700	6,060	19,500	10,200	2,190	1,770	6,380	2,240	1,420
26	4,920	6,700	7,880	5,250	6,700	15,400	9,900	2,880	1,820	6,540	2,140	1,340
27	4,500	6,540	7,880	5,770	6,060	11,800	9,060	3,640	2,560	7,060	2,020	1,420
28	4,310	6,700	7,460	5,510	5,250	10,500	7,880	3,640	3,480	9,380	1,970	1,880
29	4,310	6,700	6,700	5,030	-	7,660	6,550	3,410	3,710	13,800	1,920	2,520
30	4,220	6,380	6,060	4,600	-	6,700	5,380	3,790	3,410	21,200	2,240	2,240
31	4,040	-	5,640	4,500	-	6,060	-	4,220	-	21,800	2,240	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	145,290	8,800	3,140	4,687	1.34	1.54
November	245,940	19,500	2,880	8,198	2.35	2.62
December	177,920	7,880	4,600	5,739	1.64	1.89
Calendar year 1937	2,596,630	55,500	1,870	7,114	2.04	27.64
January	165,350	6,880	4,400	5,334	1.53	1.76
February	123,590	6,700	3,340	4,414	1.26	1.31
March	295,450	30,100	3,000	9,531	2.73	3.15
April	270,220	17,700	4,810	9,007	2.58	2.88
May	109,010	5,510	2,140	3,516	1.01	1.16
June	76,700	3,790	1,540	2,557	.733	.82
July	151,500	21,800	1,420	4,887	1.40	1.61
August	182,170	18,300	1,920	5,876	1.68	1.94
September	59,920	2,520	1,340	1,997	.572	.64
Water year 1937-38	2,003,060	30,100	1,340	5,488	1.57	21.31

Choctawhatchee River near Bruce, Fla.

Location.- Water-stage recorder, lat. 30°27', long. 85°54', in sec. 36, T. 1 N., R. 17 W., at bridge on State Highway 10, about 5 miles southeast of Bruce. Zero of gage is 3.94 feet above mean sea level (general adjustment of 1929).

Drainage area.- 4,580 square miles.

Records available.- October 1930 to September 1938.

Extremes.- Maximum discharge during year, 30,900 second-feet Mar. 24 (gage height, 11.78 feet); minimum, 2,260 second-feet Sept. 26-28; minimum gage height, 1.27 feet Sept. 27, 28.

1930-38: Maximum discharge, 70,200 second-feet Sept. 5, 6, 1937, from rating curve extended above 47,000 second-feet; maximum gage height, 16.04 feet Sept. 6, 1937; minimum discharge observed, 1,680 second-feet Nov. 10-13, 1931; minimum gage height, 0.42 foot July 1, 1935.

Maximum stage known, 25.0 feet in March 1929, from floodmarks (discharge, 220,000 second-feet, from rating curve extended above 47,000 second-feet on basis of computation for station at Caryville).

Remarks.- Records excellent except those for periods of missing gage heights and those for October and July, all of which are good.

Rating table, water year, 1937-38 (gage height, in feet, and discharge, in second-feet)

1.3	2,260	5.0	5,620	10.0	20,100
2.0	2,720	6.0	7,400	11.0	25,700
3.0	3,450	7.0	9,640	11.8	30,900
4.0	4,340	8.0	12,300		
4.5	4,930	9.0	15,600		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,330	5,790	8,900	*9,000	*6,200	7,800	10,200	9,640	4,450	4,130	17,600	*3,200
2	5,190	5,620	8,660	†8,660	*6,400	7,800	8,900	8,660	4,570	4,130	21,600	*3,200
3	5,060	5,330	8,440	8,000	*6,600	7,600	8,220	7,600	4,690	3,770	20,600	*3,100
4	5,060	5,060	8,220	7,600	*6,400	7,020	7,600	6,830	4,450	3,290	17,600	*3,000
5	5,060	4,810	8,000	7,400	6,130	6,470	7,400	6,130	4,230	3,000	15,000	3,000
6	5,190	4,690	7,600	7,210	5,960	5,960	7,800	5,470	4,030	2,790	12,900	3,000
7	5,470	4,450	7,400	7,210	5,960	5,470	8,660	5,060	3,850	2,650	11,800	3,070
8	5,790	4,230	7,210	7,210	5,620	5,330	9,640	5,060	3,610	2,520	11,800	3,140
9	6,130	4,130	7,020	7,210	5,470	5,190	9,900	5,190	3,450	2,450	11,200	3,290
10	6,300	4,150	6,830	7,210	5,330	5,060	9,900	5,190	3,610	2,320	10,700	3,290
11	6,300	5,730	6,830	7,400	5,190	4,930	9,900	5,470	3,770	2,380	9,900	3,070
12	5,960	6,830	6,830	7,600	5,060	4,810	11,200	5,620	3,940	2,520	9,380	3,000
13	5,620	7,400	*7,200	8,000	4,930	4,690	14,600	5,960	4,030	2,860	9,140	3,140
14	5,330	8,220	*7,400	8,220	4,810	4,570	17,600	5,960	3,940	3,290	8,900	3,070
15	5,190	9,640	*7,700	8,220	4,690	4,340	19,100	5,620	3,610	3,610	8,900	2,860
16	4,930	12,800	*7,800	8,220	4,690	4,450	19,100	5,060	3,290	3,690	8,660	2,790
17	4,690	16,800	*7,600	8,000	4,570	5,060	17,200	4,570	3,070	3,690	8,000	2,790
18	4,570	20,600	*7,500	7,600	4,570	5,620	15,300	4,230	2,860	3,610	7,020	3,070
19	4,690	22,800	†7,400	7,400	4,690	6,650	12,900	4,030	2,720	3,610	6,300	3,140
20	4,930	21,600	*7,200	7,020	4,810	7,800	10,900	3,770	2,720	*3,700	5,470	3,000
21	5,470	19,600	*7,000	6,650	5,060	10,300	9,380	3,610	2,720	*3,900	4,930	2,790
22	6,130	17,200	*6,800	6,470	6,330	18,200	8,220	3,450	2,860	4,230	4,570	2,580
23	6,830	15,600	*6,700	6,300	5,790	27,200	7,400	3,290	3,000	4,450	4,230	2,450
24	7,800	14,200	*6,600	6,300	6,470	30,200	7,020	3,210	3,070	4,690	3,940	2,380
25	8,900	12,900	*6,500	6,300	6,830	29,500	7,210	3,140	3,000	5,060	3,610	2,320
26	9,380	12,000	†7,020	*6,500	7,210	26,900	8,000	3,290	2,860	5,620	3,370	2,320
27	9,140	11,200	*7,600	*7,000	7,400	22,800	9,380	3,530	2,790	6,300	3,140	2,260
28	8,440	10,400	*8,300	*7,300	7,800	19,100	10,400	3,940	3,290	7,020	*2,900	2,260
29	7,600	9,640	*9,000	*7,400	-	16,000	10,700	4,230	3,770	7,800	*2,800	*2,600
30	6,830	9,140	*9,100	*7,000	-	13,600	10,400	4,450	4,030	8,660	*3,000	2,860
31	6,300	-	*9,100	*6,500	-	11,500	-	4,450	-	11,400	*3,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	189,610	9,380	4,570	6,116	1.34	1.54
November	312,560	22,800	4,130	10,420	2.28	2.54
December	235,460	9,100	6,500	7,595	1.66	1.91
Calendar year 1937	3,437,370	70,200	3,060	9,417	2.06	27.93
January	228,110	9,000	6,300	7,358	1.61	1.86
February	159,970	7,800	4,570	5,713	1.25	1.30
March	341,920	30,200	4,540	11,030	2.41	2.78
April	324,130	19,100	7,020	10,800	2.36	2.63
May	155,710	9,640	3,140	5,023	1.10	1.27
June	106,280	4,690	2,720	3,543	.774	.86
July	133,140	11,400	2,320	4,295	.938	1.08
August	272,160	21,600	2,800	8,779	1.92	2.21
September	86,040	3,290	2,260	2,868	.626	.70
Water year 1937-38	2,545,090	30,200	2,260	6,973	1.52	20.68

*Gage height missing; discharge computed on basis of recorded range in stage and records for station at Caryville.
†Gage height missing; discharge computed from staff gage reading.

Pea River at Elba, Ala.

Location.- Staff gage, lat. 31°24', long. 86°04', in SE¼ sec. 8, T. 5 N., R. 20 E., at bridge on U. S. Highway 84, 500 feet downstream from Whitewater Creek and half a mile upstream from Beaver Dam Creek and Atlantic Coast Line Railroad bridge.

Drainage area.- 952 square miles.

Records available.- May 1935 to September 1938. June to December 1906 (gage heights only) at site half a mile downstream. Records of gage heights since January 1931 published in reports of U. S. Weather Bureau.

Extremes.- Maximum discharge during year, 35,000 second-feet Mar. 17 (gage height, 35.0 feet); minimum gage height observed, 0.60 feet June 15.

1935-38: Maximum discharge, that of Mar. 17, 1938; minimum gage height observed, that of June 15, 1938.

Maximum stage known, 43.5 feet, present site and datum, March 1929, from reports of U. S. Weather Bureau (discharge not determined).

Remarks.- Discharge below 3,530 second-feet (gage height, 8.0 feet) Oct. 1 to June 15 and below 3,400 second-feet (gage height, 10.0 feet) June 16 to Sept. 30 not determined due to variable stage-discharge relation resulting from operation of power plant at dam 4½ miles downstream. Gage read twice daily.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.27	5.71	6.71	6.89	6.87	3.68	4.60	3.92	3.61	5.90	9.24	4.97
2	4.97	5.61	6.61	7.21	6.77	3.55	5.30	3.68	3.57	5.18	9.46	4.86
3	5.04	5.54	6.51	7.14	6.71	3.30	5.54	3.40	3.82	4.22	9.10	4.71
4	5.99	5.51	6.37	7.19	6.71	3.18	6.08	3.20	3.68	3.80	8.92	4.90
5	5.77	5.34	6.69	7.01	6.59	3.10	5.80	3.18	3.14	3.44	8.16	5.06
6	5.51	5.09	6.94	7.83	6.44	3.05	6.40	4.42	2.82	2.94	7.48	5.24
7	5.01	4.94	6.77	9.32	6.31	3.00	12.03	5.08	2.22	2.48	9.14	5.23
8	4.85	4.88	6.77	8.63	6.19	3.15	13.13	5.88	2.90	2.38	9.91	4.96
9	4.70	4.68	8.09	8.27	6.09	3.02	15.37	5.15	3.25	2.28	9.63	4.86
10	5.47	5.24	7.74	8.09	6.04	2.92	18.72	4.05	2.90	5.22	9.64	4.76
11	5.29	8.01	7.44	7.81	5.97	2.98	14.57	3.48	2.32	4.54	9.49	4.92
12	5.09	11.44	7.41	7.61	5.94	3.05	10.71	3.09	1.98	4.30	8.38	5.04
13	4.97	11.93	7.19	7.47	5.87	2.92	8.91	2.92	1.80	4.22	7.93	4.96
14	4.80	11.35	6.79	7.31	5.79	2.78	5.92	2.92	1.20	4.06	7.74	4.78
15	4.40	10.75	6.89	7.09	5.77	2.88	5.80	2.82	.68	5.01	7.61	5.26
16	4.20	10.07	6.87	6.97	5.29	18.94	6.05	2.54	2.86	6.15	7.30	5.06
17	4.74	9.54	6.81	6.84	4.78	30.25	4.75	2.27	3.12	4.70	6.53	4.86
18	6.47	9.01	6.94	6.69	4.08	20.70	4.44	2.05	3.70	3.80	6.36	4.73
19	8.89	8.01	7.31	6.84	6.01	17.08	4.46	2.02	4.42	4.02	6.30	4.56
20	8.30	8.34	7.09	6.71	5.27	17.88	4.71	1.86	3.82	6.00	6.38	4.38
21	7.79	8.01	6.89	6.61	4.90	14.00	7.26	1.60	4.75	8.15	6.20	4.08
22	7.27	7.41	6.59	6.51	4.42	10.02	8.39	1.43	4.72	9.29	5.90	4.53
23	6.74	7.09	8.09	6.41	5.14	8.71	7.84	1.10	3.84	9.36	5.80	5.00
24	6.57	6.94	8.17	7.87	5.01	7.66	7.91	1.01	3.76	8.57	5.67	4.74
25	6.31	7.19	7.74	7.73	4.58	7.02	7.84	2.18	3.50	8.83	4.96	4.70
26	6.11	7.14	7.69	7.19	4.12	6.54	6.72	2.83	7.04	19.77	4.54	4.56
27	6.19	6.94	7.54	7.07	3.90	6.00	5.50	3.00	7.12	17.56	4.26	4.60
28	5.97	6.81	7.27	6.87	3.78	6.10	4.80	3.06	6.90	10.68	5.14	4.93
29	5.77	6.77	7.17	6.74	-	5.50	4.46	3.66	6.64	9.91	4.97	4.60
30	5.87	6.81	7.07	6.61	-	5.29	4.22	3.61	6.25	9.75	4.84	5.83
31	5.87	-	6.97	6.97	-	4.92	-	3.66	-	9.20	5.06	-

Note.- Gage heights below 8.0 feet Oct. 1 to June 15 and 10.0 feet June 16 to Sept. 30 subject to some inaccuracy due to fluctuation from operation of power plant 4½ miles downstream.

Discharge, in second-feet, water year October 1937 to September 1938

Oct. 5	*800	Nov. 18	3,930	Jan. 9	3,620	Mar. 21	9,340	Apr. 11	10,100
19	3,870	19	3,530	10	3,560	22	4,730	12	5,510
20	3,620	20	3,620	21	*1,240	23	3,770	13	3,890
Nov. 12	6,210	21	3,530	Mar. 15	†634	24	*3,520	May 20	*482
13	6,770	Dec. 8	*1,130	16	15,800	25	*2,900	July 19	*301
14	6,210	9	3,560	17	28,500	Apr. 7	6,980	26	15,100
15	5,550	24	3,590	18	17,500	8	8,210	27	12,200
16	4,830	Jan. 7	4,130	19	13,200	9	11,100	28	4,100
17	4,130	8	3,730	20	14,200	10	15,200	29	*3,360

*Result of discharge measurement.
†Mean of two discharge measurements.

Pea River near Samson, Ala.

Location.- Water-stage recorder, lat. 31°07', long. 86°06', in T. 2 N., R. 19 E., at bridge on State Highway 12, 500 feet downstream from Boyenton Creek, 3 miles west of Samson, and 19 miles upstream from mouth.
Drainage area.- 1,170 square miles.
Records available.- May 1935 to September 1938. August 1904 to August 1913 and June 1922 to October 1925 at site 1½ miles upstream (published as Pea River at Fera, Ala.).
Extremes.- Maximum discharge during year, 23,300 second-feet Mar. 18 (gage height, 35.83 feet); minimum, 181 second-feet Sept. 19 (gage height, 1.19 feet); minimum daily discharge, 257 second-feet Sept. 26.
1904-13, 1922-25, 1935-38: Maximum discharge, 27,800 second-feet Jan. 22, 1936 (gage height, 37.2 feet); minimum discharge observed, 41 second-feet Oct. 26, 1935 (gage height, 0.40 foot).
Maximum stage known, 45.3 feet, present site and datum Mar. 15, 1929, from floodmarks (discharge not determined).
Remarks.- Records good. Daily fluctuations in discharge caused by operation of power plant 25 miles upstream. Gage heights Mar. 26-31, July 26-27 determined from graph drawn on basis of weather records and records for stations on nearby streams.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-3)

Oct. 1 to Nov. 13

3.8	695	8.5	2,000	15.5	4,720
4.5	853	11.5	3,050	17.5	5,720
5.1	1,000	13.5	3,850	18.7	6,350
6.5	1,370	14.5	4,260		

Nov. 14 to Sept. 30

1.6	257	14.0	4,220	27.0	12,400
2.5	440	18.0	6,130	29.0	14,400
4.0	789	21.0	7,850	32.0	17,800
7.0	1,600	23.0	9,200	35.0	21,800
10.0	2,600	25.0	10,700	35.8	23,300

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	695	975	1,630	1,600	1,460	1,180	1,910	1,400	1,150	643	3,010	506
2	853	925	1,540	1,660	1,340	1,100	2,010	1,290	1,040	597	3,440	506
3	925	853	1,480	1,910	1,260	1,020	2,320	1,180	1,230	585	3,440	484
4	1,000	784	1,430	1,880	1,210	993	2,250	1,100	1,040	517	2,460	473
5	1,160	739	1,400	1,810	1,180	967	2,290	1,070	814	398	1,880	473
6	1,030	717	1,630	1,780	1,180	941	2,150	1,400	691	356	1,570	831
7	925	717	1,600	2,720	1,180	941	4,960	1,630	620	349	2,010	620
8	630	739	1,480	3,400	1,150	889	7,180	2,390	597	303	3,280	574
9	761	739	1,920	3,120	1,100	839	8,440	2,150	873	283	2,460	495
10	1,090	864	2,430	2,900	1,070	814	10,000	1,750	1,320	473	2,320	643
11	1,000	4,070	2,110	2,570	1,040	814	12,100	1,370	915	839	1,840	597
12	807	5,160	2,080	2,360	1,040	769	10,600	1,100	715	764	1,660	484
13	830	6,350	1,940	2,220	1,020	739	7,430	967	597	597	1,720	473
14	717	6,760	1,810	2,040	993	764	4,340	915	597	484	1,570	451
15	739	6,670	1,720	1,880	993	739	2,790	967	506	517	1,320	429
16	717	6,020	1,660	1,690	1,020	2,520	2,320	915	398	597	1,070	462
17	761	4,990	1,600	1,540	993	13,000	2,040	839	326	597	1,020	506
18	2,310	3,870	1,630	1,510	993	22,300	1,840	764	326	563	839	473
19	4,140	3,080	1,510	1,510	1,570	20,800	1,750	715	555	563	789	270
20	3,680	3,200	1,430	1,460	2,040	17,900	1,910	691	620	1,040	739	366
21	2,940	2,820	1,370	1,430	1,600	16,200	2,520	643	551	1,540	691	348
22	2,200	2,460	1,320	1,400	1,430	12,200	4,260	620	517	2,160	643	316
23	1,870	2,220	1,550	1,370	1,430	8,200	4,300	597	484	3,010	551	326
24	1,590	2,040	2,680	1,540	1,940	5,680	3,820	597	440	2,150	574	284
25	1,400	1,980	2,460	2,460	1,750	4,220	3,650	667	387	2,360	539	312
26	1,320	2,080	2,320	2,040	1,510	3,400	3,570	967	557	4,360	506	257
27	1,460	2,080	2,150	1,750	1,340	2,970	2,750	1,020	915	13,000	495	440
28	1,400	2,010	1,980	1,600	1,260	2,680	2,080	1,070	1,020	12,700	597	408
29	1,290	1,910	1,840	1,480	-	2,460	1,780	1,820	915	8,040	667	377
30	1,160	1,750	1,750	1,400	-	2,290	1,600	1,540	764	5,320	597	336
31	1,030	-	1,690	1,430	-	2,110	-	1,340	-	4,040	517	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	42,630	4,140	695	1,375	1.18	1.36
November	79,592	6,780	717	2,653	2.27	2.53
December	55,140	2,680	1,320	1,779	1.52	1.75
Calendar year 1937	817,411	22,200	422	2,239	1.91	25.98
January	59,460	3,400	1,370	1,918	1.64	1.89
February	36,092	2,040	993	1,289	1.10	1.14
March	152,459	22,300	739	4,918	4.20	4.84
April	120,960	12,100	1,600	4,032	3.45	3.85
May	35,484	2,390	597	1,145	.979	1.13
June	21,480	1,320	326	716	.612	.68
July	69,751	13,000	286	2,250	1.92	2.21
August	44,814	3,440	495	1,446	1.24	1.43
September	13,518	831	257	451	.385	.43
Water year 1937-38	731,380	22,300	257	2,004	1.71	23.24

Peak discharge.- Mar. 18 (4:30 p.m.) 23,300 sec.-ft.; July 27 (10 p.m.) 14,600 sec.-ft.

Yellow River near Holt, Fla.

Location.- Staff gage, lat. 30°40'25", long. 86°44'50", in sec. 16, T. 2 N., R. 25 W., at county highway bridge 2½ miles south of Holt. Zero of gage is 18.02 feet above mean sea level.

Drainage area.- 1,260 square miles.

Records available.- October 1933 to September 1938.

Extremes.- Maximum discharge observed during year, 11,100 second-feet Nov. 15 (gage height, 9.50 feet); minimum observed, 885 second-feet June 18; minimum gage height observed, 1.22 feet July 10.

1933-38: Maximum discharge, 23,000 second-feet Oct. 9, 1934 (gage height, 12.80 feet, from floodmarks); minimum observed, 812 second-feet Oct. 2, 1934 (gage height, 0.79 foot).

Flood of 1929 reached a stage of about 25.4 feet, from information furnished by local residents (discharge not determined).

Remarks.- Records good. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,590	1,930	3,100	1,980	1,750	1,780	2,020	1,490	1,890	1,240	6,800	1,300
2	1,620	1,780	2,760	2,120	1,850	1,780	2,120	1,750	1,680	1,240	5,540	1,330
3	1,680	1,680	2,470	2,070	1,850	1,680	2,340	1,400	1,430	1,060	4,640	1,360
4	1,520	1,650	2,540	2,220	1,750	1,650	2,680	1,330	1,330	1,010	3,860	1,400
5	1,720	1,590	2,340	2,400	1,680	1,650	3,010	1,430	1,200	957	3,430	1,300
6	1,750	1,560	2,280	2,470	1,620	1,650	2,840	1,590	1,200	984	3,310	1,270
7	1,650	1,520	2,340	2,470	1,590	1,680	2,540	1,980	1,200	957	2,920	1,400
8	1,650	1,520	2,470	2,400	1,560	1,720	2,280	2,020	1,140	932	2,840	1,430
9	1,620	1,490	2,540	2,540	1,520	1,620	2,400	1,980	1,140	908	3,100	1,460
10	1,520	1,460	2,610	2,610	1,490	1,560	2,840	1,930	1,270	908	4,850	1,300
11	1,650	2,120	2,540	2,680	1,460	1,520	3,700	1,780	1,360	957	5,540	1,200
12	1,890	2,680	2,610	2,680	1,460	1,490	4,230	1,460	1,200	1,170	4,430	1,140
13	1,890	5,540	2,610	2,610	1,460	1,460	4,430	1,330	1,270	1,200	3,560	1,140
14	1,680	8,780	2,610	2,260	1,460	1,430	3,860	1,300	1,140	1,270	2,920	1,200
15	1,650	11,100	2,470	2,220	1,520	1,400	3,100	1,300	1,010	1,360	2,470	1,170
16	1,560	10,100	2,340	2,120	1,430	1,890	2,340	1,270	957	1,490	2,170	1,170
17	2,020	9,090	2,280	2,020	1,430	2,470	1,980	1,240	908	1,400	1,980	1,560
18	2,070	7,620	2,280	1,930	1,400	3,010	1,750	1,170	885	1,550	1,850	1,360
19	2,470	6,800	2,220	1,890	1,520	4,640	1,720	1,170	908	1,820	1,750	1,270
20	3,310	5,300	2,280	1,850	1,930	5,540	1,650	1,140	1,300	1,980	1,590	1,140
21	5,300	4,850	2,170	1,850	2,280	7,900	1,750	1,110	1,330	2,170	1,490	1,040
22	5,780	4,230	2,120	1,820	2,920	7,070	1,820	1,080	1,200	2,280	1,520	1,010
23	5,300	3,860	2,120	1,780	3,200	5,540	2,120	1,040	1,170	2,340	1,430	984
24	5,070	3,700	2,170	1,780	3,100	4,640	2,540	1,110	1,110	2,680	1,400	984
25	4,850	3,560	2,120	1,820	3,100	4,640	2,610	1,650	1,270	3,200	1,330	957
26	3,100	3,310	2,120	1,980	3,010	4,850	2,540	1,850	1,560	3,700	1,270	984
27	2,840	3,100	2,760	2,020	2,760	3,860	2,170	2,400	1,720	3,860	1,240	1,040
28	2,340	3,100	2,680	2,020	2,400	3,200	1,680	2,610	1,930	4,430	1,270	1,140
29	2,220	3,200	2,470	1,930	-	2,760	1,520	2,400	1,780	4,640	1,460	1,110
30	1,980	3,100	2,280	1,750	-	2,340	1,590	2,120	1,490	4,470	1,430	1,080
31	1,980	-	2,070	1,720	-	2,170	-	2,020	-	4,230	1,300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	77,270	5,780	1,520	2,493	1.98	2.28
November	121,320	11,100	1,460	4,044	3.21	3.58
December	74,770	3,100	2,070	2,412	1.91	2.20
Calendar year 1937	986,060	16,000	1,060	2,702	2.14	29.11
January	66,030	2,680	1,720	2,130	1.69	1.95
February	54,500	3,200	1,400	1,946	1.54	1.60
March	90,590	7,900	1,400	2,922	2.32	2.68
April	74,170	4,430	1,520	2,472	1.96	2.19
May	49,450	2,610	1,040	1,595	1.27	1.46
June	38,978	1,930	885	1,299	1.03	1.15
July	62,413	4,640	908	2,013	1.60	1.84
August	84,690	6,800	1,240	2,732	2.17	2.50
September	36,169	1,560	957	1,206	.957	1.07
Water year 1937-38	830,350	11,100	885	2,275	1.81	24.50

Escambia River near Century, Fla.

Location.- Wire-weight gage, lat. 30°58', long. 87°15', on line between secs. 9 and 10, T. 5 N., R. 30 W., on handrail of bridge on State Highway 62, 1¾ miles east of Century.

Drainage area.- 3,700 square miles.

Records available.- October 1934 to September 1938.

Extremes.- Maximum discharge during year, 73,900 second-feet Mar. 22 (gage height, 20.66 feet, from floodmarks); minimum observed, 945 second-feet Sept. 28 (gage height, 2.20 feet).

1934-38: Maximum discharge, that of Mar. 22, 1938; minimum discharge observed, 900 second-feet Oct. 20, 26, 1935; minimum gage height, 1.91 feet Oct. 20, 1935.

Maximum stage known, 37.8 feet sometime in March 1929, from information furnished by old residents (discharge, 315,000 second-feet, from rating curve extended above 72,000 second-feet).

Remarks.- Records good except those for periods of missing gage heights, which are fair. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 12 to Sept. 30)

2.0	945	7.0	4,100	12.0	9,600	17.0	24,800
3.0	1,450	8.0	4,950	13.0	11,200	18.0	37,200
4.0	2,050	9.0	5,900	14.0	12,900	19.0	50,800
5.0	2,650	10.0	7,000	15.0	14,900	20.0	64,400
6.0	3,350	11.0	8,200	16.0	18,600	20.7	73,900

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,990	3,210	5,040	5,220	4,770	4,770	9,040	5,220	2,720	*1,810	17,300	1,750
2	2,050	3,000	4,590	5,040	4,590	4,680	8,200	4,860	2,620	*1,690	14,900	2,050
3	2,230	2,590	4,590	5,310	4,340	4,020	8,760	4,340	3,070	*1,570	11,400	2,290
4	1,990	2,350	4,260	5,600	3,860	*3,940	8,900	3,860	3,000	*1,630	8,480	2,110
5	1,810	2,530	4,340	5,310	3,940	3,860	7,720	4,180	2,790	*1,400	7,120	2,170
6	1,690	*2,470	4,770	5,400	3,780	3,560	6,780	4,180	2,470	*1,510	5,900	1,870
7	1,990	2,410	4,690	7,840	3,630	3,420	8,340	4,340	2,350	*1,400	4,340	2,110
8	1,990	2,350	4,590	9,180	3,490	3,490	11,700	5,040	2,350	*1,450	4,770	2,170
9	2,290	1,930	4,680	9,180	3,280	3,350	14,900	5,500	2,470	*1,570	6,010	1,930
10	2,050	2,170	6,450	8,900	3,210	3,210	18,100	3,630	2,470	*1,570	7,600	1,810
11	1,810	5,220	6,670	7,720	3,210	3,140	19,600	3,940	2,470	*1,630	8,080	1,570
12	1,690	9,920	6,560	6,890	3,210	3,140	20,100	4,260	2,410	*1,570	7,000	1,630
13	1,990	14,300	6,340	6,340	3,140	3,070	26,900	3,860	2,350	*1,630	4,680	1,340
14	2,590	16,100	5,500	6,230	3,000	2,860	33,100	3,700	2,170	*1,570	3,700	1,240
15	2,410	18,600	5,220	5,900	2,860	2,860	30,400	3,590	1,870	*1,630	3,490	1,290
16	2,170	15,500	4,680	5,310	2,930	5,700	21,200	3,210	2,110	*1,630	3,490	1,290
17	2,110	13,700	4,860	5,130	3,000	25,800	20,600	2,650	2,170	*1,690	3,140	1,340
18	3,940	13,700	6,120	4,860	3,490	46,700	14,300	2,410	2,230	*1,630	2,790	1,290
19	8,900	13,500	6,230	4,340	6,340	29,200	11,500	2,930	2,230	*1,630	2,590	1,240
20	10,400	12,900	5,600	4,420	9,320	48,100	9,040	2,720	2,230	*1,930	2,530	1,090
21	10,600	12,400	5,220	4,180	9,180	68,500	8,620	2,930	2,110	4,770	2,170	1,040
22	10,200	10,900	4,950	4,180	7,840	71,200	8,340	2,650	1,450	7,120	2,170	1,090
23	9,320	10,100	4,770	4,180	6,690	59,000	8,340	2,590	1,510	10,200	1,930	1,040
24	7,720	8,200	6,340	5,500	7,960	31,800	8,480	2,170	1,570	11,000	1,930	1,040
25	6,340	6,780	6,890	5,800	9,320	31,800	7,840	2,350	1,750	9,920	1,870	1,090
26	5,130	6,560	8,480	6,890	*7,720	20,600	7,120	2,930	*1,990	8,760	1,870	1,090
27	4,770	6,340	7,720	6,560	6,340	20,600	6,450	3,070	*1,930	9,320	1,870	990
28	4,770	6,560	6,230	5,500	5,500	16,900	5,400	2,720	*1,990	11,700	1,870	990
29	4,500	5,700	4,950	5,310	-	13,900	5,800	2,530	*2,050	*14,100	2,050	1,160
30	3,630	5,220	5,500	4,680	-	11,900	5,800	2,470	*1,870	*15,800	1,690	1,130
31	3,210	-	5,700	4,680	-	10,600	-	2,590	-	*18,100	1,630	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	128,280	10,600	1,690	4,138	1.12	1.29
November	237,210	18,600	1,930	7,907	2.14	2.39
December	172,520	8,480	4,260	5,565	1.50	1.73
Calendar year 1937	2,559,340	64,400	1,690	7,012	1.90	25.71
January	181,560	9,180	4,180	5,857	1.58	1.82
February	140,140	9,320	2,860	5,005	1.35	1.41
March	565,670	71,200	2,860	18,250	4.93	5.68
April	381,370	33,100	5,400	12,710	3.44	3.84
May	107,320	5,500	2,170	3,462	.936	1.08
June	66,770	3,070	1,450	2,226	.602	.67
July	152,930	18,100	1,400	4,933	1.33	1.53
August	150,360	17,300	1,630	4,850	1.31	1.51
September	44,260	2,290	990	1,475	.399	.45
Water year 1937-38	2,528,410	71,200	990	6,379	1.72	23.40

*Discharge computed from gage heights determined on basis of U. S. Weather Bureau readings on Conecuh River at Brewton, Ala.

Conecuh River at Brantley, Ala.

Location.- Wire-weight gage, lat. 31°34', long. 86°15', in SE¼ sec. 16, T. 7 N., R. 18 E., at bridge on State Highway 52, half a mile downstream from Moody Mill Creek and three-quarters of a mile southeast of Brantley.

Drainage area.- 504 square miles.

Records available.- October 1937 to September 1938.

Extremes.- Maximum discharge during year, 15,400 second-feet Mar. 16 (gage height, 22.75 feet); minimum discharge observed, 75 second-feet Sept. 26 (gage height, 1.77 feet).

Remarks.- Records good. Gage read twice daily. Daily gage heights for Oct. 1-6 computed from readings made once daily on staff gage of Alabama Water Service Co. at same site.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.7	67	10.0	1,400	15.0	3,260	20.0	10,600
2.0	102	12.0	1,880	15.5	3,760	21.4	13,000
4.0	371	13.0	2,200	16.0	4,340		
6.0	663	14.0	2,600	17.0	5,740		
8.0	1,010	14.5	2,870	18.0	7,300		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	398	600	830	647	570	884	679	344	263	974	175
2	182	371	565	813	585	496	992	570	303	236	884	155
3	195	344	525	813	540	454	956	496	317	182	762	148
4	222	317	496	796	510	412	830	440	344	155	555	182
5	195	317	510	779	496	398	745	540	303	141	482	168
6	209	290	540	848	482	384	1,040	728	290	128	440	182
7	236	276	570	1,340	468	384	2,030	695	263	122	496	175
8	209	263	555	1,280	454	371	3,360	695	303	115	728	168
9	195	263	762	1,220	426	344	11,900	663	276	108	813	162
10	263	276	830	1,160	426	344	12,900	570	303	128	585	148
11	303	636	848	1,090	412	330	7,970	510	412	168	468	128
12	236	1,200	796	1,090	398	317	3,890	454	440	155	440	122
13	195	1,580	762	1,090	398	317	2,510	398	317	141	426	122
14	182	1,530	762	1,030	384	303	2,000	357	236	134	426	115
15	175	1,380	745	920	371	303	1,620	344	195	122	412	108
16	182	2,380	711	796	371	10,700	1,400	330	182	122	303	102
17	168	2,270	679	695	371	12,000	1,180	290	155	134	236	108
18	734	1,850	631	647	371	10,400	1,050	290	141	115	222	102
19	1,400	1,580	585	600	813	9,930	956	276	141	128	222	90
20	1,470	1,400	555	600	813	7,620	974	249	155	209	195	84
21	1,420	1,200	540	585	762	4,100	974	222	155	371	175	78
22	1,300	1,070	496	585	711	2,640	1,180	222	155	585	162	78
23	1,240	938	813	570	745	2,200	1,090	209	141	711	155	77
24	1,400	813	920	663	813	2,000	1,090	195	148	830	141	78
25	1,400	762	938	711	796	1,850	1,220	236	195	938	134	78
26	1,220	728	902	711	695	1,580	1,580	317	236	4,030	122	108
27	956	711	866	695	647	1,420	1,580	357	263	3,100	115	115
28	711	663	902	695	615	1,340	1,380	357	303	2,100	182	96
29	540	647	956	728	-	1,220	1,140	357	303	1,750	357	115
30	496	615	992	745	-	1,120	902	371	263	1,340	195	108
31	440	-	938	711	-	1,010	-	357	-	1,100	195	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	18,215	1,470	141	588	1.17	1.35
November	27,568	2,380	263	919	1.82	2.03
December	22,280	992	496	719	1.43	1.65
Calendar year						
January	25,836	1,340	570	833	1.65	1.90
February	15,520	813	371	554	1.10	1.14
March	76,857	12,000	303	2,479	4.92	5.67
April	71,323	12,900	745	2,377	4.72	5.27
May	12,774	728	195	412	.817	.94
June	7,582	440	141	253	.502	.56
July	19,861	4,030	108	641	1.27	1.46
August	12,002	974	115	387	.768	.89
September	3,675	182	77	122	.242	.27
Water year 1937-38	313,493	12,900	77	859	1.70	23.13

Conecuh River near Andalusia, Ala.

Location.- Water-stage recorder, lat. 31°16', long. 86°36', in T. 3 N., R. 15 E., at Simmons Bridge on State Highway 83, 7½ miles southwest of Andalusia.
Drainage area.- 1,300 square miles.
Records available.- August 1904 to December 1919, September 1929 to September 1938.
Average discharge.- 24 years, 1,881 second-feet.
Extremes.- Maximum discharge during year, 33,300 second-feet Mar. 17 (gage height, 37.30 feet); minimum, 84 second-feet Sept. 12 (gage height, 0.51 foot); minimum daily discharge, 128 second-feet Sept. 25.
1904-19, 1929-38: Maximum discharge, that of Mar. 17, 1938; minimum, 43 second-feet Oct. 1, 1934; minimum gage height, 0.39 foot July 7, 1930; minimum daily discharge, 56 second-feet Oct. 15, 1933.
Maximum stage known, 47.64 feet Mar. 15, 1929 (discharge, 154,000 second-feet, by slope-area method).
Remarks.- Records good above 500 second-feet and fair below. Operation of power plants upstream causes daily fluctuations in flow as well as week-end reductions in flow.

Rating table, water-year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 16

1.4	205	11.0	3,750	25.0	11,200
1.9	338	14.0	5,050	30.0	16,000
2.4	483	15.5	5,720	32.0	19,000
3.2	726	17.0	6,430	33.0	21,000
4.0	990	18.3	7,050	35.0	26,000
6.0	1,690	21.0	8,450	36.5	30,600
9.0	2,890	23.0	9,700	37.3	33,300

Mar. 17 to Sept. 30

0.5	83	2.0	439
.7	110	4.0	1,020
1.1	194	6.0	1,690

Note.- Same as preceding table above 4.8 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	1,160	1,800	1,840	1,880	1,660	2,770	*1,850	1,790	42[illegible]	3,120	756
2	926	956	1,360	*2,110	1,440	1,500	2,770	1,480	1,500	411	2,640	756
3	*570	990	1,220	2,310	1,480	1,410	*2,600	1,480	872	*39[illegible]	2,560	669
4	431	1,020	1,880	1,690	1,340	1,200	2,610	1,440	843	53[illegible]	1,990	*447
5	855	1,060	*1,440	1,920	1,160	990	2,190	1,480	*785	53[illegible]	1,020	604
6	888	1,060	1,620	2,260	*1,570	*1,290	2,960	1,890	843	53[illegible]	1,020	785
7	606	*424	1,340	4,010	991	1,420	5,860	1,900	990	596	*2,330	698
8	855	871	1,190	3,230	1,230	1,060	7,540	*1,340	1,020	654	3,190	727
9	756	1,020	2,350	*3,190	1,150	1,020	9,370	1,470	1,080	69[illegible]	3,230	712
10	*516	1,230	2,080	2,640	1,230	1,080	*18,500	2,040	1,050	*616	3,600	596
11	698	4,720	2,810	2,600	1,160	1,020	24,800	1,550	990	369	1,540	*174
12	1,020	6,610	*1,730	2,560	1,020	922	19,700	1,480	*441	640	1,050	224
13	1,060	5,050	2,230	2,600	*831	*992	12,700	1,410	727	53[illegible]	1,170	452
14	956	*4,140	1,880	2,260	870	819	8,550	1,140	960	56[illegible]	*1,160	454
15	666	3,980	1,760	2,050	1,130	1,050	6,240	*712	960	58[illegible]	1,020	434
16	536	4,010	1,950	*2,310	1,090	12,200	5,270	555	1,050	50[illegible]	960	444
17	*262	4,920	1,940	1,510	1,090	30,900	*4,860	1,020	1,050	*43[illegible]	932	377
18	1,560	4,960	1,550	1,740	1,150	30,300	2,850	1,020	990	582	954	*198
19	3,960	5,090	*1,300	1,620	2,060	26,600	2,980	1,050	*636	782	708	250
20	4,400	4,310	1,910	1,410	*2,260	*26,600	2,350	1,080	442	2,120	765	334
21	3,960	*3,700	1,650	1,620	2,380	19,200	3,060	1,050	778	4,180	*658	253
22	3,380	2,430	1,340	1,440	1,370	13,200	3,060	*471	553	2,600	597	272
23	3,250	2,350	1,650	*1,510	2,030	9,840	3,400	806	538	2,68[illegible]	756	339
24	*2,980	2,030	4,190	2,080	2,160	7,920	*3,060	843	640	*2,85[illegible]	758	342
25	2,220	2,520	2,660	3,440	2,190	6,330	2,590	872	640	3,12[illegible]	814	*128
26	2,560	2,190	*1,890	1,920	1,980	5,140	1,910	727	*524	8,78[illegible]	698	180
27	2,530	2,030	988	1,990	*1,760	*4,440	2,000	712	611	11,90[illegible]	872	409
28	1,830	*1,730	1,440	1,580	1,630	4,270	2,880	814	596	13,00[illegible]	*728	406
29	990	1,840	2,730	1,730	-	3,960	2,390	*720	495	9,84[illegible]	441	375
30	1,340	1,410	2,430	*1,920	-	3,190	2,070	556	467	7,01[illegible]	611	413
31	*1,180	-	1,990	1,690	-	3,320	-	843	-	*5,36[illegible]	698	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square m'le	Run-off in inches
October	48,981	4,400	262	1,580	1.22	1.41
November	79,611	6,610	424	2,654	2.04	2.28
December	58,298	4,190	988	1,881	1.45	1.67
Calendar year 1937	960,457	28,400	262	2,631	2.02	27.48
January	66,770	4,010	1,410	2,154	1.66	1.91
February	41,612	2,380	831	1,486	1.14	1.19
March	224,833	30,900	819	7,253	5.58	6.43
April	173,890	24,800	1,910	5,796	4.46	4.98
May	35,801	2,040	471	1,155	.888	1.02
June	24,861	1,790	441	829	.638	.71
July	83,861	13,000	369	2,705	2.08	2.40
August	42,608	3,600	441	1,374	1.06	1.22
September	13,208	785	128	440	.338	.38
Water year 1937-38	894,334	30,900	128	2,450	1.88	25.60

*Sunday.

Conecuh River near Brooklyn, Ala.

Location.- Water-stage recorder, lat. 31°10', long. 86°48', in sec. 6, T. 2 N., R. 13 E., at bridge on U. S. Highway 29, 4 miles downstream from Boller Creek, 8 miles southwest of Brooklyn, and 30 miles upstream from Murder Creek.

Drainage area.- 2,400 square miles.

Records available.- May 1935 to September 1938.

Extremes.- Maximum discharge during year, 60,700 second-feet Mar. 20 (gage height, 38.03 feet); minimum, 343 second-feet Sept. 26 (gage height, 2.47 feet).
1935-38: Maximum discharge, that of Mar. 20, 1938; minimum discharge observed, 252 second-feet Oct. 10, 1935 (gage height, 2.00 feet).
Maximum stage known, about 41 feet Mar. 15, 1929 (discharge not determined).

Remarks.- Records good. Some regulation from operation of power plants upstream.

Rating table, water-year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.4	323	11.5	4,700	34.0	36,900
3.4	626	18.0	9,440	36.0	45,800
4.5	1,000	22.0	12,900	38.0	60,700
6.5	1,830	26.0	17,600		
8.5	2,820	30.0	25,400		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,240	1,700	2,710	3,210	2,930	2,870	5,180	2,980	1,570	859	6,980	1,240
2	1,320	1,570	2,980	3,100	2,710	2,660	4,900	2,600	2,790	791	4,830	1,360
3	1,140	1,400	2,350	3,700	2,550	2,450	5,110	2,450	1,700	894	4,360	1,280
4	680	1,490	2,600	3,580	2,500	2,300	4,770	2,350	1,530	724	4,290	1,230
5	980	1,490	2,660	3,150	2,260	2,060	4,090	2,350	1,400	808	2,930	899
6	1,200	1,490	2,820	3,450	2,400	2,020	4,260	2,400	1,280	876	2,350	1,280
7	1,240	1,330	2,710	6,120	2,060	2,160	8,590	3,300	1,400	894	2,800	1,280
8	1,240	783	2,350	6,220	2,020	2,110	11,900	2,550	1,490	925	4,490	1,160
9	1,200	1,290	3,490	5,660	2,060	1,830	14,900	2,400	1,530	965	5,750	1,120
10	1,080	1,580	4,220	5,250	1,970	1,830	18,800	2,960	1,530	1,000	6,290	1,040
11	825	5,690	4,490	4,560	2,020	1,790	27,800	2,660	1,490	859	4,540	886
12	1,470	12,500	4,160	4,490	1,880	1,740	34,100	2,500	1,320	1,040	2,770	555
13	1,740	11,800	3,680	4,160	1,660	1,610	29,000	2,400	939	1,040	2,160	658
14	1,740	11,000	3,510	4,020	1,570	1,610	19,800	2,110	1,320	1,000	2,300	757
15	1,380	10,500	2,930	3,580	1,740	1,660	12,700	1,790	1,360	1,000	2,020	757
16	1,080	9,440	2,930	3,270	1,830	8,250	9,200	1,280	1,400	1,040	1,830	757
17	894	9,280	2,820	3,150	1,790	25,000	7,800	1,640	1,450	1,040	1,610	708
18	1,640	9,200	3,330	2,710	1,830	41,200	6,080	1,740	1,450	965	1,610	642
19	6,050	8,810	2,870	2,820	4,610	57,200	5,040	1,700	1,240	1,120	1,450	439
20	7,280	8,260	3,040	2,450	4,970	59,100	4,900	1,700	861	2,410	1,280	550
21	7,000	7,000	3,100	2,600	5,040	50,000	4,900	1,700	1,190	7,180	1,300	562
22	6,010	6,040	2,870	2,550	3,840	36,800	5,660	1,490	1,120	6,220	990	469
23	5,250	4,700	2,610	2,500	3,740	25,000	5,800	1,120	965	5,520	1,190	569
24	4,830	4,290	4,640	3,150	4,700	19,000	5,730	1,360	965	4,970	1,120	610
25	3,940	3,890	6,540	4,700	4,160	14,000	5,180	1,530	1,080	5,450	1,200	505
26	3,210	4,220	4,740	4,630	4,020	11,100	4,220	1,570	1,160	10,200	1,160	360
27	3,580	3,830	3,840	3,830	3,510	9,050	3,510	1,400	1,080	14,400	1,080	571
28	2,870	3,330	2,820	3,330	3,150	8,180	4,130	1,450	1,120	17,200	1,240	642
29	1,950	3,270	3,880	3,210	-	7,360	3,960	1,530	1,000	17,800	1,070	626
30	1,740	2,980	4,160	3,100	-	6,360	3,450	1,280	929	14,300	944	634
31	2,060	-	3,390	3,040	-	5,660	-	1,620	-	10,200	1,080	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	77,859	7,280	680	2,512	1.05	1.21
November	154,153	12,500	783	5,138	2.14	2.39
December	105,140	6,540	2,350	3,392	1.41	1.63
Calendar year 1937	1,655,405	48,500	538	4,535	1.89	25.65
January	115,290	6,220	2,450	3,719	1.55	1.79
February	79,520	5,040	1,570	2,840	1.18	1.23
March	416,960	59,100	1,610	13,450	5.60	6.46
April	285,460	34,100	3,450	9,515	3.96	4.42
May	61,810	3,300	1,120	1,994	.831	.96
June	39,659	2,790	861	1,322	.551	.61
July	133,694	17,800	724	4,313	1.80	2.08
August	79,014	6,980	944	2,549	1.06	1.22
September	24,146	1,360	360	805	.335	.37
Water year 1937-38	1,572,705	59,100	360	4,309	1.80	24.37

Pigeon Creek near Thad, Ala.

Location.- Wire-weight gage, lat. 31°28', long. 86°39', in NE¼ sec. 28, T. 6 N., R. 14 E., at bridge on State Highway 55, half a mile upstream from Louisville & Nashville Railroad bridge, 2 miles southeast of Thad, and 25 miles upstream from mouth.

Drainage area.- 244 square miles.

Records available.- October 1937 to September 1938.

Extremes.- Maximum discharge during year, 14,400 second-feet Mar. 18 (gage height, 26.06 feet); minimum discharge observed, 16 second-feet Sept. 12 (gage height, 2.13 feet); minimum daily discharge, 22 second-feet Sept. 28.

Remarks.- Records good except those for period when there was no gage, Oct. 1-11, which were estimated on basis of weather records and records for Conecuh River at Brantley and are fair. Gage read twice daily. Some diurnal fluctuation and regulation caused by operation of small power plant upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.2	19	7.0	500	15.0	2,370	23.0	8,240
2.5	36	10.0	980	17.0	3,400	24.0	9,880
3.0	74	12.0	1,370	19.0	4,580	25.0	11,900
4.5	209	13.0	1,610	21.0	6,050	25.6	13,200
6.0	368	14.0	1,920	22.0	7,000		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		173	322	311	300	300	405	219	182	78	311	155
2		164	300	344	289	259	530	200	191	74	300	114
3		155	279	392	289	249	405	200	155	58	311	119
4		146	269	405	289	239	368	182	119	54	311	92
5		137	269	500	269	229	380	182	114	47	333	154
6	150	146	300	500	200	219	568	191	105	38	344	182
7		137	322	530	249	209	775	200	101	54	351	101
8		128	311	560	239	209	1,850	200	92	41	895	70
9		128	472	500	229	209	8,170	200	87	50	810	70
10		173	620	560	219	209	6,940	239	87	110	515	70
11		458	545	575	219	200	4,340	259	78	164	390	40
12	530	1,030	472	515	209	191	2,720	219	78	137	229	23
13	444	1,240	444	405	219	182	1,630	173	78	74	200	43
14	259	1,350	392	356	200	182	1,020	155	74	78	155	32
15	164	1,420	344	333	200	242	620	164	74	74	128	31
16	137	1,440	311	311	200	4,140	472	146	83	78	128	35
17	137	1,310	322	289	200	9,410	405	146	101	26	96	37
18	328	1,020	333	289	209	13,200	380	137	83	61	101	43
19	605	810	344	279	515	8,180	380	119	83	70	92	42
20	778	698	322	279	545	5,180	405	114	87	52	87	39
21	861	714	322	289	444	3,400	486	114	137	173	74	42
22	912	620	311	300	472	2,130	650	110	58	311	70	36
23	895	500	405	279	620	1,690	730	114	83	405	62	34
24	585	444	605	431	620	1,640	746	101	119	472	58	43
25	300	444	635	530	472	1,560	698	119	105	710	58	36
26	259	405	575	444	431	1,150	560	137	83	2,050	58	37
27	249	392	590	486	418	963	380	173	74	3,970	54	42
28	219	368	575	545	368	844	289	155	110	2,090	54	22
29	239	311	500	515	-	698	259	128	105	1,420	66	23
30	229	322	444	368	-	515	229	182	70	966	58	50
31	200	-	333	322	-	431	-	164	-	444	173	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	9,980	912	-	322	1.32	1.52
November	16,783	1,440	128	559	2.29	2.56
December	12,588	635	269	406	1.66	1.91
Calendar year 1937						
January	12,742	575	279	411	1.68	1.94
February	9,133	620	200	326	1.34	1.40
March	58,459	13,200	182	1,886	7.73	8.91
April	37,790	8,170	229	1,260	5.16	5.76
May	5,142	259	101	166	.680	.78
June	2,996	191	58	99.9	.409	.46
July	14,426	3,970	26	465	1.91	2.20
August	6,872	895	54	222	.910	1.05
September	1,857	182	22	61.9	.254	.28
Water year 1937-38	188,768	13,200	22	517	2.12	28.77

Cartecay River near Ellijay, Ga.

Location.- Staff gage, lat. 34°41', long. 84°27', adjacent to State Highway 43, three-quarters of a mile downstream from Owltown Creek, 2 miles southeast of Ellijay, Gilmer County, and 2 miles upstream from confluence with Ellijay River to form Coosawattee River.

Drainage area.- 135 square miles.

Records available.- March 1937 to September 1938. July 1904 to December 1905, May to November 1907, and December 1918 to June 1921 at site 8 miles upstream.

Extremes.- Maximum discharge during year, 20,000 second-feet Apr. 8 (gage height, 13.0 feet, from floodmarks), by slope-area method; minimum, 88 second-feet Oct. 17 (gage height, 1.30 feet).
1937-38: Maximum discharge, that of Apr. 8, 1938; minimum, that of Oct. 17, 1938.

Remarks.- Records below 2,500 second-feet are good; those for days of rapidly changing stage and those above 2,500 second-feet are fair. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.3	88	3.0	820	9.0	8,700
1.6	148	4.0	1,580	11.0	13,700
2.0	270	5.0	2,550	13.0	20,000
2.5	510	7.0	5,140		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	123	111	270	194	132	722	290	235	177	310	203
2	107	121	105	310	174	130	660	270	252	174	1,030	197
3	111	119	109	235	164	191	430	290	235	160	755	219
4	197	115	109	197	158	169	355	270	203	174	540	200
5	132	117	115	180	153	148	310	290	200	203	405	405
6	119	115	109	174	151	310	332	270	194	171	455	235
7	111	113	102	235	156	219	820	270	200	169	405	219
8	100	113	103	191	148	171	8,190	332	430	168	355	197
9	98	115	102	169	143	161	1,500	380	219	177	482	194
10	103	115	105	169	143	660	890	270	380	177	405	191
11	95	117	119	174	143	355	722	252	235	161	355	188
12	95	130	115	161	134	252	600	252	355	148	310	183
13	96	115	111	153	139	219	540	252	235	143	332	180
14	107	109	111	148	139	219	482	290	219	158	310	180
15	100	107	102	148	132	200	455	252	200	194	355	200
16	93	111	102	143	125	482	430	235	191	151	380	174
17	90	127	139	141	127	380	405	219	194	141	310	174
18	183	115	235	139	127	290	405	219	310	136	290	166
19	455	113	171	139	174	252	380	219	405	722	270	166
20	252	115	143	134	139	722	430	235	332	773	252	158
21	174	107	130	130	136	430	455	235	380	1,840	270	158
22	156	107	121	130	127	355	455	219	290	2,420	252	156
23	151	103	219	130	219	332	405	270	235	1,660	235	153
24	139	103	203	270	183	290	355	282	219	1,100	235	151
25	125	100	166	270	156	270	355	235	219	722	219	146
26	151	111	151	203	151	252	332	235	203	570	219	143
27	235	125	180	177	143	270	310	219	270	455	219	143
28	164	123	290	169	139	252	310	203	203	405	203	146
29	148	121	219	156	-	235	290	203	194	380	219	148
30	134	113	188	158	-	235	290	290	186	360	219	148
31	125	-	177	235	-	235	-	235	-	332	203	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,439	455	90	143	1.06	1.22
November	3,436	130	100	115	.852	.95
December	4,462	290	102	144	1.07	1.23
Calendar year						
January	5,638	310	130	182	1.35	1.56
February	4,217	219	125	151	1.12	1.17
March	8,818	722	130	284	2.10	2.42
April	22,615	8,190	290	754	5.59	6.24
May	7,985	380	203	258	1.91	2.20
June	7,625	430	186	254	1.88	2.10
July	14,781	2,420	136	477	3.53	4.07
August	10,799	1,030	203	348	2.58	2.97
September	5,521	405	143	184	1.36	1.52
Water year 1937-38	100,336	8,190	90	275	2.04	27.65

Oostanaula River at Resaca, Ga.

Location.- Water-stage recorder, lat. 34°34', long. 84°57', at bridge on U. S. Highway 41 at Resaca, Gordon County, 200 feet downstream from Nashville, Chattanooga & St. Louis Railway bridge, three-quarters of a mile upstream from Camp Creek, and 3½ miles downstream from confluence of Conasauga and Coosawattee Rivers to form the Oostanaula. Zero of gage is 617.30 feet above mean sea level. Prior to Sept. 12 wire-weight gage at same site and datum.

Drainage area.- 1,610 square miles.

Records available.- April 1892 to December 1931, March 1937 to September 1938.

Average discharge.- 31 years (1896-98, 1903-31, 1938), 2,814 second-feet.

Extremes.- Maximum discharge during year, 39,900 second-feet Apr. 9 (gage height, 31.5 feet); minimum, 490 second-feet Oct. 1, 2 (gage height, 1.85 feet).
1892-1931, 1937-38: Maximum discharge, 46,600 second-feet (revised) Feb. 11, 1921 (gage height, 33.0 feet); minimum, 180 second-feet Sept. 7, 8, 1925 (gage height, 0.5 foot).
Maximum stage known, 36.6 feet Apr. 1, 1886.

Remarks.- Records good. Discharge for periods of backwater, Apr. 9-14 and July 26-28, computed on basis of three discharge measurements for the first period and five for the second period. Gage read twice daily prior to Sept. 12.

Rating table, water year 1937-38 except periods of backwater (gage height, in feet, and discharge, in second-feet)

1.8	470	4.0	1,540	12.0	7,390	24.0	19,700	31.0	37,800
2.4	715	6.0	2,810	16.0	11,050	27.0	24,600	32.0	42,100
3.0	1,000	9.0	5,000	20.0	15,150	29.0	30,200		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	490	850	850	1,660	2,260	1,480	4,780	2,410	2,810	1,660	2,670	1,210
2	490	805	805	3,230	2,220	1,320	10,600	2,340	2,600	1,540	3,020	1,100
3	550	760	760	3,800	1,840	1,660	9,620	2,150	2,600	1,430	4,920	1,320
4	850	715	715	2,670	1,660	2,150	4,850	2,020	2,540	1,430	4,020	1,260
5	1,160	715	715	1,960	1,540	1,780	3,510	2,280	1,900	1,720	3,160	1,100
6	1,480	715	760	1,660	1,430	2,600	3,090	2,740	1,600	1,480	2,540	1,480
7	1,050	715	715	2,480	1,380	4,250	7,100	2,220	1,480	1,260	2,810	1,210
8	760	670	670	3,160	1,320	2,880	17,800	2,280	2,480	1,260	2,670	1,160
9	630	670	715	2,280	1,260	2,220	36,800	2,540	4,020	1,660	2,340	1,050
10	590	715	670	1,840	1,210	6,570	33,600	2,410	6,490	2,080	2,480	1,000
11	760	670	630	1,720	1,160	8,970	26,500	1,900	5,850	1,600	2,480	1,000
12	670	760	715	1,780	1,160	7,730	18,200	1,720	4,480	1,320	2,280	950
13	630	760	760	1,600	1,100	6,010	11,500	1,660	2,810	1,160	2,060	900
14	590	715	715	1,430	1,100	2,880	5,800	1,840	2,150	1,210	1,960	900
15	590	670	715	1,380	1,050	2,410	3,650	2,020	1,780	1,260	1,900	1,000
16	550	670	670	1,320	1,050	4,850	3,300	1,720	1,600	1,260	2,020	1,210
17	550	715	715	1,210	1,100	8,700	3,090	1,540	1,540	1,050	1,960	1,100
18	590	760	1,050	1,210	1,050	5,610	4,100	1,480	5,530	1,000	1,780	950
19	2,600	715	1,380	1,160	1,260	3,440	5,930	1,430	3,160	1,050	1,600	850
20	2,150	715	1,480	1,100	2,080	8,700	7,300	1,380	5,000	4,180	1,480	850
21	1,660	715	1,210	1,050	1,900	11,600	9,240	1,380	5,080	5,050	1,430	805
22	1,210	670	1,050	1,050	1,430	9,440	9,150	1,720	4,850	9,530	1,380	760
23	1,000	670	1,050	1,100	1,760	6,490	9,060	1,960	2,810	13,400	1,320	760
24	900	630	1,720	2,020	3,880	5,450	8,430	3,160	2,150	17,000	1,320	760
25	805	670	1,660	4,250	3,370	5,220	4,850	2,670	1,960	18,400	1,260	760
26	805	670	1,430	3,720	2,280	3,880	3,510	1,780	3,440	18,400	1,210	715
27	1,960	805	1,320	2,670	1,900	3,440	3,090	1,540	4,100	15,200	1,160	715
28	1,960	850	2,600	1,960	1,660	3,370	2,740	1,430	4,320	9,200	1,210	715
29	1,320	900	3,090	1,660	-	3,020	2,480	1,430	2,670	3,800	1,210	715
30	1,050	850	2,410	1,540	-	2,670	2,340	2,150	1,960	3,090	1,160	715
31	950	-	1,840	1,600	-	2,480	-	2,540	-	2,880	1,210	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	31,350	2,600	490	1,011	0.628	0.72
November	21,910	900	630	730	.453	.51
December	35,585	3,090	630	1,148	.713	.82
Calendar year						
January	61,270	4,250	1,050	1,976	1.23	1.42
February	46,450	3,880	1,050	1,659	1.03	1.07
March	143,270	11,600	1,320	4,622	2.87	3.31
April	276,210	36,800	2,340	9,207	5.72	6.38
May	61,840	3,160	1,380	1,995	1.24	1.43
June	95,760	6,490	1,480	3,192	1.98	2.21
July	146,560	18,400	1,000	4,728	2.94	3.39
August	64,040	4,920	1,160	2,066	1.28	1.48
September	29,020	1,480	715	967	.601	.67
Water year 1937-38	1,013,265	36,800	490	2,776	1.72	23.41

Coosa River near Rome, Ga.

Location.- Water-stage recorder, lat. 34°12', long. 85°16', at Mayo Bar lock and dam, 1⅛ miles upstream from Webb Creek, 6 miles southwest of Rome, Floyd County, and 7⅞ miles downstream from confluence of Oostanaula and Etowah Rivers to form the Coosa.

Drainage area.- 4,040 square miles.

Records available.- June 1928 to December 1931 and March 1937 to September 1938. January 1897 to December 1903 at site at Rome.

Extremes.- Maximum discharge during period March to September 1937, 37,100 second-feet May 1 (gage height, 28.7 feet); minimum, 1,550 second-feet Sept. 25 (gage height, 0.50 foot).

Maximum discharge during water year 1937-38, 64,000 second-feet Apr. 10; maximum gage height, 36.2 feet Apr. 10; minimum discharge, 1,550 second-feet Sept. 30 (gage height, 0.51 foot).

1897-1903, 1928-31, 1937-38: Maximum discharge, that of Apr. 10, 1938; minimum, 870 second-feet Oct. 18-22, 1931 (gage height, -0.55 foot).

Maximum stage known, 40.3 feet Apr. 1, 1886.

Remarks.- Records good except those for periods of missing gage heights, Apr. 18-24, Aug. 27, 28, 1937, and Aug. 21-26, 1938, which were computed on basis of records for Etowah River near Kingston and Oostanaula River at Resaca and are fair. Records above 5,000 second-feet determined from auxiliary curves, using rate of change of stage as a factor if necessary.

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	5,300	36,500	5,300	4,500	3,140	4,400
2						-	5,100	31,200	5,100	3,420	3,140	4,000
3						-	4,900	27,800	5,000	2,950	2,380	4,100
4						-	4,800	22,600	4,900	2,760	2,280	2,570
5						-	7,260	20,300	4,700	3,040	2,190	2,380
6						-	15,900	22,900	4,200	5,400	4,200	3,330
7						-	13,000	20,000	4,100	4,900	5,000	4,000
8						-	12,700	15,600	3,800	4,200	4,900	2,950
9						-	22,800	11,400	3,620	3,900	3,900	3,420
10						6,560	17,900	9,200	3,520	3,420	4,600	4,200
11						5,900	10,800	8,100	3,620	3,240	6,450	3,040
12						5,600	8,650	7,440	3,710	2,860	5,700	2,480
13						5,400	7,440	7,000	3,420	2,660	3,620	2,280
14						5,400	6,780	7,550	3,240	2,660	4,800	2,100
15						5,700	6,450	7,330	3,330	2,570	4,300	2,000
16						6,670	6,450	6,780	3,520	2,380	3,240	2,000
17						6,340	6,890	6,120	4,300	2,280	2,760	2,100
18						5,800	6,950	5,700	7,220	2,380	2,380	1,820
19						6,560	5,800	5,500	5,800	2,760	2,280	1,820
20						10,700	5,600	5,600	4,200	2,460	2,190	1,820
21						11,300	5,500	5,400	3,900	2,460	2,100	1,730
22						9,500	5,500	6,010	3,520	2,380	2,100	1,730
23						9,200	5,600	6,120	3,140	2,190	2,190	1,640
24						7,220	7,100	5,400	3,040	3,240	3,140	1,640
25						7,440	18,200	5,000	2,860	3,420	6,780	1,550
26						7,770	20,300	4,700	2,860	2,860	6,450	1,640
27						7,000	19,300	4,600	2,950	3,330	9,000	1,550
28						6,340	15,000	4,700	2,950	2,570	8,000	1,550
29						5,900	21,700	4,600	4,360	2,280	4,500	1,640
30						5,600	35,100	4,400	6,000	3,420	3,520	1,640
31						5,400	-	4,600	-	2,860	3,420	-

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Discharge, in second-feet, of Coosa River near Rome, Ga., 1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,640	2,660	2,380	4,000	3,710	3,330	19,200	5,400	5,100	3,620	5,500	2,480
2	1,640	2,480	2,280	4,500	4,200	3,040	30,800	5,300	5,200	3,330	7,020	2,380
3	1,730	2,280	2,190	5,600	4,000	3,330	30,800	5,100	5,200	3,140	10,600	2,660
4	2,860	2,190	2,100	5,700	3,620	3,900	20,300	4,900	5,200	2,950	8,910	2,950
5	6,300	2,190	2,100	4,500	3,330	4,200	10,900	4,700	4,700	2,950	6,970	2,480
6	5,900	2,190	2,100	3,900	3,240	4,500	9,200	7,090	3,710	3,330	6,120	2,760
7	4,200	2,190	2,100	4,300	3,140	6,340	19,900	6,510	3,420	3,040	5,400	3,420
8	2,860	2,100	2,600	5,400	2,950	6,560	43,200	5,700	4,600	2,950	5,300	2,860
9	2,280	2,100	2,000	5,400	2,860	5,000	60,000	5,300	5,700	3,520	5,300	2,480
10	2,000	2,100	2,000	4,400	2,760	12,200	62,600	5,500	9,840	3,620	4,900	2,280
11	2,000	2,100	1,910	3,900	2,660	16,100	53,000	5,000	10,700	3,800	4,700	2,190
12	2,000	2,100	1,820	3,800	2,660	14,100	47,100	4,400	10,300	3,140	4,500	2,190
13	2,000	2,190	1,910	3,710	2,660	11,200	41,500	4,200	6,960	2,760	4,200	2,100
14	1,910	2,190	2,000	3,420	2,570	7,320	35,300	4,200	5,100	2,570	3,900	2,100
15	1,910	2,190	2,000	3,240	2,570	5,700	24,800	4,400	4,100	3,140	3,710	2,190
16	1,820	2,100	2,000	3,040	2,570	14,100	12,100	4,300	3,620	2,950	4,400	2,190
17	1,730	2,100	2,000	2,950	2,480	23,100	8,220	3,900	3,330	2,570	4,000	2,280
18	1,910	2,100	2,190	2,950	2,480	17,200	7,660	3,620	5,000	2,480	3,710	2,100
19	4,360	2,100	2,760	2,760	2,660	10,700	10,700	3,520	8,980	4,360	3,240	2,000
20	8,650	2,100	3,140	2,760	3,140	26,200	12,200	3,420	7,770	6,560	3,040	1,820
21	5,900	2,190	2,950	2,660	3,710	28,600	16,700	3,420	9,420	10,800	2,950	1,820
22	4,000	2,100	2,660	2,570	3,330	22,100	17,200	3,520	8,540	17,200	2,850	1,730
23	3,240	2,000	2,570	2,570	3,330	16,600	15,700	4,200	6,790	22,800	2,750	1,640
24	2,860	2,000	3,140	3,710	4,650	15,000	14,300	4,500	5,000	29,000	2,650	1,730
25	2,570	2,000	3,800	5,800	6,340	11,600	12,000	5,500	4,100	29,300	2,560	1,730
26	2,570	2,000	3,520	6,890	5,300	9,570	8,240	4,500	4,100	25,700	2,460	1,640
27	5,640	2,000	3,240	5,900	4,100	8,320	7,110	3,710	6,270	23,200	2,380	1,640
28	7,110	2,380	3,620	4,600	3,710	7,660	6,450	3,520	8,100	20,800	2,380	1,640
29	4,600	2,570	5,100	3,800	-	7,220	5,900	3,420	5,870	13,000	2,860	1,640
30	3,420	2,480	5,300	3,420	-	6,340	5,600	4,800	4,400	6,720	2,660	1,640
31	2,950	-	4,400	3,420	-	6,450	-	5,000	-	5,700	2,660	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
March 10-31, 1937	153,300	11,300	5,400	6,968	1.72	1.41
April	334,770	35,100	4,800	11,160	2.76	3.08
May	340,150	36,500	4,400	10,970	2.72	3.14
June	122,180	7,220	2,860	4,073	1.01	1.13
July	95,790	5,400	2,190	3,090	.765	.88
August	124,650	9,000	2,100	4,021	1.00	1.15
September	73,120	4,400	1,550	2,437	.603	.67
Water year						
October 1937	104,560	8,650	1,640	3,373	.835	.96
November	65,470	2,660	2,000	2,182	.540	.60
December	83,280	5,300	1,820	2,686	.685	.77
Calendar year						
January 1938	125,570	6,890	2,570	4,051	1.00	1.15
February	94,730	6,340	2,480	3,383	.837	.87
March	337,580	28,600	3,040	10,890	2.70	3.11
April	668,680	62,600	5,600	22,290	5.52	6.16
May	142,550	7,090	3,420	4,598	1.14	1.31
June	183,120	10,700	3,330	6,104	1.51	1.68
July	271,000	29,300	2,480	8,742	2.16	2.49
August	134,580	10,600	2,380	4,341	1.07	1.23
September	64,760	3,420	1,640	2,159	.534	.60
Water year 1937-38	2,275,880	62,600	1,640	6,235	1.54	20.93

Coosa River at Gadsden, Ala.

Location.- Water-stage recorder, lat. 34°01', long. 86°00', in T. 12 S., R. 6 E., at Etowah County Memorial Bridge on U. S. Highway 241, in Gadsden, 700 feet downstream from Louisville & Nashville Railroad bridge. Zero of gage is 485.16 feet above mean sea level.

Drainage area.- 5,600 square miles.

Records available.- October 1926 to March 1932, May 1935 to September 1938.

Extremes.- Maximum discharge during year, 57,200 second-feet Apr. 14 (gage height, 26.63 feet); minimum, 1,990 second-feet Oct. 1 (gage height, 1.16 feet).
1926-32, 1935-38: Maximum discharge, 76,900 second-feet Apr. 11, 1936 (gage height, 31.13 feet); minimum, 1,180 second-feet Oct. 24, 1931 (gage height, 0.16 foot).
Maximum stage known, 36.7 feet Apr. 6, 1886 (discharge not determined).

Remarks.- Records good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.2	2,040	10.0	15,200	24.0	48,500
1.6	2,420	12.5	19,600	26.0	55,100
2.1	3,000	14.0	22,500	26.6	57,200
4.0	5,540	17.0	29,400		
5.3	7,430	21.0	39,800		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,040	3,780	3,060	6,240	4,860	5,000	17,200	7,590	7,910	6,530	6,550	3,260
2	2,080	3,390	3,000	6,530	5,000	4,450	28,400	7,130	7,590	6,530	11,300	3,260
3	2,080	3,190	2,940	6,980	5,270	4,180	33,700	6,830	7,750	4,450	12,200	3,130
4	2,420	3,000	2,820	7,280	5,270	4,450	34,500	6,380	7,280	4,180	13,500	3,130
5	4,690	2,880	2,760	7,280	4,860	5,410	33,400	6,240	6,380	4,180	12,700	3,390
6	7,130	2,820	2,640	6,530	4,450	6,680	28,400	6,830	5,960	3,910	10,500	3,390
7	8,070	2,760	2,640	6,380	4,320	7,750	23,800	9,190	5,270	4,050	8,870	3,260
8	5,620	2,700	2,640	7,280	4,050	8,070	44,400	9,510	6,680	4,320	7,590	3,650
9	4,180	2,700	2,580	7,590	3,910	8,390	54,400	6,230	7,280	5,000	7,280	3,650
10	3,260	2,640	2,530	7,430	3,780	13,400	56,500	7,130	9,990	7,910	6,830	3,190
11	2,820	2,700	2,530	6,680	3,650	19,000	54,400	6,680	11,500	8,230	6,380	3,000
12	2,530	2,760	2,580	5,960	3,520	21,300	54,400	6,380	12,500	6,240	5,960	2,820
13	2,530	2,760	2,420	5,540	3,520	19,400	55,800	5,820	11,800	4,720	5,680	2,700
14	2,530	2,760	2,320	5,130	3,390	15,900	57,200	5,410	10,200	4,180	5,410	2,700
15	2,470	2,820	2,420	4,860	3,390	12,500	56,900	5,270	7,280	5,270	5,130	2,640
16	2,370	2,820	2,530	4,590	3,390	12,300	54,400	5,270	5,540	5,620	5,130	2,580
17	2,370	2,760	2,530	4,320	3,390	19,200	50,800	5,270	4,720	4,590	4,860	2,580
18	2,950	2,700	2,640	4,050	3,260	24,000	42,300	5,000	4,450	3,780	5,000	2,700
19	4,590	2,700	3,000	3,910	3,520	24,900	23,900	4,590	5,130	5,080	4,590	2,700
20	6,100	2,760	3,390	3,780	3,780	30,100	14,700	4,450	9,510	9,190	4,180	2,530
21	8,550	2,760	3,650	3,650	4,050	34,000	17,300	4,320	10,800	11,300	3,910	2,420
22	8,230	2,700	3,780	3,650	4,320	36,100	21,500	4,320	11,200	17,300	3,650	2,370
23	5,820	2,700	3,520	3,650	5,000	35,800	22,700	4,590	10,200	19,600	3,520	2,370
24	4,450	2,640	3,390	5,130	5,820	35,300	20,500	5,410	8,670	26,300	3,520	2,270
25	3,780	2,530	3,780	7,590	6,240	31,100	17,800	5,540	7,130	29,400	3,390	2,220
26	3,650	2,530	4,320	9,190	7,280	23,000	15,600	6,100	6,100	31,100	3,260	2,220
27	3,650	2,530	4,590	9,190	7,130	16,400	12,500	5,820	6,380	31,600	3,130	2,170
28	5,130	2,640	4,590	8,390	6,820	13,900	9,830	4,860	9,510	30,600	3,060	2,170
29	7,430	2,760	5,270	6,830	-	11,800	8,550	4,450	10,500	27,200	3,130	2,170
30	6,380	3,000	5,960	5,680	-	10,600	7,750	4,450	8,550	21,900	3,260	2,170
31	4,720	-	6,530	5,130	-	10,300	-	6,100	-	13,400	3,520	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	134,820	8,550	2,040	4,349	0.750	0.86
November	84,190	3,780	2,530	2,806	.484	.54
December	103,350	6,530	2,320	3,334	.575	.66
Calendar year 1937	3,743,220	55,400	1,990	10,260	1.77	24.00
January	186,420	9,190	3,650	6,014	1.04	1.20
February	126,240	7,280	3,260	4,509	.777	.81
March	524,680	36,100	4,180	16,930	2.92	3.37
April	973,530	57,200	7,750	32,450	5.59	6.24
May	185,160	9,510	4,320	5,973	1.03	1.19
June	243,960	12,500	4,450	8,132	1.40	1.56
July	367,860	31,600	3,780	11,870	2.05	2.36
August	188,990	13,500	3,060	6,096	1.05	1.21
September	82,810	3,650	2,170	2,760	.476	.53
Water year 1937-38	3,202,010	57,200	2,040	8,773	1.51	20.53

Coosa River at Childersburg, Ala.

Location.- Water-stage recorder, lat. 33°17', long. 86°22', in T. 20 S., R. 3 E., at Central of Georgia Railway bridge, 1 mile northwest of Childersburg. Zero of gage is 421.00 feet above mean sea level.

Drainage area.- 8,390 square miles.

Records available.- February 1914 to September 1938.

Average discharge.- 21 years (1917-38), 14,360 second-feet.

Extremes.- Maximum discharge during year, 136,000 second-feet Apr. 9 (gage height, 30.03 feet); minimum, 2,880 second-feet Oct. 1 (gage height, 1.56 feet).
1914-38: Maximum discharge, that of Apr. 9, 1938; minimum, 1,300 second-feet sometime in September 1925.

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

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.5	2,740	9.5	29,100	25.0	106,700
2.4	4,860	12.0	39,800	27.0	118,300
4.0	9,260	16.0	58,700	30.0	136,300
5.0	12,700	19.0	73,700		
7.0	19,400	21.0	84,300		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,920	6,860	4,260	8,680	7,700	8,680	32,000	11,400	8,120	10,500	16,100	4,990
2	3,150	5,770	4,380	9,560	7,280	7,420	64,700	11,400	11,100	8,400	13,700	5,250
3	3,200	5,120	4,500	10,200	7,140	6,720	65,700	10,800	11,700	7,140	19,400	4,860
4	3,290	4,740	4,380	10,200	7,140	6,300	54,900	9,860	10,800	6,300	20,600	4,740
5	3,380	4,500	4,260	9,860	7,280	6,300	47,200	11,100	9,260	6,030	18,700	4,500
6	4,860	4,380	4,140	9,860	7,000	7,420	44,400	14,400	8,680	5,900	16,100	4,620
7	8,680	4,140	4,020	10,200	6,580	9,260	60,200	13,000	8,120	5,770	13,700	4,740
8	9,860	4,140	3,900	10,500	6,160	10,200	112,000	13,400	7,420	5,510	12,000	4,620
9	8,120	4,020	3,880	10,500	5,900	10,200	136,000	13,000	8,680	7,560	11,400	4,620
10	6,160	4,020	3,880	10,500	5,640	12,700	123,000	11,700	9,860	9,860	10,500	4,990
11	4,860	4,020	3,830	10,200	5,380	24,000	93,800	10,200	12,000	11,100	9,260	4,620
12	4,260	5,120	3,760	9,260	5,250	27,100	70,200	9,560	14,100	10,800	8,680	4,260
13	3,880	4,990	3,730	8,680	5,120	27,100	64,700	9,260	14,700	8,680	8,120	4,020
14	3,680	4,620	3,710	7,840	4,990	23,600	63,700	8,680	13,700	6,860	7,700	3,880
15	3,570	4,380	3,640	7,420	4,860	19,400	63,700	8,120	12,000	6,160	7,420	3,800
16	3,520	4,380	3,590	7,000	4,860	26,700	63,700	7,700	9,560	6,720	7,000	3,730
17	3,500	4,260	3,730	6,580	4,860	35,800	61,700	7,560	7,840	8,680	7,000	3,660
18	4,990	4,260	3,900	6,300	4,860	35,400	58,700	7,420	7,000	7,000	6,580	3,610
19	9,260	4,140	4,020	6,030	5,640	35,800	52,000	7,280	6,720	5,900	6,580	3,610
20	11,100	4,140	4,140	5,770	6,580	59,200	31,200	6,660	8,120	8,960	6,300	3,640
21	10,800	4,140	4,620	5,640	6,440	62,700	23,600	6,440	12,400	13,700	5,770	3,570
22	11,700	4,140	4,990	5,510	6,160	54,900	28,700	6,300	13,700	19,800	5,380	3,410
23	10,800	4,020	5,380	5,380	7,280	55,300	30,800	6,300	13,400	28,300	5,120	3,320
24	8,680	4,020	5,510	6,160	9,560	62,700	29,900	6,720	12,400	29,500	4,990	3,250
25	6,720	4,020	5,120	9,860	9,860	56,800	26,300	7,280	11,100	35,000	4,860	3,180
26	6,160	4,020	5,250	12,000	9,560	46,200	22,800	7,560	9,860	35,800	4,620	3,180
27	6,860	4,020	5,770	12,400	9,860	33,300	20,200	8,120	8,680	36,200	4,620	3,200
28	6,580	4,020	6,440	11,700	9,860	23,600	16,500	7,840	8,400	35,800	4,740	3,130
29	7,140	3,900	6,580	11,100	-	19,800	13,400	7,000	11,100	34,500	6,860	3,080
30	9,260	4,020	7,140	9,560	-	16,900	11,700	6,720	12,400	31,200	5,380	3,040
31	8,680	-	7,840	8,400	-	16,500	-	7,000	-	25,100	4,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	199,620	11,700	2,920	6,439	0.767	0.88
November	132,320	6,860	3,900	4,411	.526	.59
December	144,290	7,840	3,590	4,655	.555	.84
Calendar year 1937	5,673,050	93,100	2,920	15,540	1.85	25.15
January	272,850	12,400	5,380	8,802	1.05	1.21
February	188,800	9,860	4,860	6,743	.804	.84
March	848,000	62,700	6,300	27,350	3.26	3.76
April	1,587,400	136,000	11,700	52,910	6.31	7.04
May	279,980	14,400	6,300	9,032	1.08	1.24
June	312,920	14,700	6,720	10,430	1.24	1.38
July	478,730	36,200	5,510	15,440	1.84	2.12
August	284,040	20,600	4,620	9,163	1.09	1.26
September	119,120	5,250	3,040	3,971	.473	.53
Water year 1937-38	4,848,070	136,000	2,920	13,280	1.58	21.49

Peak discharge.- Mar. 20 (11 p.m.) 65,700 sec.-ft.; Apr. 9 (1 p.m.) 136,000 sec.-ft.; Aug. 3 (11 p.m.) 21,700 sec.-ft.

Coosa River at Jordan Dam, near Wetumpka, Ala.

Location.- Water-stage recorder, lat. 32°37', long. 86°15', in sec. 22, T. 19 N., R. 18 E., half a mile downstream from Jordan Dam and 7 miles upstream from Wetumpka. Zero of gage is 179.65 feet above mean sea level.
Drainage area.- 10,200 square miles.
Records available.- July 1912 to September 1914, December 1925 to September 1938.
Average discharge.- 12 years (1926-38), 16,460 second-feet.
Extremes.- Maximum discharge during year, 298,000 second-feet Apr. 8 (gage height, 46.4 feet), from rating curve extended above 68,000 second-feet on basis of power-plant records and spillway discharge; minimum, 54 second-feet at times in November, December, July, August, and September (gage height, 1.98 feet); minimum daily discharge, 209 second-feet July 10.
1912-14, 1925-38: Maximum discharge, that of Apr. 8, 1938; minimum, 54 second-feet at times in November and December 1937, July, August, and September 1938; minimum gage height, 1.95 feet at times in period 1930-37; minimum daily discharge, 70 second-feet Oct. 3, 1932, Dec. 9, 1933.
Remarks.- Records good between 4,000 and 70,000 second-feet and fair below 4,000 and above 70,000 second-feet. Discharge for periods of missing gage heights, Nov. 17 to Dec. 5, July 23-26, and period of backwater from Tallapoosa River, Apr. 8-14, computed from records of Jordan Dam hydroelectric plant. Flow almost completely regulated during low and medium stages by hydroelectric plants at Lay, Mitchell, and Jordan Dams. Records collected by Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Rating table, water year 1937-38 except periods of backwater (gage height, in feet, and discharge, in second-feet)

2.7	179	4.8	1,600	8.0	6,660	11.0	16,400	17.5	51,000	29.0	130,500
3.0	294	5.9	2,800	9.0	9,240	12.0	21,100	21.0	72,900	35.0	184,500
3.9	820	7.0	4,720	10.0	12,600	14.0	31,300	26.5	110,400	42.2	256,500

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,600	10,000	6,610	10,400	14,200	11,800	40,800	13,100	9,480	10,000	24,300	4,200
2	2,780	10,100	2,960	8,640	9,480	11,600	99,200	15,700	8,800	10,100	19,600	4,410
3	4,010	9,020	1,160	9,460	10,400	10,000	84,200	12,700	10,400	11,400	20,200	1,040
4	6,460	7,760	4,390	12,600	8,080	9,160	66,400	14,100	11,000	9,140	26,700	5,200
5	4,920	5,670	5,540	10,500	8,600	9,260	53,100	13,200	8,790	9,680	22,000	6,480
6	7,270	2,290	7,710	10,100	7,620	7,820	55,200	6,250	11,800	9,520	20,500	7,250
7	6,270	212	8,540	12,900	11,100	11,900	105,000	17,500	9,920	10,000	16,200	4,980
8	5,430	7,080	8,700	13,000	11,600	12,200	256,000	14,900	12,500	8,370	20,600	5,080
9	11,100	6,600	3,100	10,800	1,090	12,000	180,000	20,400	13,300	4,270	22,200	6,340
10	6,920	4,380	1,540	16,600	9,290	14,900	151,000	18,800	12,800	209	15,500	2,340
11	7,850	2,690	1,050	14,400	5,660	13,800	121,000	14,800	10,300	11,600	14,800	4,730
12	5,970	8,880	2,730	14,100	4,360	18,000	85,400	14,300	8,760	11,400	9,520	7,590
13	5,150	6,980	8,340	13,100	7,390	25,600	66,800	15,300	16,400	11,500	5,860	7,390
14	4,980	6,880	6,250	8,870	7,520	31,000	73,000	12,500	15,500	7,250	6,440	6,400
15	3,760	6,790	4,860	8,350	6,000	26,600	75,100	9,910	15,300	8,270	8,500	4,780
16	1,750	4,500	3,650	9,550	6,100	37,100	71,300	11,700	12,500	4,370	9,760	3,780
17	4,440	3,760	2,440	13,400	5,590	45,600	66,000	9,700	8,340	7,960	9,640	1,590
18	9,800	3,380	571	7,990	6,100	41,700	63,800	10,700	14,700	9,480	8,000	3,730
19	13,800	7,840	5,290	9,740	7,690	42,600	59,900	9,480	12,500	7,630	8,040	6,830
20	15,400	4,970	7,390	7,610	6,560	77,700	46,900	5,340	13,900	11,700	7,000	5,090
21	15,200	6,220	5,670	5,310	9,430	76,500	22,700	3,480	14,300	14,700	737	4,160
22	15,400	6,130	5,680	3,490	10,100	61,800	31,900	7,060	10,900	19,300	8,540	3,520
23	14,200	6,030	6,060	5,040	11,100	67,900	33,300	9,310	9,300	30,500	8,240	2,540
24	7,340	7,780	7,820	9,830	10,500	79,900	38,400	8,300	9,640	41,200	5,440	448
25	11,200	1,550	8,810	13,400	11,200	67,200	33,200	6,980	10,400	42,900	4,620	3,880
26	7,500	3,100	7,380	14,900	11,100	57,300	24,300	3,240	11,200	40,100	3,810	6,420
27	6,000	1,460	7,900	16,400	8,010	45,000	23,700	3,500	13,500	41,200	1,920	5,240
28	10,000	7,120	7,810	13,000	11,600	27,300	22,600	6,530	13,500	39,600	6,140	3,300
29	13,800	8,480	8,140	10,000	-	25,000	21,000	8,650	12,600	37,600	8,060	2,930
30	11,500	7,750	7,340	7,230	-	22,700	13,400	12,300	12,500	32,000	8,100	2,750
31	9,440	-	10,200	7,970	-	21,200	-	13,200	-	29,800	5,160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	251,240	15,400	1,600	8,105	0.795	0.92
November	175,402	10,100	212	5,847	.573	.64
December	175,631	10,200	571	5,666	.555	.64
Calendar year 1937	6,984,369	120,000	143	19,140	1.88	25.48
January	328,680	16,600	3,490	10,600	1.04	1.20
February	237,470	14,200	4,360	8,481	.831	.87
March	1,022,140	79,900	7,820	32,970	3.23	3.72
April	2,084,600	256,000	13,400	69,490	6.81	7.60
May	342,930	20,400	3,240	11,060	1.08	1.24
June	354,830	16,400	8,340	11,830	1.16	1.29
July	542,749	42,900	209	17,510	1.72	1.98
August	357,127	26,700	737	11,520	1.13	1.30
September	134,418	7,590	448	4,481	.439	.49
Water year 1937-38	6,007,217	256,000	209	16,460	1.61	21.89

Alabama River near Montgomery, Ala.

Location.- Water-stage recorder, lat. 32°24'42", long. 86°24'32", in NW¼ sec. 31, T. 17 N., R. 17 E., at bridge on U. S. Highway 31, 4 miles upstream from Autauga Creek and 6 miles northwest of Montgomery.
Drainage area.- 15,100 square miles.
Records available.- October 1927 to September 1938. January 1899 to December 1903 (gage heights only) at Montgomery, 9 miles upstream.
Average discharge.- 11 years, 24,340 second-feet.
Extremes.- Maximum discharge during year, 214,000 second-feet Apr. 10 (gage height, 56.8 feet); minimum, 6,770 second-feet Nov. 8 (gage height, 1.8 feet); minimum daily discharge, 7,700 second-feet Sept. 6.
1899-1903, 1927-38: Maximum gage height, 59.6 feet Mar. 17, 1929 (discharge of 209,000 second-feet, published in previous Water-Supply Papers, probably too low); minimum discharge, 4,840 second-feet Nov. 20, 1931 (gage height, 0.37 foot); minimum daily discharge, 5,120 second-feet Nov. 20, 1931.
Remarks.- Records good. Gage heights during period Apr. 6-10 determined from partial recorder record and from gage readings made twice daily or oftener at station or at steam power plant 9 miles upstream. Flow regulated by hydroelectric plants on Tallapoosa and Coosa Rivers and by Martin Dam Reservoir (capacity, 1,580,000 acre-feet) on Tallapoosa River. Records collected by the Alabama Power Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.4	7,700	6.6	16,200	25.0	64,600	50.0	137,000	54.5	177,000
3.0	8,700	8.8	21,600	37.0	97,000	51.0	142,000	56.5	209,000
3.9	10,400	12.0	29,900	41.0	108,200	52.5	153,000		
5.1	12,800	16.0	40,300	43.0	114,000	54.0	170,000		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,780	10,800	15,300	13,000	12,800	11,200	33,800	16,000	14,600	17,200	29,400	12,400
2	8,700	13,500	13,500	11,000	16,200	11,200	73,500	19,600	13,000	13,900	26,000	11,800
3	8,700	16,700	11,000	9,780	13,500	11,000	93,200	19,800	13,900	14,800	24,200	11,600
4	8,700	16,200	9,590	12,400	13,300	9,970	94,000	22,100	13,700	12,200	33,000	9,230
5	9,410	14,800	12,600	13,900	10,600	9,410	87,300	21,400	11,400	9,780	33,600	9,590
6	11,400	13,000	12,600	12,600	9,410	9,050	78,400	16,700	11,000	12,800	29,900	7,700
7	12,400	10,600	15,000	13,000	8,700	9,230	84,300	18,800	13,500	16,900	28,100	10,600
8	10,200	7,860	16,200	15,300	12,400	11,000	119,000	22,900	14,400	16,400	19,600	12,000
9	11,800	11,200	15,500	14,800	13,900	12,000	176,000	22,900	17,400	15,000	25,800	12,200
10	12,400	12,200	11,400	15,000	13,900	12,400	209,000	26,500	14,600	12,000	23,700	13,000
11	8,700	11,800	11,200	17,900	11,400	14,100	207,000	23,700	15,500	10,400	20,100	9,780
12	10,600	14,600	9,050	16,900	10,200	13,700	185,000	20,800	12,000	15,000	19,100	9,590
13	12,800	16,700	9,970	16,200	9,780	19,600	154,000	20,600	13,000	16,400	12,600	9,970
14	12,000	14,600	12,000	13,000	9,230	24,700	136,000	19,400	15,700	15,500	12,600	13,700
15	11,600	13,700	13,300	10,200	9,230	26,500	124,000	14,800	16,200	14,800	9,970	13,700
16	10,600	13,300	12,200	10,200	11,800	28,900	114,000	12,800	16,400	15,300	14,400	12,200
17	8,530	13,000	11,200	11,400	11,400	45,700	105,000	15,000	13,700	13,700	17,400	11,000
18	10,800	12,200	10,600	12,400	10,600	51,700	95,100	18,800	14,800	9,780	17,600	9,410
19	15,700	12,000	8,530	12,800	11,400	51,900	86,800	18,600	15,000	11,000	16,400	8,700
20	21,100	13,500	10,600	13,300	9,410	60,000	77,800	17,400	12,600	16,900	16,000	9,050
21	21,600	11,600	10,200	11,600	9,050	73,500	63,000	13,900	15,300	20,400	13,900	11,600
22	20,800	11,400	11,800	9,590	11,000	75,700	47,600	13,500	15,000	25,500	10,800	11,400
23	19,600	12,200	12,200	8,360	12,800	71,400	46,800	14,800	12,800	32,000	15,500	10,400
24	14,400	14,600	13,300	11,400	13,500	74,100	47,300	15,000	12,400	44,100	14,600	9,590
25	11,400	14,800	13,000	14,800	11,600	75,700	46,300	15,700	12,000	50,800	13,000	8,190
26	12,200	10,600	12,200	16,900	12,000	71,100	36,700	15,000	14,400	51,400	12,400	8,530
27	14,800	10,200	10,200	18,600	10,800	61,900	30,400	12,200	12,400	50,000	11,400	8,870
28	14,800	10,600	10,400	17,900	9,410	46,300	28,900	12,600	14,800	48,200	10,200	10,200
29	17,200	11,800	10,200	13,900	-	30,400	27,300	13,900	16,200	45,700	10,800	9,780
30	15,700	13,900	10,800	9,970	-	25,800	23,700	11,000	17,400	40,100	9,780	9,230
31	12,200	-	12,000	9,410	-	22,900	-	14,400	-	34,600	12,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	400,620	21,600	8,530	12,920	0.856	0.99
November	383,960	16,700	7,860	12,800	.848	.95
December	367,640	16,200	8,530	11,860	.785	.90
Calendar year 1937	9,736,790	106,000	6,620	26,680	1.77	23.98
January	407,510	18,600	8,360	13,150	.871	1.00
February	319,320	16,200	8,700	11,400	.755	.79
March	1,072,060	75,700	9,050	34,580	2.29	2.64
April	2,731,200	209,000	23,700	91,040	6.03	6.73
May	540,600	26,500	11,000	17,440	1.15	1.33
June	425,100	17,400	11,000	14,170	.938	1.05
July	722,560	51,400	9,780	23,310	1.54	1.78
August	564,050	33,600	9,780	18,200	1.21	1.40
September	515,010	13,700	7,700	10,500	.695	.78
Water year 1937-38	8,249,630	209,000	7,700	22,600	1.50	20.34

Alabama River at Selma, Ala.

Location.- Wire-weight gage, lat. 32°24', long. 87°01', in T. 17 N., R. 10 E., at bridge on U. S. Highway 80, in Selma, 2 miles upstream from Valley Creek. Prior to Apr. 12, 1938, water-stage recorder at same site and datum.

Drainage area.- 17,100 square miles.

Records available.- January 1899 to December 1913, June 1928 to September 1938.

Average discharge.- 23 years (1900-1913, 1928-38), 26,860 second-feet.

Extremes.- Maximum discharge during year, 192,000 second-feet Apr. 12 (gage height, 55.4 feet); minimum, 8,700 second-feet Nov. 9 (gage height, 3.05 feet); minimum daily discharge, 9,180 second-feet Nov. 9.

1899-1913, 1928-38: Maximum discharge, 204,000 second-feet Mar. 19, 1929 (gage height, 55.52 feet); minimum, 2,660 second-feet Nov. 1, 1904 (gage height, -2.20 feet); minimum daily discharge, 3,300 second-feet Oct. 9 to Nov. 3, 1904.

Maximum stage known, 57.0 feet Apr. 8, 1886 (discharge, 221,000 second-feet).

Remarks.- Records good. Gage read twice daily Apr. 12 to Sept. 30. Flow regulated by power plants on Coosa and Tallapoosa Rivers. (See records for Alabama River near Montgomery, Ala.)

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,300	13,700	15,000	13,300	10,800	10,900	47,400	24,700	15,400	18,700	37,700	13,900
2	10,800	12,000	16,000	14,500	14,200	12,200	77,200	18,500	15,200	17,400	33,400	14,500
3	10,000	14,500	14,700	13,200	16,600	12,600	102,000	21,200	14,500	15,000	31,200	14,500
4	9,690	17,000	12,200	12,200	14,900	11,800	108,000	22,200	15,000	15,400	31,900	13,500
5	9,690	16,800	11,100	14,300	14,100	10,900	107,000	23,700	14,700	13,300	37,900	11,500
6	10,200	15,600	13,300	15,400	11,800	10,200	104,000	24,200	13,200	11,500	35,900	11,300
7	12,000	13,700	14,100	15,800	10,400	9,690	110,000	18,900	12,400	14,100	32,900	10,000
8	13,000	11,300	16,000	17,400	9,860	9,860	142,000	23,200	13,700	17,400	29,900	12,000
9	11,500	9,180	17,200	19,400	13,000	11,500	162,000	24,400	15,600	17,000	25,400	13,300
10	12,400	11,700	16,000	18,100	14,700	12,400	174,000	25,900	17,600	16,000	27,900	14,100
11	13,000	14,700	12,800	18,100	14,700	13,500	186,000	28,400	16,200	13,500	25,900	14,700
12	10,200	21,500	10,800	19,400	12,800	14,700	190,000	25,400	16,600	12,400	22,400	11,800
13	11,100	25,700	10,000	18,700	11,100	15,200	188,000	22,700	14,500	16,000	20,100	11,500
14	13,000	25,700	10,900	17,600	10,600	20,500	178,000	22,400	14,900	17,200	15,200	12,600
15	12,600	22,200	13,000	14,500	10,200	26,200	168,000	20,300	16,400	17,600	13,700	15,200
16	12,000	18,700	13,900	11,700	10,400	30,400	155,000	15,800	17,000	18,100	12,400	15,000
17	11,100	16,600	13,700	11,100	12,200	40,400	141,000	14,500	17,000	16,800	16,200	13,900
18	12,600	15,200	13,300	12,400	12,200	53,000	129,000	16,600	14,900	15,400	18,700	12,200
19	17,200	14,500	12,600	13,200	12,800	58,500	116,000	19,600	16,000	12,000	18,700	10,900
20	21,700	14,500	10,800	13,900	13,500	61,600	106,000	19,600	16,200	14,500	17,900	10,000
21	25,700	15,000	11,500	14,300	12,200	71,400	93,800	18,100	14,900	21,200	17,000	10,400
22	24,900	13,700	11,700	12,800	11,100	79,100	77,800	14,900	17,000	27,200	15,200	12,600
23	22,900	13,300	13,700	10,900	12,600	82,000	63,800	14,900	16,000	33,200	13,500	12,600
24	21,000	14,100	17,000	10,400	14,900	82,000	57,100	15,600	14,100	40,700	16,200	11,700
25	16,100	15,800	17,900	15,200	16,000	83,600	53,200	16,400	13,500	52,400	15,800	10,800
26	13,000	15,400	17,000	19,200	14,500	83,600	49,200	17,000	13,700	56,300	14,500	9,520
27	13,700	12,600	15,200	20,300	13,900	79,400	40,400	15,800	15,200	56,300	13,900	9,520
28	15,800	11,700	13,200	21,000	12,400	70,100	34,700	13,700	14,100	55,000	13,000	10,000
29	16,200	12,000	12,200	19,400	-	54,500	32,400	14,100	15,800	51,700	12,800	11,300
30	17,900	13,300	11,700	15,600	-	38,900	30,200	14,700	17,200	48,200	12,800	10,900
31	16,600	-	12,000	11,800	-	30,900	-	13,200	-	42,400	12,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	448,800	25,700	9,690	14,480	0.847	0.98
November	461,680	25,700	9,180	15,390	.900	1.00
December	420,500	17,900	10,000	13,560	.793	.91
Calendar year 1937	11,202,460	117,000	8,090	30,690	1.79	24.35
January	475,100	21,000	10,400	15,330	.896	1.03
February	358,460	16,600	9,860	12,800	.749	.78
March	1,201,750	83,600	9,690	38,770	2.27	2.62
April	3,223,200	190,000	30,200	107,400	6.28	7.01
May	600,600	28,400	13,200	19,370	1.13	1.30
June	458,500	17,600	12,400	15,280	.894	1.00
July	793,900	56,300	11,500	25,610	1.50	1.73
August	662,200	37,900	12,200	21,360	1.25	1.44
September	365,740	15,200	9,520	12,190	.713	.80
Water year 1937-38	9,470,510	190,000	9,180	25,950	1.52	20.60

Alabama River near Millers Ferry, Ala.

Location.- Staff gage, lat. 32°07', long. 87°24', in NW¼ sec. 8, T. 13 N., R. 7 E., at bridge on State Highway 28, just downstream from Prairie Creek, 2¼ miles northwest of Millers Ferry.

Drainage area.- 20,700 square miles.

Records available.- October 1937 to September 1938.

Extremes.- Maximum discharge during year, 237,000 second-feet Apr. 14 (gage height, 56.6 feet); minimum observed, 9,940 second-feet Oct. 6 (gage height, 6.4 feet).
Maximum stage known, about 62 feet sometime in 1886.

Remarks.- Records good. Discharge above 32,300 second-feet determined by using rate of change of stage as a factor. Gage read once daily Oct. 1 to Apr. 30 and twice daily thereafter. Flow regulated by operation of power plants on Coosa and Tallapoosa Rivers. (See Alabama River near Montgomery, Ala.).

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,200	18,800	15,300	16,900	15,700	15,900	106,000	33,500	15,500	18,600	44,800	14,000
2	10,700	17,700	16,700	17,900	15,100	14,300	115,000	28,200	16,900	20,100	41,800	13,600
3	11,500	15,900	17,500	18,800	17,100	14,700	120,000	24,100	17,100	19,600	38,600	16,300
4	11,800	15,300	16,500	17,900	18,800	14,900	116,000	24,400	16,700	17,700	36,200	16,700
5	10,400	16,300	14,500	17,300	17,500	14,700	118,000	26,500	16,700	16,500	36,800	14,700
6	10,200	16,700	13,400	19,200	16,100	14,000	125,000	28,900	16,700	15,100	39,000	12,700
7	11,500	16,700	15,100	22,800	14,500	12,800	148,000	29,100	15,300	12,800	38,700	12,100
8	12,500	15,900	16,300	23,400	13,200	12,500	179,000	27,500	14,700	14,000	36,400	11,000
9	14,000	15,100	18,100	23,900	12,800	12,500	196,000	26,500	15,500	16,900	34,800	11,800
10	13,600	14,500	19,000	23,200	14,900	13,600	208,000	27,900	16,900	18,800	31,300	13,200
11	12,100	19,200	18,600	22,800	16,700	14,500	212,000	29,100	17,700	17,100	29,900	14,300
12	11,600	42,300	15,900	22,300	16,300	15,100	222,000	30,300	18,600	15,100	27,700	14,300
13	11,800	46,100	13,000	22,800	14,500	16,300	230,000	28,700	18,300	14,300	23,000	12,800
14	12,100	40,500	12,300	21,400	13,400	18,800	235,000	26,000	17,500	17,100	20,500	12,300
15	12,800	34,300	12,800	18,800	12,500	23,400	230,000	24,100	16,900	18,800	16,500	12,500
16	14,000	28,200	14,500	16,900	12,300	31,800	222,000	21,800	17,900	20,500	14,300	13,600
17	14,300	23,700	16,300	14,900	12,500	56,200	193,000	20,300	18,600	20,100	13,400	14,300
18	19,400	21,000	17,900	14,300	14,700	66,200	178,000	19,200	18,300	18,600	17,100	14,300
19	23,600	19,200	18,600	14,700	17,300	70,100	172,000	18,800	17,100	17,500	19,800	13,600
20	34,600	18,800	16,300	15,500	18,100	81,200	138,000	20,500	17,900	15,500	19,800	11,500
21	33,800	18,600	14,300	16,300	18,800	87,400	126,000	20,500	18,800	18,300	17,500	10,700
22	31,800	18,100	14,300	16,500	17,300	92,800	115,000	19,000	19,400	25,100	18,100	11,100
23	29,100	16,700	15,700	15,300	17,300	101,000	92,000	17,700	19,600	30,600	15,300	12,300
24	25,500	16,100	20,700	15,300	21,800	98,800	74,600	17,300	18,300	42,000	14,100	12,500
25	23,000	16,300	23,900	18,800	22,300	96,700	70,800	18,600	16,700	55,000	16,100	12,300
26	19,000	17,300	22,300	21,200	20,700	96,400	62,200	19,600	15,700	62,000	14,300	11,300
27	16,500	17,500	20,500	23,700	19,200	95,400	53,000	20,100	15,700	65,500	15,100	10,700
28	18,100	15,900	18,300	24,600	17,700	85,500	44,400	18,800	17,100	64,300	14,300	10,500
29	18,300	14,100	16,500	23,900	-	74,100	40,200	17,500	17,500	59,400	14,300	10,800
30	18,800	14,000	15,900	21,400	-	44,800	36,400	16,300	17,900	55,000	13,200	11,500
31	18,800	-	16,100	18,300	-	60,200	-	15,500	-	50,500	13,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	535,400	34,600	10,200	17,270	0.834	0.96
November	620,800	46,100	14,000	20,690	1.00	1.12
December	517,100	23,900	12,300	16,680	.806	.93
Calendar year 1937						
January	601,000	24,600	14,300	19,390	.937	1.08
February	459,100	22,300	12,300	16,400	.792	.82
March	1,466,600	101,000	12,500	47,310	2.29	2.64
April	4,177,600	235,000	36,400	139,300	6.73	7.51
May	716,300	32,500	15,500	23,110	1.12	1.29
June	517,500	19,600	14,700	17,250	.833	.93
July	872,400	65,500	12,800	28,140	1.36	1.57
August	745,900	44,900	13,200	24,060	1.16	1.34
September	383,300	16,700	10,500	12,780	.617	.69
Water year 1937-38	11,613,000	235,000	10,200	31,820	1.54	20.88

Alabama River at Claiborne, Ala.

Location.- Water-stage recorder, lat. 31°32', long. 87°31', in sec. 25, T. 7 N., R. 5 E., at bridge on State Highway 44, in Claiborne. Zero of gage is at mean sea level.

Drainage area.- 22,000 square miles.

Records available.- April 1930 to September 1938.

Extremes.- Maximum discharge during year, 227,000 second-feet Apr. 16, 17; maximum gage height, 52.25 feet Apr. 17; minimum discharge, 9,750 second-feet Oct. 1 (gage height, 10.97 feet).

1930-38: Maximum discharge, that of Apr. 16, 17, 1938; maximum gage height, that of Apr. 17, 1938; minimum discharge, 6,200 second-feet Nov. 3, 4, 1931; minimum gage height, 8.00 feet Nov. 4, 1931.

Remarks.- Records good. Gage heights for Oct. 2-14, Nov. 13-15 determined from graph drawn on basis of partial gage-height record and recorded range in stage. Flow regulated by power plants on Coosa and Tallapoosa Rivers. (See records for Alabama River near Montgomery, Ala.)

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

11.1	9,920	18.0	23,700	27.0	47,300	36.0	85,700	46.0	151,000
12.0	11,500	23.0	35,600	30.0	58,700	40.0	108,000	49.0	183,000
16.0	19,400	25.0	41,000	34.0	76,100	44.0	134,000	52.2	227,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,920	19,000	15,400	16,600	20,600	19,800	73,800	39,900	17,000	17,800	51,600	14,000
2	10,800	18,200	16,000	16,800	18,200	17,800	89,800	35,400	16,800	18,800	47,000	14,000
3	11,500	16,200	17,200	18,200	17,000	16,600	101,000	30,400	17,600	19,600	42,800	15,200
4	11,700	14,800	18,000	19,600	18,600	16,200	109,000	27,100	17,800	19,000	39,600	16,200
5	11,500	15,800	17,400	19,400	19,400	16,200	114,000	26,700	17,400	17,800	37,100	16,400
6	11,100	17,400	16,000	19,200	19,000	15,800	118,000	28,300	17,800	17,000	37,100	15,600
7	11,000	17,800	15,200	21,500	18,000	14,800	126,000	29,200	17,400	15,600	37,900	14,000
8	11,300	17,200	15,800	25,300	16,600	14,200	140,000	27,800	16,200	14,200	37,700	12,800
9	12,300	15,800	17,200	25,700	14,800	13,400	161,000	26,000	15,600	15,600	36,400	11,900
10	13,000	13,800	19,000	25,500	14,200	13,400	175,000	26,700	16,400	17,800	33,900	12,300
11	12,800	14,600	20,000	25,300	15,400	14,200	188,000	27,100	17,800	18,600	32,100	13,600
12	13,200	29,000	19,000	24,300	16,800	15,200	198,000	28,300	18,800	18,000	30,600	14,400
13	12,800	42,500	17,000	24,100	17,000	16,200	208,000	28,500	18,800	16,600	29,200	14,800
14	11,900	47,000	14,800	23,900	16,200	17,400	216,000	27,100	18,800	16,000	25,700	13,800
15	11,900	44,000	13,600	23,200	14,800	19,400	222,000	25,700	17,600	17,400	22,800	12,600
16	12,800	38,200	13,800	21,900	13,800	32,200	227,000	24,600	17,600	18,800	19,400	12,800
17	13,200	33,100	16,200	19,600	13,200	47,000	227,000	22,800	18,400	19,400	17,000	14,400
18	16,800	28,800	20,400	17,400	13,400	55,500	224,000	20,000	19,000	19,800	15,600	15,200
19	24,300	25,000	22,400	16,200	18,000	63,700	218,000	18,800	18,600	19,000	17,000	14,800
20	30,900	22,800	21,100	16,400	23,000	71,100	206,000	19,800	17,800	18,200	18,600	13,800
21	32,600	21,500	18,800	16,800	23,400	77,500	193,000	21,300	18,400	17,800	19,200	12,400
22	32,400	20,600	16,800	17,400	21,700	82,300	178,000	21,500	18,600	20,200	19,000	11,300
23	31,100	19,800	17,600	17,400	20,200	87,800	162,000	20,400	19,000	25,300	18,200	11,300
24	29,000	18,400	21,700	17,600	21,900	93,100	146,000	19,000	19,600	34,100	16,600	12,400
25	26,400	17,600	25,500	18,400	24,600	97,500	128,000	19,000	18,800	40,400	17,600	13,000
26	23,700	17,800	25,700	20,000	24,600	99,200	110,000	19,400	17,400	49,400	16,400	12,600
27	20,400	18,600	24,100	21,900	23,200	100,000	90,900	19,800	16,400	56,300	16,400	11,900
28	17,800	18,200	22,400	23,700	21,500	101,000	73,800	20,000	16,800	59,900	16,000	11,100
29	17,000	17,000	20,400	24,600	-	98,600	57,900	19,000	17,200	61,200	15,400	10,600
30	17,600	15,600	18,800	24,600	-	92,500	46,300	17,600	17,200	59,500	15,000	10,800
31	18,400	-	17,600	23,200	-	78,900	-	17,400	-	55,900	14,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	541,120	32,600	9,920	17,460	0.794	0.92
November	676,100	47,000	13,800	22,540	1.02	1.14
December	574,900	25,700	13,600	18,550	.843	.97
Calendar year 1937	13,786,900	128,000	8,650	37,770	1.72	23.30
January	645,700	25,700	16,200	20,830	.947	1.09
February	519,100	24,600	13,200	18,540	.843	.88
March	1,518,500	101,000	13,400	48,980	2.23	2.57
April	4,527,500	227,000	46,300	150,900	6.86	7.65
May	754,600	39,900	17,400	24,340	1.11	1.28
June	532,600	19,600	15,600	17,750	.807	.90
July	835,000	61,200	14,200	26,940	1.22	1.41
August	813,300	51,600	14,400	26,240	1.19	1.37
September	400,000	16,400	10,600	13,330	.606	.68
Water year 1937-38	12,338,420	227,000	9,920	33,800	1.54	20.86

Conasauga River at Tilton, Ga.

Location.- Staff gage, lat. 34°40', long. 84°56', at county bridge a quarter of a mile downstream from Swamp Creek, half a mile northeast of Tilton, Whitfield County, 12 miles downstream from Holly Creek, and 12 miles upstream from confluence with Coosawattee River to form the Oostanaula.

Drainage area.- 682 square miles.

Records available.- June 1937 to September 1938.

Extremes.- Maximum discharge observed during period June to September 1937, 2,920 second-feet Aug. 26 (gage height, 9.3 feet); minimum observed, 160 second-feet Aug. 4, 5, and Sept. 26-30 (gage height, 2.5 feet).
Maximum discharge observed during water year 1937-38, 20,300 second-feet Apr. 10 (gage height, 25.4 feet); minimum observed, 160 second-feet Oct. 1, 2 (gage height, 2.5 feet).

Remarks.- Records fair below 2,400 second-feet and good above. Stage affected by backwater Apr. 12, 13, July 27, 28. Gage-height record from twice-daily gage readings and results of nine discharge measurements furnished by Corps of Engineers, U. S. Army.

Rating table, June 5, 1937 to Sept. 30, 1938, except periods of backwater (gage height, in feet, and discharge, in second-feet)

2.5	160	8.0	2,320	22.0	12,800
3.0	310	12.0	4,200	24.0	17,000
4.0	646	16.0	6,360	26.0	21,700
5.0	1,024	18.0	7,750		
6.0	1,436	20.0	9,770		

Discharge, in second-feet, 1937-38

1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									-	250	280	506
2									-	220	280	374
3									-	220	190	310
4									-	220	160	265
5									506	220	160	280
6									506	326	754	1,160
7									438	390	374	574
8									374	326	342	390
9									342	310	358	792
10									342	280	1,350	406
11									342	280	868	310
12									342	280	390	265
13									310	295	280	250
14									280	250	374	250
15									280	235	438	205
16									326	220	342	220
17									574	220	295	220
18									718	190	265	220
19									540	190	235	220
20									506	265	220	205
21									406	235	190	190
22									310	220	190	190
23									295	250	190	190
24									265	235	540	190
25									250	506	1,870	190
26									250	610	2,870	160
27									250	250	2,100	160
28									250	250	574	160
29									250	280	506	160
30									250	310	438	160
31									-	295	506	-

Discharge, in second-feet, of Conasauga River at Tilton, Ga., 1937-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	310	342	718	1,230	846	1,350	868	1,830	646	830	358
2	160	280	326	1,870	1,100	574	3,060	868	1,270	610	1,270	310
3	205	280	280	2,050	792	792	2,780	718	1,520	540	1,650	310
4	342	250	265	1,180	718	868	1,520	646	1,480	506	1,440	295
5	540	250	280	792	646	754	1,180	1,270	868	506	1,180	310
6	792	250	280	718	610	1,350	1,020	868	682	472	830	310
7	390	250	280	1,270	574	2,320	1,830	.718	574	438	868	342
8	295	250	280	1,520	574	1,270	8,580	792	1,520	506	944	326
9	220	250	235	944	506	944	16,100	1,140	2,410	574	792	295
10	250	250	220	792	506	3,720	19,300	868	3,820	718	682	250
11	374	250	235	754	472	5,220	13,700	646	3,340	646	682	250
12	265	250	190	754	472	5,550	6,500	574	1,870	506	718	265
13	220	250	220	646	438	2,500	2,600	574	1,230	406	646	250
14	220	250	250	574	438	1,270	1,520	574	906	438	574	265
15	190	250	250	540	406	1,020	1,230	718	754	406	506	326
16	190	250	250	506	438	1,350	1,100	574	646	406	506	438
17	190	250	280	438	438	2,500	868	472	646	374	646	342
18	342	250	406	472	438	1,780	2,920	438	906	374	506	265
19	906	250	682	406	646	1,230	4,600	438	646	326	472	235
20	868	250	792	438	1,310	4,700	5,500	438	1,960	574	438	220
21	718	250	506	390	906	5,550	5,440	438	3,300	1,520	406	220
22	506	250	438	406	718	5,770	6,120	540	2,500	2,180	390	220
23	390	250	610	438	1,100	2,870	6,680	646	1,100	5,320	358	220
24	342	250	754	1,350	2,690	3,250	4,960	1,520	868	7,430	342	220
25	310	250	718	2,870	1,780	3,020	1,920	906	868	8,450	310	220
26	374	250	540	2,320	1,060	1,740	1,520	646	2,140	9,070	310	220
27	1,180	250	574	1,310	868	1,440	1,230	540	2,600	6,200	295	190
28	906	310	1,350	868	792	1,560	1,020	438	2,320	2,000	326	190
29	610	342	1,660	718	-	1,310	944	438	1,180	1,100	342	190
30	438	374	1,100	646	-	1,100	830	718	792	1,020	310	190
31	342	-	792	718	-	1,020	-	1,180	-	1,020	358	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
June 5-30, 1937	9,502	718	250	365	0.535	0.52
July	8,628	610	190	278	.408	.47
August	17,929	2,870	160	578	.848	.98
September	9,192	1,180	160	306	.449	.50
Water year						
October 1937	13,235	1,180	160	427	.626	.72
November	7,896	374	260	263	.386	.43
December	15,375	1,650	190	496	.727	.84
Calendar year						
January 1938	29,416	2,870	390	949	1.39	1.60
February	22,666	2,690	406	810	1.19	1.24
March	68.988	5,770	574	2,225	3.26	3.76
April	127,922	19,300	830	4,264	6.25	6.97
May	22,212	1,520	438	717	1.05	1.21
June	46,546	3,820	574	1,552	2.28	2.54
July	55,282	9,070	326	1,783	2.61	3.01
August	19,927	1,650	295	643	.943	1.09
September	8,042	438	190	268	.393	.44
Water year 1937-38	437,507	19,300	160	1,199	1.76	23.85

Etowah River at Canton, Ga.

Location.- Wire-weight gage, lat. 34°14', long. 84°30', at bridge on State Highway 5, at Canton, Cherokee County, three-quarters of a mile upstream from Canton Creek and 1⅝ miles downstream from Hickory Log Creek.

Drainage area.- 605 square miles.

Records available.- March 1892 to December 1905 (prior to 1895 gage heights only), March 1937 to September 1938. U. S. Weather Bureau has obtained daily stages since July 1891.

Extremes.- Maximum discharge observed during year, 19,700 second-feet Apr. 8 (gage height, 22.44 feet); minimum observed, 350 second-feet Oct. 1-3; minimum gage height, 1.48 feet Oct. 2, 3.

1896-1905, 1937-38: Maximum discharge observed, that of Apr. 8, 1938; minimum observed, 190 second-feet several days in September and October 1904.

Maximum stage known, 28.3 feet Dec. 10, 1919, present datum.

Remarks.- Records good. Discharge for June 17 computed on basis of records for station at Kingston. Occasional regulation during periods of low flow. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.5	350	8.0	3,250	21.0	15,660
2.0	535	12.0	5,650	22.0	18,300
3.0	920	16.0	8,520	23.0	22,000
4.0	1,290	18.0	10,650		
6.0	2,208	20.0	13,640		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	350	615	575	806	844	575	2,410	1,030	920	654	1,030	495
2	350	535	575	920	730	535	4,270	1,030	1,030	615	1,170	495
3	402	535	535	882	692	615	2,410	992	1,100	615	1,410	1,030
4	1,030	535	535	806	692	956	1,830	992	882	615	1,370	575
5	1,370	535	535	730	654	730	1,410	1,210	844	575	1,100	495
6	1,250	535	535	768	654	920	1,250	2,010	730	654	1,030	768
7	692	535	535	844	654	956	2,980	1,210	692	615	992	615
8	575	535	515	806	654	806	14,300	1,170	692	575	956	575
9	495	535	515	768	615	730	10,400	1,140	575	615	956	535
10	455	535	515	730	615	2,060	3,340	1,100	1,060	615	956	515
11	438	535	515	730	615	1,680	2,410	992	1,060	575	956	515
12	438	535	495	768	575	1,140	2,010	956	1,140	515	882	495
13	438	535	475	730	575	992	1,820	956	920	495	806	475
14	438	535	455	692	575	882	1,630	992	768	475	768	455
15	438	535	475	692	575	844	1,540	956	692	495	768	438
16	420	535	475	654	575	2,880	1,460	920	654	475	844	438
17	420	535	515	654	535	3,730	1,370	882	654	495	768	420
18	615	535	768	654	535	1,720	1,410	882	1,820	475	692	420
19	3,910	535	692	615	615	1,290	1,540	844	1,370	920	615	420
20	2,110	535	654	615	615	4,930	1,370	844	1,820	1,460	615	402
21	1,140	535	615	615	575	2,720	1,910	806	1,370	3,250	615	385
22	882	535	692	615	575	1,720	1,770	806	1,100	4,080	575	368
23	768	535	920	575	615	1,590	1,540	806	1,060	5,410	575	368
24	730	515	768	730	1,140	1,460	1,410	806	844	4,870	575	368
25	654	515	692	1,100	806	1,250	1,250	768	768	2,860	535	368
26	615	535	654	882	730	1,140	1,210	768	730	2,060	535	368
27	2,670	730	654	768	692	1,140	1,170	768	920	1,650	515	368
28	1,100	768	692	692	654	1,100	1,140	730	806	1,540	535	368
29	768	730	692	654	-	1,030	1,100	730	692	1,170	515	385
30	730	654	882	654	-	992	1,060	882	654	1,100	515	420
31	654	-	768	692	-	956	-	1,100	-	1,060	515	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	27,345	3,910	350	882	1.46	1.68
November	16,832	768	515	561	.927	1.03
December	18,918	920	455	610	1.01	1.16
Calendar year						
January	22,841	1,100	575	737	1.22	1.41
February	18,381	1,140	535	656	1.08	1.12
March	44,069	4,930	535	1,422	2.35	2.71
April	74,520	14,300	1,060	2,484	4.11	4.59
May	30,078	2,010	730	970	1.60	1.84
June	28,367	1,820	575	946	1.56	1.74
July	41,528	5,410	475	1,340	2.21	2.55
August	24,689	1,410	515	796	1.32	1.52
September	14,342	1,030	368	478	.790	.88
Water year 1937-38	361,910	14,300	350	992	1.64	22.23

Etowah River near Kingston, Ga.

Location.- Water-stage recorder, lat. 34°12', long. 84°59', at county bridge, half a mile upstream from Two Run Creek, 1⅝ miles upstream from Connesena Creek, and 2½ miles southwest of Kingston, Bartow County. Zero of gage is 609.97 feet above mean sea level.

Drainage area.- 1,630 square miles.

Records available.- July 1928 to December 1931, November 1936 to September 1938.

Extremes.- Maximum discharge during year, 42,700 second-feet Apr. 9 (gage height, 27.7 feet); minimum, 380 second-feet Sept. 30 (gage height, 3.20 feet).
1928-31, 1936-38: Maximum discharge, that of Apr. 9, 1938; minimum, 201 second-feet Oct. 19, 1931 (gage height, 2.76 feet).

Remarks.- Records good except those for period of doubtful gage heights, Apr. 25 to May 5, May 7-17 (computed from partial gage-height record), and those for periods of missing gage heights, May 30 to June 7, Aug. 21-25 (computed on basis of records for Etowa River at Canton, Oostanaula River at Resaca, and Coosa River near Rome), all of which are fair. Moderate diurnal fluctuation during low stage caused by mill dam at Cartersville.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.0	270	5.0	1,680	10.0	8,000	20.0	26,200
3.5	560	6.0	2,610	13.0	13,100	24.0	34,400
4.0	900	8.0	4,950	16.0	18,500	28.0	43,400

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	970	1,390	1,190	1,430	1,390	1,230	10,600	2,180	2,600	1,350	1,860	970
2	935	1,310	1,150	1,470	1,390	1,190	20,600	2,130	2,500	1,310	3,710	935
3	1,040	1,270	1,110	1,590	1,310	1,230	13,000	2,130	2,500	1,270	4,430	1,550
4	1,970	1,270	1,110	1,470	1,270	1,470	5,230	2,130	2,100	1,230	3,350	1,270
5	5,900	1,230	1,110	1,390	1,270	1,510	3,820	2,310	1,700	1,230	2,360	1,080
6	3,240	1,190	1,110	1,350	1,270	1,820	3,350	3,700	1,600	1,310	2,130	1,770
7	1,950	1,190	1,110	1,720	1,230	2,220	7,990	2,810	1,550	1,270	2,180	1,550
8	1,390	1,190	1,040	1,900	1,230	1,720	34,300	2,310	1,510	1,430	1,900	1,190
9	1,190	1,150	1,080	1,680	1,190	1,510	40,900	2,130	1,680	1,390	2,080	1,110
10	1,110	1,150	1,110	1,470	1,150	4,320	21,500	2,040	2,220	1,510	2,080	1,000
11	1,080	1,150	1,040	1,430	1,190	4,820	6,560	2,000	2,180	1,270	1,680	970
12	1,040	1,150	1,000	1,470	1,190	3,020	5,230	1,950	3,580	1,110	1,640	970
13	1,000	1,190	1,040	1,430	1,190	2,220	4,430	1,950	2,130	1,080	1,550	935
14	1,040	1,190	1,080	1,350	1,190	1,900	3,940	2,040	1,640	1,080	1,430	900
15	1,040	1,150	1,080	1,310	1,150	1,770	3,580	2,040	1,430	1,390	1,470	935
16	970	1,110	1,040	1,270	1,150	7,460	3,350	1,860	1,350	1,150	2,260	865
17	935	1,110	1,110	1,230	1,110	12,400	3,130	1,720	1,350	1,040	1,590	865
18	1,310	1,110	1,350	1,230	1,110	5,800	3,240	1,680	3,460	970	1,430	816
19	4,300	1,080	1,550	1,190	1,230	4,000	4,180	1,680	2,410	1,190	1,310	802
20	5,370	1,110	1,430	1,190	1,350	17,200	3,350	1,640	3,820	3,340	1,230	809
21	2,810	1,110	1,310	1,150	1,270	10,800	4,430	1,590	2,810	4,820	1,230	760
22	1,900	1,040	1,230	1,150	1,150	4,820	4,300	1,900	2,610	7,840	1,180	718
23	1,680	1,040	1,350	1,150	1,270	3,940	3,460	1,770	1,950	10,000	1,140	739
24	1,510	1,000	1,770	1,230	2,000	4,430	3,020	1,590	1,680	11,200	1,100	753
25	1,390	1,000	1,820	1,680	1,900	3,350	2,810	1,550	1,510	7,040	1,060	718
26	1,560	1,040	1,550	1,860	1,510	2,810	2,610	1,550	1,550	4,060	1,040	697
27	5,510	1,150	1,510	1,550	1,390	2,710	2,460	1,590	2,840	2,910	970	697
28	3,580	1,310	1,590	1,390	1,310	2,810	2,360	1,550	2,080	2,360	1,190	697
29	2,080	1,350	2,040	1,270	-	2,510	2,260	1,590	1,590	2,040	1,470	725
30	1,640	1,270	1,860	1,270	-	2,260	2,220	1,800	1,430	1,860	1,080	732
31	1,470	-	1,640	1,270	-	2,360	-	2,400	-	1,720	1,000	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	62,910	5,900	935	2,029	1.24	1.43
November	35,000	1,390	1,000	1,167	.716	.80
December	40,510	2,040	1,000	1,307	.802	.92
Calendar year 1937	1,090,340	31,400	935	2,987	1.83	24.66
January	43,540	1,900	1,150	1,405	.862	.99
February	36,360	2,000	1,110	1,299	.797	.83
March	121,610	17,200	1,190	3,923	2.41	2.78
April	232,210	40,900	2,220	7,740	4.75	5.30
May	61,510	3,700	1,550	1,978	1.21	1.40
June	63,360	3,820	1,350	2,112	1.30	1.45
July	82,770	11,200	970	2,670	1.64	1.89
August	54,130	4,430	970	1,746	1.07	1.23
September	28,528	1,770	697	951	.583	.65
Water year 1937-38	862,238	40,900	697	2,362	1.45	19.67

Peak discharge.- Mar. 20 (10 a.m.) 19,100 sec.-ft.; July 24 (6 a.m.) 12,600 sec.-ft.

Chattooga River at Summerville, Ga.

Location.- Water-stage recorder, lat. 34°28', long. 85°20', 600 feet downstream from bridge on U. S. Highway 27, 1 mile southeast of Summerville, Chattooga County, and 4 miles upstream from Raccoon Creek. Prior to Nov. 12 staff gage at same site and datum.

Drainage area.- 193 square miles.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge during year, 12,100 second-feet Apr. 8 (gage height, 17.7 feet); minimum discharge observed, 36 second-feet Oct. 15, 17 (gage height, 1.54 feet). 1937-38: Maximum discharge, that of Apr. 8, 1938; minimum discharge observed, that of Oct. 15, 17, 1938.

Remarks.- Records good except those for periods of once-daily gage readings, Oct. 1 to Nov. 11, July 3-11, and periods of missing gage heights, June 23-28, 30, July 1, 2, which were computed on basis of records for several nearby stations and are fair. Extensive diurnal fluctuation caused by operation of hydroelectric plant at Trion, 6 miles upstream.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.5	32	3.0	260	8.0	1,460	12.0	3,080	16.0	8,480
2.0	90	4.0	468	10.0	2,040	13.0	4,100	18.0	12,780
2.5	167	6.0	950	11.0	2,440	14.0	5,360		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	108	96	283	262	150	572	264	166	300	337	132
2	94	101	96	386	192	144	603	252	299	270	1,020	122
3	320	82	97	327	216	304	440	250	224	208	482	110
4	223	72	98	276	169	206	373	214	172	188	426	89
5	512	71	97	242	202	216	343	1,030	163	254	324	102
6	107	73	96	214	149	411	405	938	158	150	319	130
7	100	106	94	446	190	321	897	406	174	270	429	95
8	119	83	96	353	126	263	9,100	447	541	250	363	113
9	101	106	94	299	166	261	4,720	357	333	372	286	99
10	97	72	94	265	120	2,010	1,290	284	765	414	272	97
11	100	103	93	247	138	1,120	850	278	728	219	210	80
12	76	104	79	242	135	609	664	242	347	243	215	124
13	91	100	68	206	145	461	534	253	272	176	228	94
14	67	97	85	205	116	376	453	226	213	209	153	104
15	67	97	84	176	151	345	409	181	201	259	205	108
16	116	96	86	142	127	759	358	214	187	192	189	75
17	38	98	102	166	135	522	332	169	192	160	167	119
18	172	97	202	183	134	402	683	168	521	137	162	57
19	435	98	201	144	135	572	461	176	336	236	161	106
20	290	100	186	119	132	2,520	1,010	167	1,150	419	152	112
21	89	96	113	134	132	1,410	1,800	166	588	568	118	72
22	128	96	126	154	121	781	1,330	279	390	875	163	98
23	110	96	161	136	254	948	875	406	280	2,900	152	82
24	98	96	222	561	241	1,150	620	550	200	4,940	133	106
25	142	94	182	486	204	697	492	228	170	1,200	131	70
26	104	96	163	354	195	548	426	164	170	1,800	124	78
27	330	96	216	304	181	498	365	171	700	732	126	110
28	142	96	532	253	167	445	322	167	480	533	81	80
29	125	94	362	225	-	390	314	177	350	538	144	95
30	119	96	291	204	-	320	278	209	330	397	141	120
31	118	-	260	255	-	329	-	186	-	345	103	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile.	Run-off in inches
October	4,713	512	38	152	0.788	0.91
November	2,820	108	71	94	.487	.54
December	4,772	532	68	154	.798	.92
Calendar year						
January	7,989	561	119	258	1.34	1.54
February	4,635	262	116	166	.860	.90
March	19,488	2,520	144	629	3.26	3.76
April	31,319	9,100	278	1,044	5.41	6.04
May	9,219	1,030	164	297	1.54	1.78
June	10,800	1,150	158	360	1.87	2.09
July	19,754	4,940	137	637	3.30	3.80
August	7,506	1,020	81	242	1.25	1.44
September	2,979	132	57	99	.513	.57
Water year 1937-38	125,994	9,100	38	345	1.79	24.29

Peak discharge.- Mar. 10 (7 p.m.) 3,080 sec.-ft.; Mar. 20 (3 p.m.) 2,920 sec.-ft.; Apr. 8 (5 p.m.) 12,100 sec.-ft.; July 24 (3 a.m.) 7,760 sec.-ft.

Little River near Jamestown, Ala.

Location.- Water-stage recorder, lat. 34°24', long. 85°38', in T. 7 S., R. 10 E., at highway bridge a quarter of a mile upstream from Yellow Creek and 2½ miles west of Jamestown. Zero of gage is 1,177.4 feet above mean sea level (from Alabama Power Co. bench mark).

Drainage area.- 121 square miles.

Records available.- October 1928 to April 1932, May 1935 to September 1938.

Extremes.- Maximum discharge during year, 10,900 second-feet Apr. 8 (gage height, 9.00 feet); minimum, 0.5 second-foot Oct. 1, Sept. 22-27 (gage height, 0.60 foot).
1928-32, 1935-38: Maximum discharge, 18,800 second-feet Feb. 4, 1936 (gage height, 11.9 feet); no flow on several days in July and September 1930 and period Sept. 17 to Nov. 29, 1931.

Remarks.- Records good above 60 second-feet and fair below.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.6	0.5	1.0	18.5	1.7	147	2.7	612	3.6	1,330	6.0	4,500
.7	2.2	1.1	27	1.9	223	2.9	743	4.0	1,740	6.9	6,040
.8	6.4	1.3	51	2.2	355	3.1	893	4.5	2,320	7.3	6,810
.9	12.0	1.5	88	2.5	500	3.3	1,060	5.0	2,990		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	53	115	411	301	147	586	115	57	172	226	3.6
2	1.5	44	96	612	266	134	750	96	112	150	618	2.8
3	7.1	41	84	505	244	371	571	75	126	88	430	2.5
4	22	38	73	406	211	454	459	64	74	65	360	2.5
5	108	37	71	328	183	373	373	785	51	78	257	2.2
6	152	31	69	306	161	734	350	715	39	139	189	2.2
7	66	28	61	571	144	631	819	430	32	100	161	1.9
8	40	27	53	500	121	474	6,790	364	278	319	125	1.7
9	28	25	51	411	110	396	2,130	262	356	539	104	1.7
10	23	26	51	350	99	2,180	1,130	187	511	611	93	1.5
11	20	27	45	332	93	1,190	758	144	346	314	71	1.5
12	18	44	40	297	88	743	571	110	244	204	59	1.3
13	16	96	41	253	77	549	454	112	155	134	53	1.3
14	14	80	46	227	71	435	369	93	99	93	43	1.5
15	12	67	47	199	67	369	310	73	69	182	59	1.7
16	11	64	46	176	69	490	253	57	53	99	46	1.5
17	10	90	100	165	69	495	241	47	56	84	31	1.3
18	148	96	464	147	67	401	709	39	172	67	24	1.3
19	554	91	387	131	128	512	571	36	136	1,810	19	1.1
20	350	91	292	115	147	2,600	1,100	30	848	1,240	16	.8
21	202	80	234	107	121	1,330	1,790	29	516	1,030	13	.6
22	181	71	195	128	118	816	1,130	37	323	1,190	11	.6
23	94	64	239	137	270	1,400	743	34	207	2,500	9.6	.5
24	71	57	341	480	355	1,380	549	67	139	2,280	8.4	.5
25	59	54	310	824	306	824	425	58	180	1,440	6.9	.6
26	56	65	266	625	262	606	337	38	323	782	5.9	.5
27	159	108	390	480	223	500	262	27	1,020	538	5.4	.5
28	140	144	631	387	179	430	207	22	608	401	5.4	.6
29	101	154	618	319	-	355	165	18	378	306	5.9	1.5
30	80	134	480	275	-	314	131	26	257	213	5.4	2.5
31	64	-	383	306	-	306	-	55	-	154	4.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	2,808.2	554	0.6	90.6	0.749	0.86
November	2,027	154	25	67.6	.559	.62
December	6,519	831	40	210	1.74	2.01
Calendar year 1937	105,653.3	5,600	.4	289	2.39	32.44
January	10,510	824	107	339	2.80	3.23
February	4,550	355	67	162	1.34	1.40
March	21,939	2,600	134	708	5.85	6.74
April	25,033	6,790	131	834	6.89	7.69
May	4,245	785	18	137	1.13	1.30
June	7,743	1,020	32	259	2.14	2.39
July	17,202	2,500	65	555	4.59	5.29
August	3,065.3	618	4.4	98.9	.817	.94
September	44.3	3.6	.5	1.48	.012	.01
Water year 1937-38	105,705.8	6,790	.5	290	2.40	32.48

Peak discharge.- Mar. 10 (9 a.m.) 3,130 sec.-ft.; Mar. 20 (11 a.m.) 3,420 sec.-ft.; Apr. 8 (a.m.) 10,900 sec.-ft.; July 23 (4 p.m.)4,500 sec.-ft.

Choccolocco Creek near Jenifer, Ala.

Location.- Staff gage, lat. 33°34', long. 85°56', in T. 17 S., R. E., at Louisville & Nashville Railroad bridge, 1½ miles north of Jenifer.

Drainage area.- 275 square miles.

Records available.- August 1903 to February 1908, May 1929 to March 1932, May 1935 to September 1938.

Extremes.- Maximum discharge during year, 21,800 second-feet Apr. 8 (gage height, 16.0 feet, from floodmark), from rating curve extended above 10,800 second-feet on basis of run-off at nearby stations and area-velocity studies; minimum, 91 second-feet Sept. 30 (gage height, 1.74 feet).

1903-8, 1929-32, 1935-38: Maximum discharge, 25,800 second-feet Feb. 4, 1936 (gage height, 17.2 feet), from rating curve extended above 10,800 second-feet on basis of run-off at nearby stations and area-velocity studies; minimum discharge observed, 26 second-feet Oct. 24-30, Nov. 1, 2, 1904, Oct. 9, 1931 (gage height, 1.40 feet).

Remarks.- Records good below 10,000 second-feet and fair above. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.7	85	3.5	623	7.0	2,750	14.0	15,800
1.9	119	4.0	863	8.0	3,800	16.0	21,800
2.1	164	5.0	1,420	9.0	5,090		
2.5	273	6.0	2,000	10.0	6,680		
3.0	428	6.5	2,330	12.0	10,800		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	190	130	204	177	231	1,600	412	273	162	217	130
2	121	177	127	245	177	217	4,040	500	268	157	217	121
3	136	164	130	217	177	204	5,180	412	245	177	231	117
4	157	159	127	204	177	204	1,880	363	231	190	245	114
5	164	152	138	177	177	190	1,080	539	217	177	231	110
6	157	147	145	217	177	259	1,080	761	204	217	217	114
7	147	152	138	395	177	245	3,380	713	190	177	217	136
8	140	145	142	302	164	231	17,000	463	245	177	217	138
9	134	138	140	259	164	217	9,880	412	245	217	231	142
10	125	138	138	231	162	905	2,940	395	259	393	204	152
11	117	164	138	231	157	971	1,590	379	245	288	190	140
12	110	177	136	217	157	863	1,080	348	245	217	177	127
13	114	177	134	217	152	500	863	332	217	177	177	121
14	110	164	132	204	152	363	761	317	204	162	177	132
15	110	162	130	177	147	348	667	302	190	147	162	132
16	110	164	138	164	142	2,040	580	273	177	157	152	125
17	130	157	142	177	142	4,500	539	259	164	177	147	121
18	348	152	138	162	154	2,770	580	259	177	164	142	121
19	580	147	140	162	217	2,000	713	231	259	288	138	121
20	412	138	134	157	204	4,040	667	231	379	493	130	117
21	317	138	136	152	190	3,140	1,020	217	317	554	121	114
22	217	132	134	157	217	2,120	1,300	217	273	1,390	117	108
23	177	130	152	152	417	1,590	971	217	245	1,080	117	106
24	162	138	147	177	713	2,120	713	259	204	637	117	105
25	162	138	140	190	500	1,640	580	245	190	539	114	103
26	220	147	154	190	395	1,140	500	231	231	500	125	108
27	500	142	177	177	332	811	463	217	204	446	138	110
28	348	138	190	177	273	667	428	217	190	348	162	106
29	273	134	177	190	-	539	395	217	177	288	177	99
30	245	134	164	190	-	463	379	302	177	259	164	93
31	217	-	159	190	-	500	-	259	-	217	145	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,365	580	105	205	0.745	0.86
November	4,535	190	130	151	.549	.61
December	4,447	190	127	143	.520	.60
Calendar year	172,511	6,560	98	473	1.72	23.32
January	6,261	395	152	202	.735	.85
February	6,390	713	142	228	.829	.86
March	36,028	4,500	190	1,162	4.23	4.88
April	62,849	17,000	379	2,095	7.62	8.50
May	10,499	761	217	339	1.23	1.42
June	6,862	379	164	229	.833	.93
July	10,502	1,560	147	339	1.23	1.42
August	5,316	245	114	171	.622	.72
September	3,583	152	93	119	.433	.48
Water year 1937-38	163,657	17,000	93	448	1.63	22.13

Tallapoosa River at Wadley, Ala.

Location.- Staff gage, lat. 33°08', long. 85°34', in sec. 12, T. 22 S., R. 10 E., in Wadley. Zero of gage is 600.78 feet above mean sea level.

Drainage area.- 1,660 square miles.

Records available.- September 1923 to September 1938.

Average discharge.- 15 years, 2,507 second-feet.

Extremes.- Maximum discharge during year, 40,400 second-feet Apr. 9 (gage height, 24.5 feet, from high-water mark); minimum discharge observed, 214 second-feet Sept. 27 (gage height, 2.64 feet).
1923-38: Maximum discharge observed, 52,800 second-feet Feb. 5, 1936 (gage height, 27.9 feet); minimum observed, 60 second-feet on eight days in September 1925 and on Oct. 2, 1931 (gage height, 2.2 feet).

Remarks.- Records good below 11,000 second-feet and fair above. Gage read twice daily. Slight diurnal regulation during extremely low water caused by operation of small mills upstream. Records collected by Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.6	190	3.8	1,510	10.0	11,200	20.0	29,900
2.7	260	4.8	2,810	15.0	20,100	22.0	34,400
2.9	450	6.0	4,520	18.0	25,800	24.5	40,400

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	450	970	826	970	1,090	1,090	20,300	2,550	1,770	898	886	571
2	626	970	814	1,030	1,090	1,030	28,000	3,650	2,290	602	7,920	970
3	838	886	802	1,090	1,090	970	18,300	2,420	4,520	766	7,070	1,030
4	778	850	778	1,030	1,030	970	13,800	1,900	3,090	626	5,120	790
5	5,910	814	802	970	970	910	7,920	2,160	2,030	778	2,420	637
6	7,070	802	790	970	970	1,030	4,370	3,230	1,510	742	1,640	2,160
7	4,220	814	766	1,510	970	1,210	19,700	2,810	1,270	766	1,510	970
8	2,030	790	778	1,770	910	1,210	36,300	3,090	1,390	698	1,270	898
9	1,270	814	790	1,510	886	1,030	30,800	2,160	2,030	886	1,210	730
10	910	790	778	1,270	886	1,270	25,600	1,900	1,580	3,230	1,150	718
11	802	1,090	742	1,210	862	4,220	20,500	1,770	1,390	1,450	1,150	494
12	766	1,390	730	1,150	862	2,950	8,600	1,580	2,950	1,030	1,090	450
13	742	1,210	730	1,090	838	1,770	4,520	1,450	1,210	802	1,090	450
14	730	1,030	742	1,090	838	1,450	3,790	1,450	1,030	682	970	420
15	682	970	742	1,030	838	1,210	3,370	1,390	970	1,030	874	410
16	659	910	754	970	838	7,920	3,090	1,330	886	790	778	410
17	682	874	838	970	814	13,800	2,810	1,270	898	1,090	706	410
18	1,210	838	1,030	910	814	12,200	2,680	1,210	850	790	670	410
19	5,270	850	1,030	910	1,210	8,090	2,950	1,210	1,030	1,770	626	400
20	3,930	862	1,030	910	1,390	12,900	2,810	1,150	2,810	5,590	593	360
21	2,030	838	910	910	1,270	11,500	5,270	1,090	5,120	3,090	560	330
22	1,510	814	850	886	1,090	9,960	5,270	1,090	3,930	5,750	538	320
23	1,210	814	1,030	910	1,150	4,520	4,070	1,030	1,580	3,510	483	292
24	1,090	790	1,510	2,030	2,290	9,110	3,230	1,210	1,270	3,790	461	292
25	970	790	1,450	2,290	2,030	6,390	2,680	1,150	1,450	2,550	430	276
26	1,150	814	1,330	2,030	1,580	3,930	2,290	1,640	2,550	3,370	440	252
27	3,230	838	1,150	1,580	1,270	3,090	2,160	2,420	3,790	1,640	420	214
28	3,230	886	1,090	1,330	1,150	2,680	2,030	1,900	1,900	1,270	430	260
29	1,770	886	1,090	1,150	-	2,290	1,900	2,030	1,150	1,030	3,230	268
30	1,330	874	1,090	1,090	-	2,030	1,770	1,770	970	970	1,270	260
31	1,150	-	1,030	1,090	-	1,770	-	1,900	-	910	1,150	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	58,245	7,070	450	1,879	1.13	1.30
November	26,868	1,390	790	896	.540	.60
December	28,822	1,510	730	930	.560	.65
Calendar year 1937	1,059,747	21,600	355	2,903	1.75	23.74
January	37,656	2,290	886	1,215	.732	.84
February	31,026	2,290	814	1,108	.667	.69
March	134,500	13,800	910	4,339	2.61	3.01
April	290,880	36,300	1,770	9,696	5.84	6.52
May	56,910	3,650	1,030	1,836	1.11	1.28
June	59,214	5,120	850	1,974	1.19	1.33
July	53,496	5,750	682	1,726	1.04	1.20
August	48,155	7,920	420	1,553	.936	1.08
September	16,452	2,160	214	548	.330	.37
Water year 1937-38	842,224	36,300	214	2,307	1.39	18.87

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Tallapoosa River below Tallassee, Ala.

Location.- Water-stage recorder, lat. 32°31', long. 85°53', in T. 18 N., R. 22 E., 1½ miles below highway bridge at Tallassee. Zero of gage is 162.03 feet above mean sea level.

Drainage area.- 3,320 square miles.

Records available.- July 1928 to September 1938.

Average discharge.- 10 years, 5,005 second-feet.

Extremes.- Maximum discharge during year, 42,600 second-feet Apr. 9, from discharge over spillway and through turbines at power plant 2 miles upstream; maximum gage height, 37.6 feet Apr. 10 (affected by backwater from Coosa River); minimum discharge, 33 second-feet June 19, 20 (gage height, -0.09 foot); minimum daily discharge, 34 second-feet June 19.

1928-38: Maximum discharge, 115,000 second-feet Mar. 15, 1929 (gage height, 51.35 feet); minimum, 10 second-feet at times in 1930 and 1931; minimum gage height, -1.6 feet Oct. 2, 5, 1932; minimum daily discharge, 10 second-feet June 3, 1930, May 17, 1931.

Remarks.- Records good except those between 75 and 1,000 second-feet, above 10,000 second-feet, and for periods of backwater from Coosa River, Mar. 16-23, Apr. 1-27, July 23-29, all of which are fair, and those below 75 second-feet, which are poor. During periods of backwater from Coosa River, discharge was determined from generation and spillway records at Thurlow Dam, 2 miles upstream. Regulation from operation of power plants and Martin Dam reservoir (capacity, 1,380,000 acre-feet) upstream. Records collected by Alabama Power Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

Rating table, water year 1937-38 except periods of backwater (gage height, in feet, and discharge, in second-feet)

-0.08	34	1.0	237	3.0	1,050	4.5	2,550	8.0	9,310	10.0	11,200
.1	53	1.4	359	3.5	1,370	5.0	3,480	8.2	9,480	12.5	14,600
.4	98	1.8	500	4.0	1,820	7.5	8,520	8.6	9,760	15.0	18,500
.7	158	2.3	700	4.2	2,070	7.8	9,070	9.0	10,100	16.0	20,200

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,570	6,830	8,120	342	4,220	203	1,700	2,850	2,680	3,380	1,300	7,880
2	4,970	9,040	8,160	45	4,110	79	4,620	6,820	4,500	4,030	4,920	7,950
3	971	8,710	7,630	2,440	4,080	712	1,100	6,970	902	962	9,590	7,790
4	5,230	8,230	8,420	2,140	2,050	53	4,450	6,220	54	620	8,890	204
5	5,880	8,700	6,280	1,250	46	336	4,400	6,260	45	6,960	8,340	1,430
6	5,280	8,270	8,300	800	51	61	4,710	7,420	3,690	8,520	6,520	6,470
7	5,750	4,050	8,650	977	4,060	394	6,300	4,880	6,400	8,720	346	7,550
8	4,540	6,380	7,990	1,310	3,950	267	10,800	5,350	3,490	8,770	1,740	7,610
9	2,010	6,500	7,880	78	4,440	282	40,900	7,900	2,270	9,070	3,230	7,740
10	1,220	6,980	6,450	2,690	4,430	394	19,800	6,500	3,150	7,000	3,620	7,510
11	6,630	7,880	7,000	3,120	5,090	146	25,700	5,200	57	4,450	3,470	89
12	7,950	2,720	3,430	1,930	4,020	39	25,800	5,170	38	6,410	5,970	5,700
13	7,260	3,910	6,560	955	600	37	9,760	4,280	590	6,570	3,130	7,890
14	7,310	4,150	7,800	1,640	4,860	833	7,700	179	2,130	7,840	2,780	8,330
15	7,070	7,090	7,270	574	6,790	1,440	5,170	773	2,560	7,860	7,070	8,420
16	6,810	6,110	7,580	127	5,950	2,550	6,120	6,320	4,690	5,890	8,860	7,890
17	1,350	7,930	8,330	2,580	5,310	3,890	4,630	9,060	3,350	66	8,770	8,020
18	4,980	7,790	6,370	4,370	3,400	1,060	5,160	8,490	39	5,220	8,720	126
19	5,280	4,600	928	4,940	176	930	4,870	9,310	34	6,480	8,580	6,220
20	3,200	5,400	6,650	4,890	73	260	4,950	9,280	3,080	2,860	8,760	7,440
21	4,190	3,380	5,680	4,890	1,320	1,570	7,300	9,260	2,140	2,570	6,900	7,600
22	4,000	7,350	5,160	4,040	3,000	2,470	8,590	4,840	2,390	2,830	6,640	7,400
23	2,070	8,220	3,750	2,650	2,050	1,670	6,990	6,930	1,860	2,280	7,420	7,670
24	51	8,240	1,920	2,810	143	1,470	3,800	7,780	3,460	2,180	8,550	7,310
25	6,090	7,700	61	1,040	543	199	4,000	8,550	446	3,130	8,600	566
26	7,960	6,870	259	1,700	504	162	3,660	8,610	75	3,100	8,340	4,840
27	8,450	6,980	1,420	2,610	76	53	4,100	8,620	2,750	3,370	7,730	6,240
28	5,040	3,420	1,640	1,440	1,180	462	3,870	3,600	4,840	2,230	188	6,180
29	2,010	7,580	3,070	936	-	236	2,150	97	6,170	1,340	3,130	6,270
30	906	8,230	3,940	252	-	398	1,960	1,910	6,670	100	6,700	7,170
31	1,050	-	2,050	5,860	-	1,750	-	2,680	-	62	7,950	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	142,078	8,450	51	4,583	1.38	1.59
November	201,240	9,040	2,720	6,708	2.02	2.25
December	168,748	8,650	61	5,443	1.64	1.89
Calendar year 1937	2,056,530	37,600	27	5,634	1.70	23.03
January	65,426	5,860	45	2,111	.636	.73
February	76,522	6,790	46	2,733	.823	.86
March	24,426	3,890	37	788	.237	.27
April	245,060	40,900	1,100	8,169	2.46	2.74
May	182,109	9,310	97	5,874	1.77	2.04
June	74,750	6,670	34	2,492	.751	.84
July	134,871	9,070	63	4,351	1.31	1.51
August	186,754	9,590	188	6,024	1.81	2.09
September	183,505	8,420	89	6,117	1.84	2.05
Water year 1937-38	1,685,489	40,900	34	4,618	1.39	18.86

Little Tallapoosa River at Carrollton, Ga.

Location.- Staff gage, lat. 33°36', long. 85°05', at water-pumping plant on U. S. Highway 27 at Carrollton, Carroll County, 1 mile upstream from Central of Georgia Railroad and 3½ miles upstream from Buck Creek.

Drainage area.- 89 square miles.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 5,370 second-feet Apr. 8 (gage height, 16.65 feet); minimum observed, 7.3 second-feet Sept. 26, 27 (gage height, 2.68 feet). Maximum stage known, 18.15 feet about Feb. 1, 1936, from floodmarks (discharge not determined).

Remarks.- Records good below 2,000 second-feet and fair above. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Jan. 26 and May 28 to June 30)

2.6	5.4	3.5	44	6.0	230	9.0	920	14.0	3,570
2.8	11.0	4.0	72	7.0	342	10.0	1,380	17.0	5,580
3.0	19.0	5.0	140	8.0	545	12.0	2,410		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12.1	60	52	60	82	54	545	98	132	49	32	17.7
2	17.7	54	49	72	76	52	1,680	111	330	44	104	17.2
3	79	54	46	72	69	52	1,190	104	354	44	210	22
4	367	52	46	63	66	54	400	79	272	42	200	66
5	515	52	49	60	63	54	220	98	104	63	111	30
6	545	52	49	60	63	57	173	111	79	46	57	36
7	294	49	44	125	60	66	575	104	72	39	46	31
8	98	49	42	132	57	60	4,340	91	173	44	42	34
9	66	52	46	104	57	54	3,570	91	118	54	49	23
10	57	54	46	85	54	182	710	76	91	69	111	19.0
11	49	63	42	85	54	191	294	63	79	42	118	18.6
12	44	69	42	85	54	125	210	57	66	34	60	17.2
13	42	66	44	76	54	111	173	54	57	31	42	16.4
14	44	60	46	72	52	82	156	57	52	28	34	16.0
15	44	57	46	66	52	76	140	52	46	111	30	15.6
16	34	54	44	63	52	440	132	46	44	66	28	13.6
17	33	52	66	63	49	1,680	118	44	57	42	26	14.4
18	82	52	82	60	49	830	111	44	57	36	23	12.1
19	230	52	82	60	85	283	125	42	272	69	21	11.4
20	283	54	66	60	85	440	125	39	710	104	19.5	10.0
21	182	52	52	57	72	515	420	36	191	156	19.0	9.1
22	98	49	49	57	57	294	440	36	118	210	17.7	8.5
23	82	46	91	57	91	230	230	36	76	118	16.0	8.5
24	76	46	104	91	111	272	140	36	57	118	14.8	9.1
25	66	49	104	111	104	283	118	39	191	104	13.2	9.1
26	111	54	91	118	79	164	104	173	250	79	11.7	8.5
27	210	66	82	91	66	132	91	750	148	57	16.4	7.9
28	200	69	82	76	60	118	85	250	91	44	60	8.8
29	118	63	79	69	-	118	82	98	66	39	23	10.3
30	82	57	72	69	-	104	76	104	54	36	20.0	11.4
31	66	-	66	79	-	91	-	111	-	33	19.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	4,226.8	545	12.1	136	1.53	1.76
November	1,658	69	46	55.3	.621	.69
December	1,901	104	42	61.3	.689	.79
Calendar year						
January	2,398	132	57	77.4	.870	1.00
February	1,873	111	49	66.9	.752	.78
March	7,264	1,680	52	234	2.63	3.03
April	16,773	4,340	76	559	6.28	7.01
May	3,130	750	36	101	1.13	1.30
June	4,407	710	44	147	1.65	1.84
July	2,051	210	28	66.2	.744	.86
August	1,594.3	210	11.7	51.4	.578	.67
September	532.4	66	7.9	17.7	.199	.22
Water year 1937-38	47,808.5	4,340	7.9	131	1.47	19.95

Cahaba River at Centerville, Ala.

Location.- Wire-weight gage, lat. 32°56', long. 87°08', in T. 23 N., R. 9 E., at bridge on State Highway 6, a quarter of a mile west of Centerville.

Drainage area.- 1,050 square miles.

Records available.- August 1901 to February 1908, May 1929 to March 1932, May 1935 to September 1938.

Extremes.- Maximum discharge during year, 82,800 second-feet Apr. 8 (gage height, 36.63 feet); minimum discharge observed, 237 second-feet Sept. 26, 30; minimum gage height observed, 2.13 feet Oct. 16, 17.
1901-8, 1929-32, 1935-38: Maximum discharge, that of Apr. 8, 1938; minimum, 90 second-feet Oct. 24-29, 1904 (gage height, -0.35 foot, present datum).

Remarks.- Records good except those for period of shifting control, Apr. 13 to Sept. 30, and those above 60,000 second-feet, which are fair. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	334	485	485	1,060	1,100	860	8,530	1,370	611	37[illegible]	1,840	990
2	474	428	456	2,320	940	750	21,000	1,280	645	34[illegible]	3,330	1,680
3	428	401	428	2,590	820	750	14,600	1,230	1,150	274	3,180	810
4	456	375	428	1,780	785	715	7,400	1,140	900	401	2,220	680
5	456	375	428	1,370	750	645	4,490	2,180	578	375	1,930	456
6	485	349	428	1,280	715	680	4,140	2,480	515	54[illegible]	1,370	375
7	645	349	428	2,640	680	820	16,900	1,410	485	401	1,460	375
8	428	349	401	2,460	645	715	66,200	1,140	456	375	2,460	349
9	375	324	401	1,730	645	680	44,400	1,100	456	45[illegible]	1,460	375
10	349	375	401	1,410	611	680	22,800	1,060	485	90[illegible]	1,190	375
11	324	739	375	1,280	611	1,060	9,070	900	485	1,59[illegible]	980	375
12	299	1,780	375	1,140	546	1,230	5,110	860	485	98[illegible]	900	375
13	286	1,500	375	980	546	1,020	3,780	750	428	54[illegible]	820	375
14	274	1,020	375	860	515	860	3,330	750	375	54[illegible]	680	375
15	261	785	349	820	611	785	2,880	715	375	51[illegible]	649	324
16	261	715	349	750	578	1,990	2,590	611	349	45[illegible]	578	311
17	261	645	459	715	546	4,880	2,460	611	349	37[illegible]	546	311
18	2,330	578	940	715	515	3,260	3,440	578	375	29[illegible]	485	311
19	5,290	611	860	680	1,570	3,310	4,580	546	750	37[illegible]	428	299
20	3,710	611	750	645	1,590	15,300	3,550	546	1,140	45[illegible]	428	299
21	1,680	578	645	611	1,140	13,500	3,550	485	820	92[illegible]	401	274
22	1,190	546	611	611	940	7,600	3,860	485	715	1,71[illegible]	375	261
23	980	515	645	578	1,100	14,300	3,440	456	578	1,68[illegible]	375	286
24	860	485	820	1,470	1,590	16,600	2,800	578	485	6,26[illegible]	349	249
25	680	485	715	2,460	1,550	10,200	2,410	645	546	8,84[illegible]	349	249
26	680	515	645	1,930	1,370	5,660	2,180	485	980	3,83[illegible]	324	237
27	900	515	680	1,320	1,100	3,900	1,880	456	645	2,13[illegible]	324	324
28	785	515	715	1,140	980	3,000	1,680	456	485	1,55[illegible]	324	261
29	645	515	715	940	-	2,500	1,590	428	456	1,26[illegible]	428	249
30	546	485	820	900	-	2,080	1,460	485	428	1,10[illegible]	324	237
31	485	-	820	980	-	1,730	-	645	-	1,19[illegible]	348	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	27,157	5,290	261	876	0.834	0.96
November	17,948	1,780	324	598	.570	.64
December	17,322	940	349	559	.532	.61
Calendar year 1937	694,481	20,600	201	1,903	1.81	24.59
January	40,165	2,640	578	1,296	1.23	1.42
February	25,089	1,590	515	896	.853	.89
March	122,060	16,600	645	3,937	3.75	4.32
April	276,100	66,200	1,460	9,203	8.76	9.77
May	26,861	2,480	428	866	.825	.95
June	17,530	1,150	349	584	.556	.62
July	41,089	8,840	274	1,325	1.26	1.45
August	30,855	3,330	324	995	.948	1.09
September	12,447	1,680	237	415	.395	.44
Water year 1937-38	654,623	66,200	237	1,793	1.71	23.16

East Fork of Tombigbee River near Fulton, Miss.

Location.- Wire-weight gage, lat. 34°16', long. 88°27', in T. 9 S., R. 8 E. Chickasaw meridian, at bridge on U. S. Highway 78, 2 miles west of Fulton.

Drainage area.- 650 square miles.

Records available.- August 1928 to September 1938.

Average discharge.- 10 years, 830 second-feet.

Extremes.- Maximum discharge observed during year, 9,600 second-feet Apr. 9 (gage height, 16.53 feet); minimum observed, 54 second-feet Sept. 26, 29; minimum gage height, 2.01 feet Oct. 1.
1928-38: Maximum discharge observed, 19,600 second-feet Sept. 28, 1932 (gage height, 18.52 feet); minimum discharge, 14 second-feet Aug. 12, 1930 (gage height, 0.87 foot).

Remarks.- Records fair. Those between 200 and 3,800 second-feet at times when stage-discharge relation was affected by rate of change of stage computed by using this rate as a factor. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	138	292	1,010	2,020	490	3,300	380	7,250	387	536	542
2	94	131	240	1,110	2,800	446	2,650	347	4,600	292	673	581
3	314	124	211	1,220	2,530	510	2,000	325	4,150	211	788	572
4	435	124	193	1,170	2,110	884	1,360	270	3,300	168	628	387
5	347	131	220	1,090	1,430	1,070	1,040	406	2,250	152	500	240
6	281	124	250	974	1,090	1,460	940	641	1,480	138	348	160
7	211	117	230	875	1,030	1,610	1,270	660	960	124	240	117
8	138	117	184	816	740	1,400	2,420	607	687	152	193	99
9	117	138	176	749	620	1,430	3,400	522	527	168	202	93
10	99	270	160	670	615	2,000	4,600	402	800	168	184	87
11	99	292	145	641	552	5,600	2,650	292	1,370	138	152	81
12	93	260	160	615	512	4,600	1,950	250	1,950	117	152	81
13	93	230	193	599	468	2,650	1,460	211	1,770	117	228	75
14	87	211	193	532	446	1,870	1,110	202	1,260	145	160	81
15	87	193	211	479	424	1,400	891	193	820	202	193	93
16	87	176	211	424	424	1,250	775	176	550	446	202	168
17	87	176	250	402	424	1,050	790	160	388	312	160	131
18	168	220	479	380	470	940	3,200	184	336	220	117	99
19	342	230	512	347	720	1,110	6,700	270	358	726	99	81
20	365	220	424	336	788	1,340	4,850	211	466	1,120	81	72
21	303	220	314	466	775	1,770	2,800	168	660	2,650	75	63
22	230	202	260	890	775	2,000	2,430	152	691	2,800	69	63
23	220	176	585	1,320	1,030	2,110	2,050	247	725	2,000	87	63
24	220	168	702	2,260	1,070	1,900	1,650	522	600	1,250	202	60
25	168	160	680	4,600	1,010	1,730	1,030	512	487	833	131	60
26	168	168	615	5,600	767	1,570	957	490	352	545	99	57
27	160	193	828	3,150	640	1,490	708	336	532	355	75	57
28	184	287	992	2,330	615	1,140	576	347	615	260	66	57
29	176	479	1,070	1,620	-	1,430	532	464	632	193	227	57
30	152	402	1,010	1,370	-	1,910	435	2,090	562	160	492	60
31	145	-	957	1,570	-	3,150	-	4,760	-	160	542	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	5,727	435	57	185	0.285	0.33
November	6,077	479	117	203	.312	.35
December	12,947	1,070	145	418	.643	.74
Calendar year 1937	286,434	11,400	42	785	1.21	16.40
January	39,615	5,600	336	1,278	1.97	2.27
February	26,895	2,800	424	961	1.48	1.54
March	53,310	5,600	446	1,720	2.65	3.06
April	65,524	8,400	435	2,184	3.36	3.75
May	16,797	4,760	152	542	.834	.96
June	41,128	7,250	336	1,371	2.11	2.35
July	16,709	2,800	117	539	.829	.96
August	7,901	798	66	255	.392	.45
September	4,437	581	57	148	.228	.25
Water year 1937-38	297,067	8,400	57	814	1.25	17.01

Tombigbee River at Aberdeen, Miss.

Location.- Wire-weight gage, lat. 33°49', long. 88°32', in T. 14 S., R. 19 W. Huntsville meridian, at bridge on U. S. Highway 45, 1 mile downstream from St. Louis-San Francisco Railroad bridge and 1½ miles south of Aberdeen.

Drainage area.- 2,210 square miles.

Records available.- August 1928 to September 1938.

Average discharge.- 10 years, 2,815 second-feet.

Extremes.- Maximum discharge observed during year, 14,000 second-feet Apr. 10 (gage height, 30.84 feet); minimum observed, 159 second-feet Oct. 1; minimum gage height observed, 1.84 feet Oct. 1, Sept. 29, 30.

1928-38: Maximum discharge, 33,100 second-feet Dec. 16, 1931 (gage height, 39.61 feet, former site); minimum discharge observed, 61 second-feet Aug. 8, 1930; minimum gage height observed, 1.15 feet, present site, Sept. 27, 1931.

Maximum stage known, 44.8 feet, former site, Apr. 20, 1892 (discharge not determined).

Remarks.- Records fair. Gage read twice daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 27, 28)

Oct. 1 to Jan. 28				Jan. 29 to Sept. 30			
1.8	151	12.0	3,110	1.8	153	14.0	7,810
2.2	215	14.0	3,890	2.4	260	16.0	4,600
2.8	329	16.0	4,750	3.0	376	18.0	5,550
3.5	475	18.0	5,690	3.5	492	21.0	7,050
4.5	724	20.5	6,970	4.0	600	23.0	8,150
6.0	1,150	22.0	7,830	5.0	850	26.5	10,200
7.5	1,600	23.9	9,040	7.5	1,600	29.0	12,100
10.0	2,410			10.0	2,410	30.8	14,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	159	369	751	3,110	7,710	1,730	11,900	1,570	5,900	1,270	825	1,000
2	192	349	697	4,440	8,150	1,480	10,900	1,360	6,800	1,030	1,520	880
3	227	329	594	3,300	7,050	1,360	9,830	1,240	8,870	800	2,960	775
4	349	310	521	2,440	5,450	1,640	8,870	1,120	10,200	675	3,620	775
5	751	310	475	2,340	4,350	1,480	7,770	1,090	10,300	576	2,510	675
6	917	310	475	2,080	3,920	1,700	6,200	1,890	9,770	505	1,730	552
7	619	291	475	3,190	3,620	2,050	4,960	1,510	8,630	492	1,120	417
8	475	310	498	3,190	3,240	1,920	8,880	1,570	6,800	492	800	336
9	389	310	498	2,340	2,850	2,110	11,200	1,570	4,190	460	825	298
10	329	329	453	2,080	2,510	6,090	14,000	1,480	4,940	552	850	260
11	291	410	431	1,950	2,050	9,770	11,900	1,180	7,490	552	775	260
12	272	521	410	2,150	1,700	12,600	11,000	970	7,160	417	625	242
13	254	569	410	1,860	1,480	12,400	10,300	825	4,830	376	650	233
14	236	521	431	1,640	1,390	11,400	9,350	775	2,780	336	576	224
15	227	453	475	1,510	1,330	10,600	7,600	725	2,310	336	625	242
16	227	475	498	1,490	1,270	9,890	5,250	625	2,180	396	725	298
17	227	453	545	1,240	1,270	8,510	3,810	576	1,980	460	576	279
18	291	453	645	1,150	1,300	6,500	5,620	576	2,020	576	505	336
19	475	453	751	1,090	4,030	4,740	8,390	825	1,640	552	417	298
20	645	498	689	1,030	4,270	7,050	9,410	650	2,210	1,630	356	260
21	889	521	861	974	2,710	7,550	11,000	625	1,640	2,060	317	224
22	805	498	751	2,660	2,570	6,800	12,200	552	1,450	2,050	298	197
23	645	498	1,010	4,930	4,350	7,930	13,400	526	1,450	1,950	279	179
24	521	453	2,080	6,710	3,590	8,150	12,300	505	1,330	2,310	260	179
25	475	431	1,730	8,080	2,640	7,110	10,700	650	1,420	2,470	260	179
26	475	431	1,640	9,040	2,280	5,650	9,050	750	1,420	2,370	279	170
27	453	431	3,440	8,710	2,130	4,350	6,850	725	1,180	2,050	279	170
28	410	453	6,870	6,920	1,950	5,900	4,110	700	1,670	1,480	242	161
29	410	569	6,250	6,300	-	6,550	2,680	700	1,760	910	242	161
30	410	697	4,140	5,900	-	7,770	1,980	1,960	1,600	725	831	170
31	389	-	3,110	6,300	-	9,230	-	4,960	-	576	880	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	13,434	917	159	433	0.196	0.23
November	13,005	697	291	434	.196	.22
December	42,804	6,870	410	1,381	.625	.72
Calendar year 1937	915,510	20,700	159	2,508	1.13	15.42
January	110,044	9,040	974	3,550	1.61	1.86
February	91,180	8,150	1,270	3,256	1.47	1.53
March	192,010	12,600	1,360	6,194	2.80	3.23
April	261,410	14,000	1,980	8,714	3.94	4.40
May	34,782	4,960	505	1,122	.508	.59
June	126,920	10,300	1,180	4,197	1.90	2.12
July	31,434	2,470	336	1,014	.459	.53
August	26,757	3,620	242	863	.390	.45
September	10,430	1,000	161	348	.157	.18
Water year 1937-38	953,210	14,000	159	2,612	1.18	16.06

Tombigbee River at Columbus, Miss.

Location.- Water-stage recorder, lat. 33°29', long. 88°26', in T. 18 S., R. 18 W. Huntsville meridian, in Columbus, a quarter of a mile upstream from Mobile & Ohio Railroad bridge, a quarter of a mile downstream from bridge on U. S. Highway 45, and 3 miles upstream from Luxapalila Creek.

Drainage area.- 4,490 square miles.

Records available.- November 1934 to September 1938. January 1900 to December 1904 at site about 300 feet upstream. July 1905 to December 1912 at site a quarter of a mile upstream, August 1928 to November 1934 at site a quarter of a mile downstream.

Average discharge.- 21 years, 5,828 second-feet.

Extremes.- Maximum discharge during year, 28,100 second-feet Apr. 11 (gage height, 24.01 feet); minimum, 380 second-feet Oct. 1; minimum gage height, 0.97 foot Sept. 29, 30.
1900-1912, 1928-38: Maximum discharge observed, 84,600 second-feet Mar. 25, 1929 (gage height, 33.6 feet, present datum); maximum gage height observed, 34.6 feet, present datum, Mar. 31, 1902 (discharge not determined); minimum discharge observed, 195 second-feet Oct. 9-12, 1911 (gage height, -0.1 foot, present datum).
Maximum stage known, 42.6 feet, present datum, Apr. 8, 1892 (discharge not determined).

Remarks.- Records fair.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 11

1.0	361	6.0	3,350	21.0	22,300
1.3	484	7.0	4,410	22.0	23,900
1.6	626	10.0	8,180	23.0	25,800
2.0	824	13.0	12,000	24.0	28,100
3.0	1,350	17.0	17,000		
4.0	1,900	20.0	20,900		

Apr. 12 to Sept. 30

0.9	386	2.0	850
1.2	500	3.0	1,350
1.5	626	4.0	1,900

Note.- Same as preceding table above 4.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	384	926	1,350	12,500	11,200	3,170	17,600	3,000	6,160	2,140	2,870	1,570
2	411	849	1,370	12,200	12,600	2,760	20,900	2,540	7,800	1,680	3,840	1,790
3	432	799	1,290	11,000	13,300	2,470	22,300	2,260	9,940	1,400	6,160	1,460
4	506	774	1,160	8,560	12,000	2,330	22,800	2,140	12,300	1,220	9,440	1,220
5	1,010	749	1,080	6,410	8,930	2,540	21,700	2,260	13,500	1,100	9,310	1,150
6	1,730	699	1,060	5,030	7,170	2,470	17,800	2,680	13,000	1,000	8,050	1,020
7	1,660	699	1,060	5,410	6,160	2,840	14,700	3,540	11,700	1,000	5,780	875
8	1,320	699	1,080	6,670	5,410	3,000	21,100	3,640	9,820	950	3,380	737
9	1,060	724	1,080	6,040	4,660	2,920	24,300	3,350	7,550	925	2,200	646
10	875	749	1,030	4,780	3,950	4,790	26,900	3,260	6,040	900	1,900	604
11	774	977	977	3,950	3,350	9,940	28,100	2,840	8,680	950	1,840	583
12	699	1,780	951	3,950	2,920	13,100	26,900	2,330	11,400	950	1,680	562
13	650	1,780	926	3,740	2,610	15,700	23,400	1,960	11,300	975	1,400	541
14	578	1,680	926	3,350	2,400	17,600	19,000	1,790	7,800	827	1,350	520
15	559	1,350	951	2,920	2,260	17,900	15,400	1,620	4,160	737	1,300	525
16	540	1,190	1,000	2,680	2,200	17,400	11,800	1,520	3,000	692	1,250	562
17	544	1,190	1,060	2,400	2,260	15,900	8,300	1,400	2,610	737	1,220	648
18	825	1,130	1,130	2,260	2,770	13,200	8,680	1,320	2,470	850	1,100	737
19	1,190	1,160	1,320	2,140	9,190	12,600	12,000	1,280	2,760	900	975	692
20	1,620	1,240	1,680	2,080	11,700	17,100	14,500	1,350	2,840	1,020	875	626
21	2,330	1,210	1,840	1,960	11,400	18,700	16,200	1,250	3,170	2,320	805	562
22	2,540	1,240	1,730	2,140	9,620	19,900	17,000	1,180	2,540	3,350	737	500
23	2,140	1,190	1,560	4,750	9,190	20,900	17,300	1,100	2,200	3,640	670	476
24	1,560	1,110	2,130	9,750	9,310	22,300	16,000	1,020	2,020	3,840	646	452
25	1,370	1,030	3,170	12,100	7,930	22,000	18,000	1,020	1,900	4,290	604	437
26	1,260	977	2,920	13,200	5,660	20,100	15,900	1,200	1,840	4,660	604	437
27	1,210	951	5,650	14,200	4,170	16,100	13,100	1,220	1,790	4,410	626	430
28	1,160	977	11,100	14,100	3,540	11,600	9,250	1,150	1,740	3,260	604	416
29	1,110	1,030	13,200	12,100	-	11,100	5,660	1,060	2,200	2,260	583	415
30	1,060	1,210	14,200	9,690	-	11,400	3,950	1,120	2,540	1,740	562	411
31	1,000	-	13,200	9,560	-	13,200	-	3,190	-	1,570	1,120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	34,127	2,540	384	1,101	0.245	0.28
November	32,069	1,780	699	1,069	.238	.27
December	93,181	14,200	926	3,006	.669	.77
Calendar year 1937	1,813,681	33,700	384	4,969	1.11	15.02
January	211,620	14,200	1,960	6,826	1.52	1.75
February	188,060	13,300	2,200	6,716	1.50	1.56
March	367,030	22,300	2,330	11,840	2.64	3.04
April	512,540	28,100	3,950	17,080	3.80	4.24
May	60,610	3,640	1,020	1,955	.435	.50
June	176,770	13,500	1,740	5,892	1.31	1.46
July	56,293	4,660	692	1,816	.404	.47
August	73,483	9,440	562	2,370	.528	.61
September	21,608	1,790	411	720	.160	.18
Water year 1937-38	1,827,391	28,100	384	5,007	1.12	15.13

Tombigbee River near Coatopa, Ala.

Location.- Wire-weight gage, lat. 32°26', long. 88°02', in T. 17 N., R. 1 E., at Moscow Memorial Bridge on U. S. Highway 80, 2 miles upstream from Sucarnoochee River and 5 miles southeast of Coatopa.

Drainage area.- 15,500 square miles.

Records available.- August 1928 to September 1938.

Average discharge.- 10 years, 22,420 second-feet.

Extremes.- Maximum discharge during year, 158,000 second-feet Apr. 9, 14 (gage height, 49.6 feet); minimum discharge observed, 1,520 second-feet Sept. 29 (gage height, 2.85 feet).

1928-38: Maximum discharge observed, 179,000 second-feet Mar. 29, 1929 (gage height, 51.4 feet); minimum discharge, 371 second-feet Oct. 1, 1931; minimum gage height observed, 2.19 feet Oct. 10, 1935.

Remarks.- Records fair. Discharge for Apr. 18 to May 5 determined from backwater curve. Gage read twice daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Backwater curve used Apr. 18 to May 5)

Oct. 1 to Mar. 31

2.9	1,380	7.0	11,100	2.8	1,240	5.0	6,260	20.0	35,600	44.0	94,400
3.1	1,660	9.0	16,300	2.9	1,410	7.0	11,600	25.0	44,300	46.0	106,100
3.6	2,640	10.0	18,200	3.0	1,600	8.0	14,100	30.0	53,900	48.0	126,000
5.0	5,920			3.2	2,010	10.0	18,300	35.0	65,900	49.7	161,000
				3.6	2,920	15.0	27,100	40.0	79,600		

Note.- Same as following table between 11.3 and 44.0 feet.

Apr. 1 to Sept. 30

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,440	4,940	3,760	35,000	22,600	17,500	87,400	23,200	7,850	6,780	9,470	5,010
2	1,740	4,460	3,530	37,300	23,000	14,400	90,300	18,000	12,200	6,520	15,800	4,300
3	2,220	3,760	3,760	40,000	24,500	11,700	93,900	15,400	15,700	5,500	23,900	4,300
4	2,530	3,300	3,990	41,800	25,200	10,000	95,300	14,000	18,500	4,300	29,200	4,770
5	3,300	3,300	3,760	40,500	25,100	9,800	95,800	13,600	19,000	4,070	31,200	4,300
6	6,670	3,080	3,530	36,800	23,900	8,980	96,800	14,600	19,200	4,300	31,000	3,380
7	8,460	3,080	3,530	34,500	20,800	10,300	103,000	17,800	19,400	5,250	28,100	3,150
8	9,460	3,080	3,530	33,900	17,300	11,700	126,000	17,900	18,800	6,260	22,100	2,920
9	7,170	2,860	3,530	32,200	15,100	12,000	152,000	16,600	17,900	4,300	19,600	2,800
10	5,670	2,860	3,530	30,500	13,600	11,400	149,000	16,100	15,700	4,300	16,100	2,570
11	4,220	5,490	3,760	27,800	12,200	13,600	140,000	15,500	13,700	4,770	11,900	2,460
12	3,530	14,400	3,760	24,200	11,100	23,200	142,000	14,100	14,100	6,000	9,470	2,120
13	3,080	16,300	3,530	21,500	10,000	31,500	152,000	11,600	16,600	5,750	8,660	2,010
14	2,530	13,900	3,530	19,700	9,500	35,900	158,000	10,300	17,600	4,300	8,390	1,900
15	2,860	11,700	3,530	17,900	8,720	37,800	152,000	10,300	16,800	3,840	7,310	1,800
16	2,640	10,000	3,300	15,800	8,980	41,800	138,000	10,000	13,900	3,380	6,520	2,010
17	2,640	9,500	5,420	14,200	7,940	43,900	129,000	8,930	8,930	2,920	6,000	2,010
18	5,420	10,000	6,920	12,800	6,920	44,300	118,000	7,850	6,780	2,690	5,010	2,230
19	11,700	9,500	6,920	11,700	15,000	46,100	107,000	7,310	7,580	2,690	4,300	2,120
20	17,900	6,920	6,420	10,800	23,000	55,500	102,000	6,000	14,700	3,610	3,840	1,900
21	19,900	6,670	6,170	10,300	28,300	63,000	97,000	4,770	19,200	8,120	3,380	1,900
22	19,700	5,920	5,920	9,500	31,700	66,900	90,500	5,010	17,400	15,000	3,150	1,800
23	17,100	5,420	6,670	8,980	32,200	71,500	84,300	5,010	14,400	21,700	2,690	1,700
24	14,900	4,700	7,420	13,800	33,400	77,000	77,800	5,250	11,900	25,200	2,690	1,600
25	10,800	4,460	6,920	22,900	32,200	80,200	71,800	5,500	12,700	28,500	2,460	1,410
26	7,420	4,220	6,670	31,000	30,000	82,600	65,000	6,260	10,600	31,500	2,340	1,500
27	6,170	4,220	8,460	32,900	25,700	84,600	56,700	6,000	8,660	31,700	2,120	1,410
28	6,420	3,760	13,600	32,700	21,200	86,300	48,000	4,770	7,580	29,500	2,120	1,410
29	6,670	3,760	24,200	30,500	-	87,800	39,300	4,530	6,520	22,100	2,460	1,320
30	5,920	3,990	31,900	28,000	-	87,400	30,700	4,300	6,520	15,400	3,150	1,500
31	5,180	-	35,200	25,200	-	87,000	-	5,250	-	10,800	4,770	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	224,360	19,900	1,440	7,237	0.467	0.54
November	189,550	16,300	2,860	6,318	.408	.46
December	236,670	35,200	3,300	7,635	.493	.57
Calendar year 1937	8,380,930	113,000	1,440	22,960	1.48	20.12
January	784,680	41,800	8,980	25,310	1.63	1.88
February	560,160	33,400	6,920	20,010	1.29	1.34
March	1,365,680	87,800	8,980	44,050	2.84	3.27
April	3,088,600	158,000	30,700	103,000	6.65	7.42
May	325,740	23,200	4,300	10,510	.678	.78
June	410,420	19,400	6,520	13,680	.883	.99
July	331,050	31,700	2,690	10,680	.689	.79
August	329,200	31,200	2,120	10,620	.685	.79
September	73,610	5,010	1,320	2,454	.158	.18
Water year 1937-38	7,919,720	158,000	1,320	21,700	1.40	19.01

Tombigbee River near Leroy, Ala.

Location.- Staff gage above spillway of navigation dam at lock 1, lat. 31°34', long. 88°01', in T. 7 N., on St. Stephens meridian, 5 miles northwest of Leroy. Zero of gage is 4.69 feet below mean sea level (Corps of Engineers, U. S. Army, benchmark).
Drainage area.- 19,100 square miles.
Records available.- October 1928 to September 1938.
Average discharge.- 10 years, 26,880 second-feet.
Extremes.- Maximum discharge during year, 192,000 second-feet Apr. 10 (gage height, 45.96 feet); minimum, 2,090 second-feet Sept. 27-30; minimum gage height, 18.18 feet Sept.30. 1928-38: Maximum discharge, that of Apr. 10, 1938; maximum gage height, 46.0 feet Apr. 2, 1929; minimum discharge not determined.
Remarks.- Records fair. Navigation dam at lock 1 is control only below 14,000 second-feet. Discharge for Apr. 27 to May 7 determined from backwater curve. Gage read twice daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-21; backwater curve used Apr. 27 to May 7)

Oct. 1 to Feb. 17

18.2	2,090	20.8	12,900	28.0	39,400
18.5	2,900	22.0	19,700	29.4	42,400
19.0	4,450	23.0	24,500		
19.5	6,250	24.5	30,200		
20.0	8,450	26.0	34,400		

Feb. 18 to Sept. 30

23.0	24,500	31.0	50,900	39.0	105,200
24.5	30,700	32.0	55,200	41.0	128,100
26.0	35,900	33.5	63,000	43.0	153,400
28.0	41,500	35.0	72,200	46.0	191,800
30.0	47,300	37.0	86,700		

Note.- Same as preceding table below 23.0 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,900	7,510	6,250	34,900	31,100	30,300	90,000	72,100	6,250	7,510	15,300	5,140
2	2,900	7,070	6,250	36,900	29,200	24,500	96,300	55,000	9,470	7,510	17,600	5,870
3	2,760	6,250	5,870	38,900	27,700	19,700	102,000	41,300	14,100	7,070	22,700	5,870
4	2,900	5,870	5,870	40,300	28,100	16,500	105,000	30,800	17,600	6,250	27,200	5,870
5	4,280	5,500	6,250	41,700	28,500	14,700	107,000	23,900	19,700	5,140	30,300	5,870
6	5,500	5,140	6,250	42,200	28,500	14,100	108,000	20,500	20,700	4,790	32,200	5,140
7	7,970	4,790	5,870	42,400	27,400	12,900	113,000	18,800	21,200	5,140	33,300	4,790
8	10,000	4,790	5,870	41,900	25,300	14,100	132,000	20,700	21,200	5,870	31,800	4,280
9	10,000	4,790	6,250	41,100	21,700	14,700	183,000	19,700	20,700	6,650	28,000	3,800
10	9,470	4,790	6,250	39,900	18,700	15,300	192,000	19,200	19,700	5,870	24,500	3,640
11	7,510	6,250	6,650	38,200	17,000	14,700	189,000	18,700	17,600	5,140	20,700	3,490
12	5,870	15,900	6,650	35,900	15,900	17,600	185,000	17,600	15,900	6,250	16,500	3,340
13	5,140	23,600	6,650	33,100	14,700	24,500	179,000	15,900	15,900	7,510	12,300	3,040
14	4,790	23,600	6,250	29,500	12,900	30,700	173,000	14,100	17,000	6,250	11,100	2,900
15	4,280	20,200	5,870	26,200	12,300	35,900	169,000	12,900	18,700	5,140	10,600	2,760
16	3,960	17,600	5,870	22,700	11,700	40,500	165,000	12,300	18,700	4,790	9,470	2,760
17	3,960	15,300	7,510	20,200	11,100	45,400	164,000	11,700	15,300	4,450	7,970	2,760
18	7,970	12,900	11,700	17,600	11,100	48,000	162,000	10,600	11,700	3,640	7,070	3,040
19	11,700	12,300	12,300	16,500	18,700	49,800	161,000	9,470	9,470	3,340	6,250	3,040
20	21,700	11,700	11,700	15,300	25,400	53,400	158,000	8,450	10,600	4,120	5,500	2,760
21	23,600	11,700	10,600	14,100	29,600	59,700	152,000	7,510	18,700	5,500	4,790	2,620
22	24,900	10,600	9,470	13,500	33,600	64,200	144,000	6,650	21,200	9,470	4,280	2,620
23	24,000	9,470	10,000	12,900	37,100	69,700	137,000	5,870	19,700	18,700	3,640	2,480
24	21,700	8,450	12,900	14,100	40,200	74,800	131,000	5,870	16,500	24,500	3,490	2,350
25	18,700	7,970	12,900	21,200	41,500	77,600	124,000	5,870	14,700	29,600	3,340	2,350
26	14,700	7,510	11,700	[illegible],600	41,000	79,700	116,000	6,250	14,100	34,600	3,040	2,220
27	11,100	7,070	11,700	[illegible],800	39,100	81,200	108,000	7,070	11,700	37,100	2,900	2,090
28	10,000	6,650	14,100	33,900	35,600	82,700	101,000	6,650	10,000	36,500	2,900	2,090
29	9,470	6,650	19,700	34,900	-	84,300	93,200	5,870	8,450	34,000	2,900	2,090
30	8,950	6,250	26,600	35,200	-	85,900	84,500	5,870	7,970	28,400	3,340	2,090
31	7,970	-	32,000	33,100	-	86,700	-	5,500	-	21,200	3,960	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	310,650	24,900	2,760	10,020	0.525	0.61
November	298,170	23,600	4,790	9,939	.520	.58
December	313,800	32,000	5,870	10,120	.530	.61
Calendar year 1937	10,166,810	117,000	2,760	27,850	1.46	19.79
January	925,700	42,400	12,900	29,860	1.56	1.80
February	714,700	41,500	11,100	25,520	1.34	1.40
March	1,383,800	86,700	12,900	44,640	2.34	2.70
April	4,124,000	192,000	84,500	137,500	7.20	8.03
May	522,700	72,100	5,500	16,860	.883	1.02
June	464,510	21,200	6,250	15,480	.810	.90
July	392,000	37,100	3,340	12,650	.662	.76
August	408,940	33,300	2,900	13,190	.691	.80
September	103,160	5,870	2,090	3,439	.180	.20
Water year 1937-38	9,962,130	192,000	2,090	27,290	1.43	19.41

Mulberry Fork of Black Warrior River near Garden City, Ala.

Location.- Wire-weight gage, lat. 34°00', long. 86°45', in T. 12 S., R. 2 W., at bridge on U. S. Highway 31, 1,000 feet below Louisville & Nashville Railroad bridge and 1 mile southwest of Garden City.

Drainage area.- 365 square miles.

Records available.- June 1928 to September 1938.

Extremes.- Maximum discharge during year, 23,300 second-feet Apr. 8 (gage height, 16.0 feet, from graph based on gage readings); minimum, 6 second-feet Oct. 1 (gage height, 2.02 feet).
1928-38: Maximum discharge, 46,600 second-feet Feb. 4, 1936 (gage height, 24.0 feet, from floodmarks); minimum observed, 3 second-feet Sept. 28-30, Oct. 1, 3-6, 1931 (gage height, 1.88 feet).

Remarks.- Records fair. Gage read twice daily.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1-18

2.0	6	4.0	516	12.5	14,200
2.1	11	4.4	756	14.5	19,300
2.3	27	5.0	1,170	16.0	23,300
2.5	50	6.1	2,120		
2.8	104	7.0	3,090		
3.0	152	7.6	3,930		
3.2	210	8.5	5,450		
3.8	421	10.5	9,520		

Oct. 18 to Sept. 30

1.9	4	2.8	93
2.0	7	3.1	168
2.2	18	3.6	339
2.4	34	3.9	466
2.6	58		

Note.- Same as preceding table above 3.9 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	76	61	756	543	225	5,620	358	71	61	5,150	85
2	13	68	58	1,030	443	206	3,000	339	60	50	2,430	69
3	541	54	52	856	420	266	1,850	266	53	43	1,030	52
4	1,510	48	50	724	399	284	1,490	225	50	152	944	48
5	352	48	50	600	378	232	1,170	209	44	108	600	40
6	130	46	50	571	339	420	1,170	193	38	125	466	34
7	79	53	50	1,260	320	320	2,710	174	34	58	443	34
8	56	53	50	890	284	249	15,600	225	32	689	358	30
9	44	53	50	822	266	249	3,480	219	243	943	1,230	43
10	37	53	46	692	266	5,380	2,220	154	688	437	510	29
11	32	55	48	692	249	1,670	1,670	130	140	151	302	33
12	30	63	50	600	249	1,170	1,330	118	82	102	320	24
13	28	64	49	543	229	890	1,100	108	53	71	266	21
14	27	68	53	443	225	756	890	100	41	55	212	19
15	22	64	60	420	222	630	756	95	34	50	199	18
16	20	58	61	378	249	890	630	85	29	93	157	22
17	20	64	68	358	212	600	571	74	25	337	125	18
18	1,820	68	193	339	202	466	1,330	68	26	135	104	17
19	992	152	174	320	378	2,320	861	64	48	1,730	85	14
20	360	71	135	284	358	6,340	1,910	60	48	436	76	13
21	249	69	122	284	284	2,280	2,450	54	46	1,530	68	12
22	199	64	104	320	266	1,670	1,490	71	41	631	58	11
23	168	58	111	302	320	3,160	1,100	762	30	2,630	58	11
24	146	55	157	1,010	320	2,330	890	140	27	1,030	46	11
25	120	54	148	856	284	1,670	734	106	30	543	44	10
26	111	55	130	600	266	1,330	600	82	150	378	41	10
27	148	58	451	516	249	1,490	516	58	1,000	234	38	10
28	146	64	1,170	443	249	1,250	443	66	272	222	32	9
29	106	64	690	399	-	960	376	64	125	180	532	9
30	91	61	724	378	-	1,790	320	48	82	205	295	9
31	82	-	600	571	-	2,980	-	58	-	536	121	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,685	1,820	6	248	0.679	0.78
November	1,881	152	46	62.7	.172	.19
December	6,015	1,170	46	194	.532	.61
Calendar year 1937	244,165	12,200	6	669	1.83	24.88
January	18,257	1,260	284	589	1.61	1.86
February	8,469	543	202	302	.827	.86
March	44,473	6,340	206	1,435	3.93	4.53
April	58,279	15,600	320	1,943	5.32	5.94
May	4,773	762	48	154	.422	.49
June	3,642	1,000	25	121	.332	.37
July	14,215	2,660	43	459	1.26	1.45
August	16,340	5,150	32	527	1.44	1.66
September	765	85	9	25.5	.070	.08
Water year 1937-38	184,794	15,600	6	506	1.39	18.82

Black Warrior River at Tuscaloosa, Ala.

Location.- Staff gage above spillway of navigation dam at lock 10, lat. 33°12'55", long. 87°33'56", in T. 21 S., R. 10 W., in Tuscaloosa. Zero of gage is 82.97 feet above mean sea level (Corps of Engineers, U. S. Army, bench mark).

Drainage area.- 4,830 square miles.

Records available.- August 1928 to September 1938. January 1889 to December 1905 at site a quarter of a mile downstream (gage heights only).

Average discharge.- 18 years (1894-1902, 1928-38), 7,956 second-feet.

Extremes.- Maximum discharge during year, 144,000 second-feet Apr. 8; maximum gage height, 63.0 feet Apr. 8, from graph drawn on basis of gage readings; minimum discharge observed, 62 second-feet Sept. 22 (gage height, 18.12 feet).
1889-1905, 1928-38: Maximum discharge, 215,000 second-feet Apr. 18, 1900 (gage height, 67.7 feet); minimum, 50 second-feet (estimated) Aug. 26, 1929.
Maximum stage known, that of Apr. 18, 1900.

Remarks.- Records fair. Those above 9,120 second-feet determined by using rate of change in stage as a factor except for four periods of which those for Mar. 21 (noon)-23 (9 a.m.) were determined from backwater curve, and those for Mar. 24 (4 p.m.)-31 (2 p.m.), and Apr. 3-6 (3 p.m.) and 9 (2 p.m.)-18 (1 a.m.) were determined from unit-fall rating using gage heights from recorders half a mile and 10⅛ miles respectively downstream. Gage read twice daily. Navigation dam at lock 10 is control below 9,120 second-feet except when return of overbank storage, following floods in excess of 55,000 second-feet, causes backwater, at which times dam is control only below about 6,000 second-feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	281	1,750	493	13,100	8,420	4,000	65,900	5,550	3,160	1,450	6,530	1,650
2	729	1,450	482	18,600	9,120	3,570	80,600	5,220	5,220	611	27,800	1,180
3	1,180	1,080	460	14,000	6,960	3,430	50,100	6,240	9,470	470	19,400	1,180
4	4,290	1,050	450	12,700	5,550	3,290	27,600	4,590	4,290	1,180	13,900	702
5	9,120	1,270	482	8,140	5,550	3,430	17,300	9,600	3,570	2,070	12,300	689
6	6,960	1,010	470	9,780	4,590	4,900	22,100	11,600	2,770	4,900	7,640	663
7	4,290	996	516	12,500	3,290	5,550	52,600	5,550	1,650	3,160	5,220	758
8	3,290	981	460	12,700	4,290	4,900	136,000	8,060	1,550	1,850	5,550	650
9	1,750	1,060	493	11,600	3,570	3,570	120,000	6,600	1,360	2,410	4,590	574
10	1,650	1,160	470	9,560	3,290	18,000	86,700	5,890	1,360	5,550	3,160	493
11	1,550	1,360	450	9,120	2,900	37,600	48,000	4,000	1,270	3,430	2,650	550
12	1,450	2,070	409	8,770	2,770	20,600	23,600	2,070	3,030	1,960	3,160	504
13	1,360	2,160	470	8,060	2,900	14,000	14,300	1,960	1,750	1,360	1,960	470
14	1,270	2,180	493	5,890	2,770	12,000	11,200	3,290	1,450	1,360	1,360	439
15	1,180	2,070	493	4,590	4,000	11,400	10,200	3,030	1,160	981	1,960	758
16	950	1,960	574	4,900	2,650	17,600	9,020	1,850	470	368	2,070	1,050
17	857	1,960	743	4,290	3,160	12,400	8,840	1,750	550	470	1,360	702
18	6,160	1,550	1,650	4,000	2,530	11,300	22,100	1,650	1,270	1,100	1,270	388
19	13,700	1,750	1,270	4,000	5,970	20,400	19,100	650	1,650	1,650	650	221
20	15,300	1,550	1,060	3,710	9,360	64,200	15,000	585	1,960	8,630	676	187
21	11,900	758	904	2,900	8,060	52,800	23,700	1,450	1,750	9,020	702	143
22	8,660	637	772	4,290	5,220	33,500	23,600	1,270	1,650	14,000	669	83
23	7,550	598	981	3,710	8,060	54,300	15,400	1,270	1,550	12,000	574	203
24	3,290	624	934	8,560	9,120	62,500	12,300	2,770	872	20,300	316	203
25	1,750	598	934	14,800	7,700	36,700	10,600	2,650	800	16,400	241	192
26	2,070	598	919	12,400	5,220	22,200	8,420	1,750	1,270	11,600	800	192
27	3,030	585	6,080	9,120	5,220	15,400	5,890	1,360	843	4,900	650	221
28	2,900	574	18,000	6,960	4,900	13,000	4,900	1,270	1,750	3,160	758	160
29	2,410	539	17,300	5,550	-	12,200	3,160	550	3,030	3,430	1,360	176
30	2,180	504	13,200	4,900	-	11,900	4,000	3,030	2,770	2,180	4,290	203
31	1,650	-	11,100	6,240	-	21,400	-	3,570	-	1,750	2,650	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	124,907	15,300	281	4,029	0.834	0.96
November	36,452	2,180	504	1,215	.252	.28
December	83,512	18,000	409	2,694	.558	.64
Calendar year 1937	3,108,016	103,000	248	8,515	1.76	23.92
January	259,660	18,800	2,900	8,376	1.73	1.99
February	147,140	9,360	2,530	5,255	1.09	1.14
March	612,040	64,200	3,290	19,740	4.09	4.72
April	960,230	136,000	3,160	32,010	6.63	7.40
May	110,675	11,600	550	3,570	.739	.85
June	65,265	9,470	470	2,176	.450	.50
July	143,700	20,300	368	4,635	.960	1.11
August	136,436	27,800	241	4,401	.911	1.05
September	15,584	1,650	83	519	.107	.12
Water year 1937-38	2,695,601	136,000	83	7,385	1.53	20.76

Black Warrior River near Eutaw, Ala.

Location.- Water-stage recorder, lat. 32°49'05", long. 87°49'00", in SE¼ sec. 6, T. 21 N., R. 3 E., at bridge on State Highway 41 between Eutaw and Wedgworth, 1½ miles below mouth of Big Creek and 4 miles southeast of Eutaw. Navigation dam at lock 7, 3 miles downstream, is control for discharge below 5,500 second-feet.

Drainage area.- 5,820 square miles.

Records available.- May 1932 to September 1938.

Extremes.- Maximum discharge during year, 122,000 second-feet Apr. 11, from graph based on rating table below 52 feet gage height and two discharge measurements; maximum gage height, 55.74 feet Apr. 11; minimum discharge, 409 second-feet Sept. 24 (gage height, 18.85 feet).

1932-38: Maximum discharge, 130,000 second-feet Feb. 7, 1936; maximum gage height, 56.3 feet Feb. 8, 1936; minimum discharge, 177 second-feet Oct. 9, 1935 (gage height, 18.44 feet).

Remarks.- Records good except those for Apr. 10-13 and parts of Apr. 9, 14, which were computed from hydrograph based on rating table below 52 feet gage height and two discharge measurements above that stage and are fair. Discharge above 5,500 second-feet determined by using surface slope as a factor.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	712	2,600	1,290	11,500	7,210	6,010	24,200	5,360	4,870	2,530	3,670	2,670
2	1,020	2,300	1,290	14,600	8,880	4,750	33,100	6,420	5,420	1,820	11,700	1,780
3	1,550	1,930	1,240	18,700	8,970	4,630	41,100	6,570	7,470	1,110	21,300	1,710
4	2,090	1,780	1,170	16,600	7,950	4,510	46,900	6,980	7,600	993	20,900	1,550
5	5,240	1,800	1,270	15,100	7,210	4,390	49,100	6,480	5,990	1,560	16,600	1,200
6	7,360	1,780	1,260	10,100	6,730	4,750	44,100	11,000	4,630	2,330	12,600	1,050
7	6,700	1,650	1,240	11,800	5,510	5,720	40,200	11,700	3,190	4,630	7,800	1,040
8	5,120	1,620	1,270	14,700	5,120	6,050	49,000	9,020	2,490	3,490	6,890	1,040
9	3,790	1,550	1,340	15,000	5,000	5,490	61,000	8,230	2,230	2,030	6,640	1,040
10	2,560	1,670	1,350	13,500	4,630	5,510	108,000	7,980	2,070	2,960	5,540	1,060
11	2,110	2,280	1,400	11,100	4,270	15,700	118,000	7,060	1,950	5,380	4,630	1,040
12	1,930	3,790	1,300	10,400	4,030	23,400	99,000	4,870	2,700	4,270	3,910	927
13	1,820	4,270	1,290	9,380	3,790	26,100	71,000	3,550	3,190	2,550	3,430	902
14	1,730	3,910	1,320	9,100	3,790	20,500	50,000	3,550	2,450	1,860	2,490	889
15	1,640	3,550	1,320	7,670	4,150	15,200	41,400	4,150	2,090	1,620	2,230	902
16	1,480	3,190	1,300	6,470	4,270	15,200	35,100	3,670	1,520	1,240	2,530	1,140
17	1,420	3,070	1,830	6,330	3,790	17,700	29,400	3,050	1,080	827	2,130	1,230
18	3,390	2,950	2,490	5,670	4,030	15,100	27,200	2,780	1,220	863	1,860	993
19	11,000	2,620	2,740	5,250	4,750	13,700	26,600	2,300	1,960	1,420	1,580	722
20	16,100	2,690	2,420	5,120	8,220	23,200	24,800	1,640	3,550	4,060	1,270	608
21	16,600	2,320	2,010	4,750	10,400	31,200	23,700	1,500	3,550	7,560	1,150	522
22	12,300	1,760	1,820	4,270	8,470	35,200	24,900	1,780	3,310	11,800	1,090	454
23	9,660	1,550	1,800	5,000	8,650	41,000	24,900	1,820	2,690	15,200	1,080	471
24	7,570	1,450	1,890	6,420	9,390	43,500	22,000	1,960	2,170	15,500	940	439
25	4,750	1,400	1,930	10,900	9,600	48,500	16,900	3,190	1,840	18,800	780	446
26	3,310	1,400	1,840	15,700	8,230	51,200	13,500	3,310	2,090	20,500	756	424
27	3,430	1,420	2,240	12,800	7,030	48,400	9,580	2,600	2,250	14,800	876	439
28	4,270	1,420	11,900	10,200	6,660	41,200	8,050	2,110	1,970	8,290	953	463
29	3,910	1,420	17,000	8,150	-	33,600	6,850	1,670	2,450	5,680	1,270	431
30	3,430	1,370	18,100	6,820	-	27,400	5,120	1,630	2,950	4,390	2,290	439
31	3,020	-	13,100	6,480	-	22,400	-	4,970	-	3,430	3,550	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	151,012	16,600	712	4,871	0.837	0.96
November	66,510	4,270	1,370	2,217	.381	.43
December	103,760	18,100	1,170	3,347	.575	.66
Calendar year 1937	3,853,632	64,400	522	10,560	1.81	24.62
January	310,080	18,700	4,270	10,000	1.72	1.98
February	180,730	10,400	3,790	6,455	1.11	1.16
March	661,210	51,200	4,390	21,330	3.66	4.22
April	1,176,700	118,000	5,120	39,220	6.74	7.52
May	143,390	11,700	1,500	4,625	.795	.92
June	92,940	7,600	1,080	3,098	.532	.59
July	173,393	20,500	827	5,593	.961	1.11
August	154,435	21,300	756	4,982	.856	.99
September	28,021	2,670	424	934	.160	.18
Water year 1937-38	3,242,181	118,000	424	8,883	1.53	20.72

Sipsey Fork of Mulberry Fork of Black Warrior River near Arley, Ala.

Location.- Wire-weight gage, lat. 33°59', long. 87°13', in N½ sec. 19, T. 12 S., R. 6 W., at Duncan Bridge, 3 miles downstream from Clear Creek and 5 miles south of Arley.

Drainage area.- 537 square miles.

Records available.- January 1936 to September 1938.

Extremes.- Maximum discharge during year, 19,500 second-feet Apr. 8 (gage height, 32.5 feet, from graph based on gage readings); minimum discharge observed, 56 second-feet Sept. 24, 25; minimum gage height observed, 3.58 feet Sept. 25.
1936-38: Maximum discharge, 38,000 second-feet Feb. 4, 1936 (gage height, 51.0 feet, from graph based on gage readings), from rating curve extended above 18,000 second-feet on basis of area-velocity studies and run-off at station near Sipsey; minimum discharge observed, 34 second-feet June 19, 20, 1936; minimum gage height observed, 3.11 feet June 20, 1936.

Remarks.- Records fair below 5,000 second-feet and poor above. Gage read once daily below 8 feet and generally twice daily above.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

3.6	56	4.7	250	5.8	870	10.0	3,950	18.0	7,600
3.8	72	4.9	325	6.0	1,030	10.8	4,400	20.0	8,600
4.0	96	5.1	420	6.9	1,720	13.0	5,500	22.0	9,900
4.3	147	5.3	531	8.0	2,570	14.0	5,950	24.0	11,600
4.5	192	5.5	656	9.0	3,300	17.0	7,150	29.0	16,100

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	168	205	1,570	1,800	420	5,560	561	1,920	205	5,010	180
2	362	168	205	1,570	1,570	395	4,360	624	4,390	180	6,300	192
3	1,850	157	192	1,410	1,260	561	3,010	502	1,880	180	2,180	137
4	2,060	147	192	1,100	990	724	2,260	531	1,180	267	1,410	128
5	592	147	180	950	832	690	1,490	624	690	219	950	111
6	420	147	168	1,300	759	656	1,410	531	531	168	795	103
7	245	157	168	1,340	592	656	3,000	502	447	147	513	137
8	180	157	157	1,100	502	624	16,100	690	395	168	420	192
9	168	180	157	870	447	641	7,310	561	347	1,350	347	119
10	168	180	157	795	395	13,200	3,430	395	325	721	305	103
11	157	192	168	759	347	6,240	2,410	347	285	285	285	89
12	147	267	192	690	325	2,870	1,880	325	234	219	250	83
13	137	285	205	561	305	1,880	1,490	370	234	192	234	83
14	128	250	205	474	325	1,490	1,260	420	205	157	234	96
15	119	250	180	447	347	1,260	1,100	395	180	147	219	128
16	119	234	168	420	347	1,180	870	325	168	137	168	103
17	137	219	1,060	370	305	1,100	759	285	168	137	168	89
18	2,080	219	795	370	325	1,030	2,180	285	219	137	157	89
19	1,720	219	624	347	862	3,120	1,650	267	219	2,360	147	77
20	1,030	234	531	325	1,180	5,400	2,800	250	234	1,350	128	72
21	795	234	420	325	950	3,360	5,720	219	250	3,190	119	67
22	395	219	305	420	759	2,340	3,360	205	267	4,020	119	67
23	325	219	325	656	724	2,720	2,260	1,260	205	3,230	111	63
24	305	192	531	1,710	656	3,160	1,650	832	180	2,110	111	56
25	285	192	656	2,490	592	2,260	1,410	502	205	1,180	111	56
26	234	192	724	1,490	531	1,720	1,100	325	234	758	103	59
27	219	205	2,790	1,100	502	1,410	795	267	671	502	96	63
28	205	219	5,150	795	474	1,340	656	234	531	420	103	63
29	192	219	3,090	724	-	1,180	561	250	370	328	168	63
30	180	205	1,950	870	-	1,650	531	502	234	305	168	72
31	180	-	1,490	990	-	1,650	-	1,100	-	3,820	168	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	15,225	2,080	91	491	0.914	1.05
November	6,073	285	147	202	.376	.42
December	23,340	5,150	157	753	1.40	1.61
Calendar year 1937	343,392	12,800	45	941	1.75	23.78
January	28,338	2,490	325	914	1.70	1.96
February	19,003	1,800	305	679	1.26	1.31
March	66,927	13,200	395	2,159	4.02	4.64
April	82,372	16,100	531	2,746	5.11	5.70
May	14,486	1,260	205	467	.870	1.00
June	17,398	4,390	168	580	1.08	1.20
July	28,587	4,020	137	922	1.72	1.98
August	21,597	6,300	96	697	1.30	1.50
September	2,940	192	56	98.0	.182	.20
Water year 1937-38	326,286	16,100	56	894	1.66	22.57

Locust Fork of Black Warrior River at Trafford, Ala.

Location.- Water-stage recorder, lat. 33°50', long. 86°45', in sec. 9, T. 14 S., R. 2 W., at highway bridge, three-quarters of a mile northwest of Trafford, 1½ miles east of Coaldale, and 2¾ miles upstream from Gurley Creek.

Drainage area.- 622 square miles.

Records available.- September 1930 to September 1938.

Extremes.- Maximum discharge during year, 37,000 second-feet Apr. 9; maximum gage height, 44.96 feet Apr. 9; minimum discharge, 31 second-feet Sept. 30 (gage height, 2.79 feet). 1930-38: Maximum discharge, 45,500 second-feet Feb. 4, 1936; maximum gage height, 50.48 feet Feb. 5, 1936; minimum discharge, 8 second-feet Oct. 2, 19-21, 1931 (gage height, 2.39 feet).

Remarks.- Records good. Discharge above 6,000 second-feet determined by using rate of change of stage as a factor.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	209	145	852	860	527	10,700	632	367	183	1,980	148
2	45	186	142	1,730	737	475	10,100	562	377	158	4,790	218
3	60	173	136	1,550	650	440	5,410	510	907	175	2,850	277
4	386	161	133	1,230	597	475	3,190	430	492	629	2,540	173
5	435	151	139	1,000	562	419	2,290	1,990	261	271	1,390	133
6	442	145	136	930	527	707	2,140	1,090	192	1,350	965	106
7	320	142	130	1,830	492	1,150	5,730	632	176	402	807	92
8	202	139	127	1,820	430	755	29,300	597	170	294	650	92
9	145	139	127	1,430	377	632	28,700	457	173	960	457	87
10	118	127	124	1,190	350	6,260	9,370	377	716	916	1,120	76
11	99	130	115	1,110	336	5,180	4,280	322	667	433	561	63
12	86	139	109	1,040	322	2,880	2,790	292	359	265	528	60
13	76	151	112	895	299	1,910	2,190	261	252	196	475	60
14	68	170	118	790	288	1,470	1,820	238	180	154	305	55
15	60	154	124	720	299	1,230	1,510	212	142	201	205	51
16	57	151	127	650	299	1,390	1,270	196	127	510	176	55
17	55	158	127	597	282	1,600	1,110	173	115	244	164	58
18	1,350	173	200	562	283	1,190	1,190	161	343	180	142	53
19	5,220	176	261	510	650	2,290	1,190	145	398	232	121	46
20	2,630	186	261	457	877	10,800	1,140	136	252	1,230	118	44
21	1,210	180	225	430	685	7,000	3,120	130	392	2,550	109	44
22	720	173	205	492	562	4,060	2,340	500	265	2,790	95	37
23	527	164	202	492	878	5,490	1,600	334	180	2,630	89	35
24	398	154	218	1,090	1,070	6,560	1,270	350	151	4,530	89	35
25	319	151	235	1,910	930	4,120	1,040	252	178	2,490	84	35
26	288	154	228	1,510	807	3,240	895	167	213	1,490	73	37
27	402	145	268	1,150	720	2,090	755	142	632	930	68	37
28	405	154	650	930	615	2,090	667	142	902	667	123	35
29	326	158	842	807	-	1,640	580	136	384	492	496	33
30	265	158	737	720	-	1,390	510	377	242	377	475	31
31	232	-	632	807	-	2,890	-	615	-	402	205	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	16,981	5,220	35	548	0.881	1.02
November	4,751	209	127	158	.254	.28
December	7,335	842	109	237	.381	.44
Calendar year 1937	445,232	28,300	24	1,220	1.96	26.58
January	31,231	1,910	430	1,007	1.62	1.87
February	15,784	1,070	282	564	.907	.94
March	82,350	10,800	419	2,656	4.27	4.92
April	138,197	29,300	510	4,607	7.41	8.27
May	12,558	1,990	130	405	.651	.75
June	10,205	907	115	340	.547	.61
July	28,311	4,530	154	913	1.47	1.70
August	22,250	4,790	68	718	1.15	1.33
September	2,306	277	31	76.9	.124	.14
Water year 1937-38	372,259	29,300	31	1,020	1.64	22.27

Pascagoula River at Merrill, Miss.

Location.- Water-stage recorder, lat. 30°59', long. 88°44', in T. 1 S., R. 7 W. St. Stephens base and meridian, at bridge on State Highway 24, half a mile downstream from confluence of Leaf and Chickasawhay Rivers to form the Pascagoula and half a mile west of Merrill. Zero of gage is 24.1 feet above mean sea level (Gulf, Mobile & Northern Railroad bench mark).

Drainage area.- 6,600 square miles.

Records available.- December 1930 to September 1938.

Extremes.- Maximum discharge during year, 154,000 second-feet Apr. 13 (gage height, 29.71 feet); minimum, 920 second-feet Oct. 1 (gage height, 2.71 feet).
1930-38: Maximum discharge, that of April 13, 1938; minimum, 696 second-feet Nov. 3, 1936 (gage height, 2.37 feet).
Maximum stage known, about 31 feet July 9, 1916 (discharge not determined).

Remarks.- Records good.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 29, 30)

2.7	920	6.0	3,680	10.0	8,800	19.0	26,500	22.0	37,400	25.0	71,500
4.0	1,900	7.0	4,760	12.0	11,800	20.0	29,200	23.0	44,200	29.5	150,000
5.0	2,730	8.0	5,990	15.0	17,700	21.0	32,900	24.0	55,000		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	920	2,460	3,180	4,650	8,500	12,700	23,500	16,600	2,020	3,180	6,380	1,820
2	990	2,220	3,000	5,730	7,900	9,700	21,500	10,500	2,910	2,910	8,200	1,820
3	1,460	2,020	2,910	6,920	7,480	7,760	21,500	8,200	3,880	2,640	10,600	1,860
4	3,280	1,860	2,730	8,350	7,340	6,510	23,500	7,060	4,210	2,380	13,300	2,380
5	3,680	1,700	2,730	9,400	7,200	5,730	25,900	6,640	4,210	2,140	14,700	2,460
6	2,910	1,620	2,910	10,000	6,640	5,240	28,300	8,200	3,880	2,020	13,700	2,300
7	2,300	1,550	3,280	11,800	5,860	4,880	31,800	7,620	3,380	1,900	11,600	2,220
8	1,940	1,480	3,580	13,500	5,240	4,540	42,400	6,920	3,000	1,780	9,400	2,060
9	1,700	1,440	4,430	13,900	4,760	4,320	70,600	6,640	2,730	1,700	6,920	1,980
10	1,590	1,480	5,480	12,700	4,430	4,210	96,000	6,120	2,640	1,660	7,060	1,820
11	1,510	2,530	5,600	11,500	4,100	3,990	127,000	5,600	2,640	1,660	10,600	1,740
12	1,400	5,040	5,120	10,800	3,880	3,880	148,000	5,000	3,000	1,700	12,000	1,620
13	1,290	9,100	4,650	9,700	3,680	3,780	150,000	4,540	3,480	2,140	9,550	1,550
14	1,250	10,200	4,210	8,200	3,580	3,680	134,000	4,320	3,880	2,140	7,200	1,510
15	1,180	9,100	3,880	7,060	3,480	3,680	108,000	3,990	4,210	2,060	6,120	1,440
16	1,140	7,900	3,680	6,250	3,380	11,200	79,500	3,780	4,430	2,140	4,880	1,360
17	1,140	8,050	3,990	5,600	3,280	17,100	56,200	3,680	4,210	2,380	4,100	1,290
18	4,520	8,350	5,120	5,120	3,280	12,300	41,700	3,680	3,680	2,460	3,680	1,290
19	11,600	7,340	5,730	4,760	6,210	10,600	35,400	3,680	3,090	2,300	3,280	1,250
20	11,800	6,510	5,480	4,540	12,200	13,100	32,100	3,680	3,480	2,300	2,910	1,210
21	9,700	6,250	5,000	4,320	16,900	14,900	29,900	3,680	5,480	2,460	2,730	1,180
22	7,340	5,860	4,540	4,210	18,400	15,700	28,900	3,660	6,250	3,680	2,460	1,140
23	5,600	5,240	4,760	4,100	18,200	23,000	28,900	3,480	7,340	4,760	2,300	1,140
24	4,540	4,650	6,510	5,450	19,500	28,300	30,300	3,280	7,760	6,640	2,140	1,100
25	3,780	4,210	7,620	10,400	21,300	30,600	31,700	3,090	7,200	10,200	2,060	1,060
26	3,180	3,880	7,200	13,500	21,700	32,900	32,500	2,910	5,860	12,900	1,940	1,060
27	3,480	3,680	6,380	13,900	20,400	34,100	30,600	2,820	4,320	13,900	1,820	1,020
28	3,990	3,560	5,990	12,900	17,100	33,700	27,300	2,820	3,480	12,900	1,780	990
29	3,990	3,480	5,480	12,000	-	31,700	25,000	2,820	3,000	11,500	1,700	990
30	3,380	3,380	5,000	10,900	-	28,900	22,100	3,000	3,090	8,950	1,700	990
31	2,820	-	4,540	9,400	-	26,300	-	3,000	-	6,780	1,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	109,400	11,800	920	3,529	C.535	0.62
November	136,160	10,200	1,440	4,539	.688	.77
December	144,710	7,620	2,730	4,668	.707	.82
Calendar year 1937	3,304,800	52,600	920	9,054	1.37	18.63
January	271,560	13,900	4,100	8,760	1.33	1.53
February	265,920	21,700	3,280	9,497	1.44	1.50
March	449,000	34,100	3,680	14,480	2.19	2.52
April	1,584,300	150,000	21,500	52,810	8.00	8.93
May	161,030	16,600	2,820	5,195	.787	.91
June	123,540	7,760	2,640	4,118	.624	.70
July	138,260	13,900	1,660	4,460	.676	.78
August	188,410	14,700	1,700	6,078	.921	1.06
September	45,650	2,460	990	1,522	.231	.26
Water year 1937-38	3,617,940	150,000	920	9,912	1.50	20.40

Pearl River at Edinburg, Miss.

Location.- Water-stage recorder, lat. 32°47', long. 89°20', in T. 11 N., R. 9 E. Choctaw meridian, at bridge on State Highway 16 in Edinburg. Prior to Sept. 21, 1938, wire-weight gage at same site and datum. Zero of gage is 341.57 feet above mean sea level (U. S. Weather Bureau bench mark).
Drainage area.- 898 square miles.
Records available.- August 1928 to September 1938.
Average discharge.- 10 years, 1,062 second-feet.
Extremes.- Maximum discharge observed during year, 15,300 second-feet Apr. 10 (gage height, 24.64 feet); minimum observed, 8 second-feet Oct. 1 (gage height, 2.15 feet).
1928-38: Maximum discharge observed, 31,400 second-feet Mar. 8, 1935 (gage height, 26.20 feet); minimum discharge, 6 second-feet Oct. 27, 1931; minimum gage height, 1.63 feet Sept. 8, 1939.
Maximum stage known, 29.0 feet Mar. 1, 1902 (discharge not determined).
Remarks.- Records good except those between 40 and 80 second-feet, which are fair, and those for period of shifting control, Sept. 4-30, and those below 40 second-feet, which are poor. Gage read twice daily when wire-weight gage was in use; gage-height graphs drawn for periods of rapidly changing stage.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 26 to Jan. 1, Sept. 4-30)

Oct. 1 to Jan. 1				Jan. 2 to Sept. 30			
2.1	7	4.0	164	2.4	10	13.0	1,870
2.3	12	5.0	296	2.6	16	16.0	2,920
2.5	19	6.0	461	2.8	25	18.0	3,810
2.7	30	7.0	650	3.0	39	20.0	5,280
2.9	45	10.0	1,260	3.9	129	21.0	6,290
3.1	64	13.0	2,010	5.0	251	22.0	7,490
3.5	106			6.0	396	23.0	9,350
				7.0	570	24.0	12,600
				10.0	1,140	24.6	15,300

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	29	342	2,010	1,460	2,020	3,560	826	129	36	1,350	112
2	10	29	296	2,600	1,460	1,790	3,930	660	119	27	1,790	227
3	15	29	239	2,920	1,410	1,550	4,110	430	104	20	1,840	364
4	19	37	213	2,960	1,320	1,360	4,390	290	84	17	1,790	318
5	15	43	200	2,760	1,250	1,210	4,250	277	79	14	1,500	227
6	19	46	200	2,760	1,190	1,170	4,850	227	64	15	1,300	172
7	17	46	176	3,170	1,120	1,020	6,120	193	56	13	1,100	183
8	13	44	164	3,000	1,040	883	9,280	183	52	12	980	183
9	12	39	164	2,760	960	769	13,000	172	94	12	883	161
10	14	111	164	2,320	864	864	15,300	172	318	11	769	129
11	12	910	164	1,930	788	864	13,800	172	193	13	769	94
12	12	1,110	158	1,820	678	845	9,800	161	389	13	660	63
13	12	1,170	152	1,680	570	807	7,000	140	534	14	481	84
14	14	1,130	158	1,580	447	788	5,280	264	498	15	318	140
15	14	1,050	158	1,410	364	769	4,050	264	348	22	239	89
16	12	970	146	1,320	318	845	3,210	227	239	24	193	58
17	10	930	176	1,230	318	902	2,460	215	183	48	151	45
18	22	1,240	226	1,140	418	902	2,960	251	193	35	129	44
19	43	1,240	213	1,040	1,520	1,760	3,000	227	183	253	109	51
20	64	1,110	213	960	1,650	3,210	3,250	204	172	348	89	45
21	53	1,090	213	864	1,840	3,290	3,210	193	204	251	74	34
22	39	1,090	213	769	1,930	3,870	2,920	151	104	333	60	27
23	34	1,050	326	642	2,020	6,520	2,530	124	84	642	46	22
24	27	990	374	1,220	2,140	8,500	2,320	364	73	960	33	19
25	25	910	374	1,360	2,320	10,400	2,140	264	63	1,080	28	17
26	25	850	408	1,480	2,460	11,400	1,840	251	51	1,020	24	15
27	35	750	1,030	1,340	2,390	9,850	1,580	215	56	980	20	15
28	35	610	1,510	1,210	2,250	7,640	1,480	333	84	788	17	14
29	32	534	1,660	1,120	-	5,960	1,190	277	63	606	30	17
30	31	425	1,710	1,100	-	4,930	1,040	183	47	498	24	33
31	30	-	1,730	1,360	-	3,870	-	151	-	588	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	723	64	8	23.3	0.026	0.03
November	19,612	1,240	29	654	.728	.81
December	13,470	1,730	146	435	.484	.56
Calendar year 1937	381,890	9,800	8	1,046	1.16	15.80
January	53,835	3,170	642	1,737	1.93	2.22
February	36,495	2,460	318	1,303	1.45	1.51
March	100,558	11,400	769	3,244	3.61	4.16
April	143,850	15,300	1,040	4,795	5.34	5.96
May	8,061	826	124	260	.290	.33
June	4,860	534	47	162	.180	.20
July	8,708	1,080	11	281	.313	.36
August	16,822	1,840	17	543	.605	.70
September	3,002	364	14	100	.111	.12
Water year 1937-38	409,996	15,300	8	1,123	1.25	16.96

Pearl River at Jackson, Miss.

Location.- Water-stage recorder, lat. 32°17'20", long. 90°10'45", in T. 5 N., R. 1 E. Choctaw meridian, at bridge on U. S. Highway 80, in Jackson. Zero of gage is 234.96 feet above mean sea level (general adjustment of 1929).

Drainage area.- 3,100 square miles.

Records available.- June 1901 to December 1913 (prior to 1903, gage heights only) and August 1928 to September 1938.

Average discharge.- 19 years (1903-12, 1928-38), 3,681 second-feet.

Extremes.- Maximum discharge during year, 32,100 second-feet Apr. 9 (gage height, 32.07 feet); minimum, 181 second-feet Nov. 8 (gage height, 1.76 feet).
1901-31, 1928-38: Maximum discharge observed, 60,000 second-feet Dec. 19, 1932 (gage height, 35.2 feet); maximum gage height, 37.20 feet Apr. 1, 1902 (discharge not determined); minimum discharge, 80 second-feet Oct. 26 to Nov. 2, 1904; minimum gage height, 0.20 foot Nov. 4, 5, 1911.

Remarks.- Records good. Discharge for periods of faulty recorder record, Dec. 21, 22, 28-31, computed from graph drawn on basis of twice-daily staff-gage readings.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.8	190	14.0	4,820	28.0	17,400
2.2	300	18.0	6,420	29.0	19,500
3.0	540	20.0	7,370	30.0	22,600
5.0	1,270	22.0	8,750	31.0	26,600
7.0	2,020	24.0	10,600	32.0	31,500
10.0	3,220	26.0	13,800		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	231	1,340	5,520	4,500	7,260	20,400	4,260	750	480	2,580	810
2	276	228	1,230	6,620	4,300	6,810	24,200	3,140	860	420	3,220	435
3	256	223	1,160	7,010	4,220	6,220	24,200	2,580	990	390	3,940	372
4	242	218	1,080	7,260	4,060	5,420	23,400	2,260	1,050	363	3,980	405
5	234	210	970	7,490	3,860	4,540	21,900	2,020	880	339	3,580	450
6	228	205	880	7,670	3,700	3,740	21,900	1,790	770	321	3,420	525
7	234	198	810	8,000	3,540	3,180	25,000	1,570	770	306	3,460	590
8	245	190	770	8,070	3,300	2,860	30,000	1,450	700	282	3,540	570
9	253	190	735	8,000	2,940	2,700	31,500	1,340	660	270	3,460	510
10	256	264	720	7,790	2,620	2,620	31,000	1,190	830	250	3,540	450
11	256	288	700	7,430	2,340	2,420	30,000	1,120	680	242	3,260	465
12	242	242	680	6,960	2,140	2,260	29,500	1,010	830	285	2,620	465
13	234	248	660	6,500	1,980	2,340	31,000	955	750	270	2,020	420
14	226	595	640	6,020	1,830	2,500	31,500	1,010	845	242	1,680	405
15	215	1,340	625	5,380	1,680	2,580	31,500	955	1,010	280	1,490	381
16	205	1,870	625	4,740	1,570	2,580	30,000	955	1,230	381	1,300	381
17	227	2,140	680	4,100	1,490	2,500	27,500	1,050	1,420	315	1,120	372
18	250	2,660	640	3,580	2,250	2,340	24,200	1,230	1,600	369	970	390
19	223	3,300	640	3,180	5,020	3,630	22,200	1,300	1,680	960	845	381
20	210	3,740	660	2,860	5,220	6,340	19,200	1,270	1,420	2,660	770	333
21	210	3,820	735	2,620	5,500	7,060	17,400	1,160	1,120	3,700	680	309
22	228	3,620	830	2,420	6,180	8,000	16,100	1,050	1,120	2,660	610	282
23	253	3,300	1,230	2,300	6,910	9,350	14,800	955	920	1,830	540	256
24	276	2,940	1,080	3,300	7,370	11,500	13,400	1,230	845	1,830	495	248
25	294	2,660	900	5,740	7,610	12,900	12,400	1,230	845	2,180	465	234
26	300	2,380	1,010	4,300	7,790	14,100	11,500	1,080	750	2,220	420	226
27	276	2,100	1,300	4,780	7,730	15,600	10,300	970	640	2,420	405	215
28	253	1,790	2,170	4,860	7,610	16,600	8,990	1,050	570	2,660	375	208
29	239	1,570	3,620	4,740	-	17,400	7,370	1,050	540	2,860	369	198
30	228	1,420	3,550	4,580	-	18,300	5,860	920	555	2,900	372	190
31	231	-	4,140	4,620	-	18,700	-	810	-	2,100	625	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	7,550	300	205	244	0.079	0.09
November	44,180	3,820	190	1,473	.475	.53
December	36,840	4,140	625	1,188	.383	.44
Calendar year 1937	1,266,954	22,800	190	3,471	1.12	15.19
January	166,440	8,070	2,300	5,369	1.73	1.99
February	119,260	7,790	1,490	4,259	1.37	1.43
March	224,250	18,700	2,260	7,234	2.33	2.69
April	648,220	31,500	5,860	21,610	6.97	7.78
May	43,960	4,260	810	1,418	.457	.53
June	27,630	1,680	540	921	.297	.33
July	36,785	3,700	242	1,187	.383	.44
August	56,151	3,980	369	1,811	.584	.67
September	11,476	810	190	383	.124	.14
Water year 1937-38	1,422,742	31,500	190	3,898	1.26	17.06

20222 O—40—19

Pearl River near Columbia, Miss.

Location.- Water-stage recorder, lat. 31°14', long. 89°51', in T. 3 N., R. 18 W. St. Stephens meridian, at bridge on State Highway 24, 1 mile west of Columbia.

Drainage area.- 5,690 square miles.

Records available.- May 1934 to September 1938. August 1928 to May 1934 at site 1 mile downstream.

Extremes.- Maximum discharge during year, 72,600 second-feet Apr. 9 (gage height, 26.40 feet); minimum, 930 second-feet Nov. 8-10 (gage height, 2.31 feet).
1928-38: Maximum discharge, that of Apr. 9, 1938; minimum, 736 second-feet Oct. 20-31, Nov. 5, 6, 1936; minimum gage height, 1.93 feet Oct. 24, 1936.

Remarks.- Records good.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 9

2.3	930	16.0	21,600
2.7	1,190	19.0	29,300
3.4	1,710	21.0	35,300
4.0	2,190	22.0	38,900
5.0	3,130	23.0	44,000
7.0	5,430	24.0	50,900
9.0	8,230	25.0	59,400
11.0	11,500	26.3	71,600
14.0	17,200		

Apr. 10 to Sept. 30

2.5	1,060	9.0	7,400
2.9	1,340	10.0	8,960
3.4	1,710	11.0	10,900
4.0	2,190	14.0	17,200
7.0	5,100		

Note.- Same as preceding table above 13.6 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090	1,020	2,830	4,330	6,910	10,800	16,600	18,600	2,450	2,080	4,880	1,830
2	1,340	1,020	2,550	6,040	7,630	10,500	19,000	15,300	2,540	1,870	4,880	2,270
3	1,640	990	2,460	9,490	7,480	10,100	22,600	11,700	2,360	1,730	5,650	2,150
4	1,600	960	2,280	10,500	6,910	9,810	25,600	8,280	2,360	1,710	7,540	1,990
5	1,450	960	2,280	10,100	6,350	9,330	27,600	6,420	2,360	1,640	7,140	1,790
6	1,260	960	2,190	9,810	5,950	8,530	29,900	5,650	2,450	1,530	6,660	1,560
7	1,190	930	2,150	9,970	5,560	7,630	35,200	5,100	2,540	1,530	5,980	1,600
8	1,120	930	2,030	10,800	5,300	6,350	52,600	4,680	2,450	1,430	5,650	1,670
9	1,090	930	1,990	10,800	5,050	5,430	71,600	4,280	2,630	1,430	6,200	1,640
10	1,060	1,020	1,910	10,500	4,810	4,810	68,600	3,980	3,360	1,430	7,140	1,600
11	1,060	1,260	1,870	10,500	4,450	4,450	63,900	3,680	6,480	1,370	8,280	1,560
12	1,060	1,410	1,790	10,300	4,210	4,210	59,400	3,480	7,020	1,370	7,260	1,600
13	1,060	1,410	1,750	10,100	3,680	4,100	54,900	3,280	8,440	1,430	5,870	1,520
14	1,020	1,340	1,710	9,810	3,660	3,880	50,900	3,080	6,420	1,530	5,100	1,600
15	1,020	1,220	1,670	9,170	3,440	3,770	46,500	2,990	5,100	1,370	4,880	1,450
16	1,020	1,190	1,670	8,530	3,230	3,880	43,400	2,810	3,980	1,430	4,780	1,370
17	1,060	1,160	1,750	7,930	3,130	3,880	44,000	2,810	3,280	1,530	3,980	1,340
18	1,300	1,680	1,790	7,190	3,130	3,770	40,300	2,990	2,810	1,430	3,280	1,300
19	1,600	2,550	1,870	6,350	5,260	3,770	38,900	4,990	3,080	1,870	2,900	1,260
20	1,640	2,930	1,870	5,560	11,600	4,100	38,900	4,780	6,130	3,080	2,540	1,260
21	1,520	3,440	1,750	4,930	13,800	7,830	41,300	3,880	9,500	5,210	2,270	1,220
22	1,300	3,990	1,670	4,570	14,200	11,500	44,000	3,380	7,470	8,600	2,110	1,190
23	1,160	4,330	1,790	4,210	14,800	13,100	45,200	3,080	4,900	11,900	1,950	1,190
24	1,090	4,330	1,990	4,450	16,000	13,100	43,400	2,900	3,780	12,200	1,910	1,160
25	1,060	4,210	2,370	6,240	16,000	13,700	40,300	2,720	3,280	10,300	1,750	1,120
26	1,060	3,990	2,730	7,630	14,400	13,800	36,500	2,540	2,900	6,540	1,670	1,120
27	1,060	3,770	2,830	7,190	12,600	14,000	33,200	2,630	2,630	5,330	1,640	1,090
28	1,090	3,550	2,550	6,770	11,500	14,400	29,300	2,720	2,360	4,880	1,600	1,060
29	1,120	3,330	2,370	6,630	-	14,800	25,600	2,630	2,230	4,380	1,830	1,060
30	1,090	3,030	2,460	6,490	-	15,600	21,600	2,540	2,150	4,230	1,830	1,060
31	1,060	-	3,330	6,490	-	15,800	-	2,450	-	4,680	1,750	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	37,290	1,640	1,020	1,203	0.211	0.24
November	63,840	4,330	930	2,128	.374	.42
December	66,250	3,330	1,670	2,137	.376	.43
Calendar year 1937	2,516,030	42,500	930	6,893	1.21	16.45
January	243,380	10,800	4,210	7,851	1.38	1.59
February	221,240	16,000	3,130	7,901	1.39	1.45
March	270,730	15,800	3,770	8,733	1.53	1.76
April	1,210,800	71,600	16,600	40,360	7.09	7.91
May	150,350	18,500	2,450	4,850	.852	.98
June	119,440	9,500	2,150	3,981	.700	.78
July	111,220	12,200	1,370	3,588	.631	.73
August	130,900	8,280	1,600	4,223	.742	.86
September	43,630	2,270	1,060	1,454	.256	.29
Water year 1937-38	2,669,070	71,600	930	7,315	1.29	17.44

Strong River at Dlo, Miss.

Location.- Staff gage, lat. 31°59', long. 89°54', in T. 2 N., R. 4 E. Choctaw meridian, half a mile upstream from Gulf & Ship Island Railroad bridge and three-quarters of a mile southeast of Dlo.

Drainage area.- 361 square miles.

Records available.- August 1928 to September 1938.

Extremes.- Maximum discharge during year, 16,800 second-feet Apr. 8 (gage height, 25.8 feet, from floodmarks); minimum, 23 second-feet Oct. 1, 2, 4-6, 8, 9, 11-14 (gage height, 2.32 feet).

1928-38: Maximum discharge, 22,900 second-feet Mar. 7, 1935 (gage height, 28.0 feet, from floodmarks) from rating curve extended above 13,400 second-feet; minimum, 16 second-feet Aug. 8, 9, 1933 (gage height, 2.25 feet).

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.32	23	3.8	778	19.0	7,300
2.36	26	4.0	935	21.0	8,610
2.40	31	4.5	1,210	22.0	9,500
2.60	74	5.5	1,610	23.0	10,900
2.75	125	7.0	2,120	24.0	12,600
2.90	186	9.5	2,980	25.0	14,900
3.3	404	12.5	4,180	25.4	15,800
3.6	609	15.5	5,550		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	24	54	196	500	352	2,890	121	157	50	1,110	50
2	23	26	54	995	572	252	5,460	114	173	41	2,340	50
3	24	26	58	534	435	211	7,540	107	177	31	1,290	37
4	23	25	60	231	358	196	7,100	100	153	29	1,380	39
5	23	26	56	181	246	177	4,570	77	141	28	860	37
6	23	24	52	236	226	173	5,190	77	117	30	1,110	37
7	24	25	54	301	211	165	10,600	72	100	33	1,210	33
8	23	24	60	363	181	137	15,800	74	69	31	1,540	33
9	23	26	67	380	157	133	12,400	74	121	29	2,250	33
10	24	28	65	466	141	145	6,800	74	296	35	2,120	33
11	23	37	60	251	133	153	4,400	72	691	41	2,090	35
12	23	45	63	201	125	141	2,110	63	1,340	45	1,380	31
13	23	45	63	173	104	133	496	63	1,650	56	572	31
14	23	48	63	165	110	137	221	67	1,060	37	206	35
15	24	45	58	149	125	149	141	77	572	39	125	33
16	25	48	58	129	141	141	153	90	466	33	97	31
17	28	33	58	110	165	133	295	84	329	33	84	35
18	28	28	67	97	292	125	4,080	94	216	145	67	35
19	26	29	72	94	2,090	313	7,100	181	145	609	56	31
20	26	33	65	90	2,390	1,340	6,200	153	252	609	45	31
21	28	45	69	90	1,920	1,720	4,350	129	231	1,420	45	31
22	28	50	63	90	2,120	995	2,830	94	211	1,340	45	29
23	30	58	67	87	2,490	734	1,340	56	173	860	37	28
24	30	54	77	550	1,790	935	650	56	110	392	37	29
25	29	50	84	1,110	1,340	1,160	866	77	97	296	43	26
26	28	45	87	860	650	1,260	1,380	100	90	186	37	28
27	26	52	90	691	500	1,060	1,380	121	90	161	33	25
28	25	48	104	500	466	778	618	141	77	149	35	26
29	25	52	100	466	-	435	186	117	67	165	35	26
30	26	56	94	396	-	852	137	117	56	181	43	24
31	26	-	104	352	-	1,600	-	141	-	181	41	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	783	30	23	25.3	0.070	0.08
November	1,155	58	24	38.5	.107	.12
December	2,146	104	52	69.2	.192	.22
Calendar year 1937	189,647	8,320	21	520	1.44	19.55
January	10,504	1,110	87	339	.939	1.08
February	19,978	2,490	104	714	1.98	2.06
March	16,235	1,720	125	524	1.45	1.67
April	117,283	15,800	137	3,909	10.8	12.05
May	2,983	181	56	96.2	.266	.31
June	9,427	1,650	56	314	.870	.97
July	7,315	1,420	28	236	.654	.75
August	20,363	2,340	33	657	1.82	2.10
September	982	50	24	32.7	.091	.10
Water year 1937-38	209,154	15,800	23	573	1.59	21.51

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at the points indicated in the following table:

Miscellaneous discharge measurements in South Atlantic slope and eastern Gulf of Mexico basins during the water year October 1937 to September 1938

Date	Stream	Tributary to or diverting from	Locality	Discharge (sec.-ft.)
May 5	James River & Kanawha Canal.	James River.....	Burnt Mill, Richmond, Va.....	844
6	....do.....	....do.....	....do.....	842
6	....do.....	....do.....	....do.....	848
5	....do.....	....do.....	Tredegar plant, in Richmond, Va.....	606
5	....do.....	....do.....	....do.....	534
6	....do.....	....do.....	....do.....	556
6	....do.....	....do.....	....do.....	574
Aug. 4	Lake Spring....	....do.....	Lakes farm, near Covington, Va.....	2.55
Oct. 9	Tar River.....	Atlantic Ocean..	Greenville, N. C.....	1,600
Nov. 3	....do.....	....do.....	....do.....	1,240
Dec. 16	....do.....	....do.....	....do.....	1,820
Feb. 12	....do.....	....do.....	....do.....	1,760
Mar. 31	....do.....	....do.....	....do.....	1,600
Apr. 13	....do.....	....do.....	....do.....	9,100
July 1	....do.....	....do.....	....do.....	10,400
Aug. 2	....do.....	....do.....	....do.....	13,500
26	....do.....	....do.....	....do.....	549
Oct. 6	Lower Little River.	Cape Fear River.	Manchester, N. C.....	303
Dec. 15	....do.....	....do.....	....do.....	316
Feb. 10	....do.....	....do.....	....do.....	278
Mar. 7	....do.....	....do.....	....do.....	296
Apr. 7	....do.....	....do.....	....do.....	356
May 24	....do.....	....do.....	....do.....	285
June 4	....do.....	....do.....	....do.....	579
4	....do.....	....do.....	....do.....	587
Aug. 29	....do.....	....do.....	....do.....	311
Dec. 17	Cedar Creek....	Congaree River..	County highway bridge about 1 mile upstream from Atlantic Coast Line Railroad bridge, near Bruner, S. C.	24.1
Feb. 8	Blue Springs...	Beaverdam Creek.	Near Sylvania, Ga.....	
July 19	Lake Weir outflow.	Oklawaha River..	Lake Weir, Fla.....	50.3
Mar. 4	Orange Creek...	....do.....	Near Orange Springs, Fla.....	282
July 7	Alligator Creek	Charlotte Harbor	Near Punta Gorda, Fla.....	156
Apr. 25	Peace Creek....	....do.....	Bartow, Fla.....	7.4
25	....do.....	....do.....	Fort Meade, Fla.....	77.1
May 26	Iris Garden Spring.	Peace Creek.....	Near Bartow, Fla.....	3.9
June 13	....do.....	....do.....	....do.....	4.5
Sept. 6	....do.....	....do.....	....do.....	7.5
Apr. 25	Bowlegs Creek	....do.....	Near Fort Meade, Fla.....	13.0
26	Charlie Apopka Creek.	....do.....	Near Zolfo Springs, Fla.....	1.8
May 25	South Fork of Alafia River.	Alafia River....	Near Keysville, Fla.....	25.5
July 19	Hillsboro River	Tampa Bay.....	40th Street Bridge, near Tampa, Fla...	531
Sept. 7	....do.....	....do.....	....do.....	274
May 24	Little Withlacoochee River.	Withlacoochee River.	Rerdell, Fla.....	0.9
Feb. 24	Soque River....	Chattahoochee River.	Near Demorest, Ga.....	288
Feb. 23	Chestatee River	....do.....	Near Dahlonega, Ga.....	532
May 14	Chattahoochee River.	Apalachicola River.	Near Gainesville, Ga.....	834
Aug. 22	Flint River....	....do.....	Near Fayettesville, Ga.....	24.2
Dec. 9	Choctawhatchee River.	Gulf of Mexico..	Highway bridge 2 miles southeast of Bellwood, Ala.	1,760
9	....do.....	....do.....	....do.....	1,980
July 20	Blackwater River.	Pensacola Bay...	Near Harold, Fla.....	686
Aug. 3	....do.....	....do.....	....do.....	1,630
Aug. 8	....do.....	....do.....	....do.....	635
Sept. 8	....do.....	....do.....	....do.....	288
28	....do.....	....do.....	....do.....	226
28	....do.....	....do.....	....do.....	234
Mar. 20	Conecuh River..	Escambia River..	Highway bridge at River Falls, 5 miles northwest of Andalusia, Ala.	25,200
19	Coosawattee River.	Oostanaula River.	Carters, Ga.....	1,220
31	....do.....	....do.....	....do.....	1,090
June 9	....do.....	....do.....	....do.....	714
July 15	....do.....	....do.....	....do.....	517
Aug. 25	....do.....	....do.....	....do.....	1,150
Oct. 5	....do.....	....do.....	....do.....	439
Dec. 1	....do.....	....do.....	....do.....	372
Jan. 26	....do.....	....do.....	....do.....	734
Feb. 24	....do.....	....do.....	....do.....	918
Mar. 22	....do.....	....do.....	....do.....	1,550
May 19	....do.....	....do.....	....do.....	721
June 21	....do.....	....do.....	....do.....	1,270
July 12	....do.....	....do.....	....do.....	513
Aug. 31	....do.....	....do.....	....do.....	686
Oct. 4	Cave Spring....	Little Cedar Creek.	At Cave Spring, Ga.....	3.61

Miscellaneous discharge measurements in South Atlantic slope and eastern Gulf of Mexico basins during the water year October 1937 to September 1938--Continued

Date	Stream	Tributary to or diverting from	Locality	Discharge (sec.-ft.)
Nov. 11	Sipsey Fork of Mulberry Fork of Black Warrior River.	Mulberry Fork of Black Warrior River.	Drummond Ferry, 3⅛ miles northeast of Sipsey, Ala.	229
Jan. 11	....do.....	....do.....	Highway bridge, 1¼ miles east of Sipsey, Ala.	1,600

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