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Part 2. South Atlantic Slope and Easter Gulf of Mexico Basins

Prepared under the direction of C. G. PAULSEN, Chief Hydraulic Engine

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PREFACE

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Bowie Creek near Hattiesburg, Miss 502
Tallahala Creek at Laurel, Miss 503
Tallahala Creek near Runnelstown, Miss 504
Tallahoma Creek near Laurel, Miss 505
Chunky Creek near Chunky, Miss 506
Chickasawhay River at Enterprise, Miss 507
Chickasawhay River near Waynesboro, Miss 508
Chickasawhay River at Leakesville, Miss 509
Okatibbee Creek near Meridian, Miss 510
Bucatunna Creek at Denham, Miss 511
Escatawpa River near Wilmer, Ala 512
Big Creek near Mobile, Ala 513
Wolf River Basin 514
Wolf River near Lyman, Miss 514
Pearl River Basin 515
Pearl River at Edinburg, Miss 515
Pearl River near Lena, Miss 516
Pearl River at Meeks Bridge, near Canton, Miss 517
Pearl River at Jackson, Miss 518
Pearl River near Rockport, Miss 519
Pearl River near Monticello, Miss 520
Pearl River near Columbia, Miss 521
Pearl River near Bogalusa, La 522
Labutcha Creek near Carthage, Miss 523
Tuscolameta Creek at Walnut Grove, Miss 524
Yockanookany River near Kosciusko, Miss 525
Yockanookany River near Ofahoma, Miss 526
Strong River at Dlo, Miss 527
Bogue Chitto near Tylertown, Miss 528
Bogue Chitto at Franklinton, La 529
Bogue Chitto near Bush, La 530
Miscellaneous discharge measurements 531
Index 547

ILLUSTRATION

Page
Figure 1. Gaging-station structures: A, Pearl River near Columbia, Miss.; B, Little Manstee River near Wimauma, Fla.; C, Congaree River at Columbia, S. C. 3

SURFACE WATER SUPPLY OF SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS, 1948

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, 1948. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of the flow of streams and of the stage and contents of lakes and reservoirs have been made at about 11,370 gaging stations in the 48 States and also at many in the Territories of Alaska and Hawaii. In July 1948, 5,960 gaging stations, including those in Hawaii, were being maintained by the Geological Survey and cooperating organizations. Miscellaneous discharge measurements were made during the water year at many 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. Cooperation of the first kind is acknowledged in connection with the description of each station affected; cooperation of the second kind is acknowledged, under the heading "Cooperation," in the introductory matter that precedes the gaging-station records in each volume. In the present volume, the section on cooperation of the second kind appears on page 12.

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 a stream whose channel is 1 square foot in cross-sectional area and whose 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 runoff is distributed uniformly both as regards time and area.

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

An "acre-foot" is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet. 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 runoff of 0.0372 inch from 1 square mile.

"Stage-discharge relation" is an abbreviation for the term "relation between gage height and discharge."

"Control" is a term used to designate a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural section, a reach of the channel, or an artificial structure.

"Contents" is a term applied to the volume of water in a reservoir. It is computed on the basis of a level pool and does not include bank storage unless otherwise indicated.

EXPLANATION OF DATA

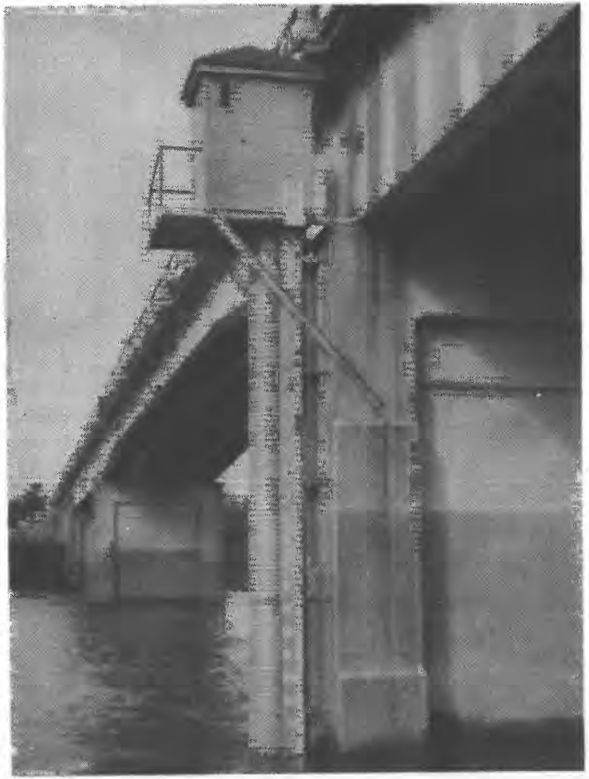
The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the records of stage and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a nonrecording 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 structures in use at gaging stations are shown in figure 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the "shifting-control method," in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. At times the stage-discharge relation for a station may be temporarily changed by the presence of aquatic growth or debris on the control. For such times the daily mean discharge is computed by what is essentially the "shifting-control" method, described above.

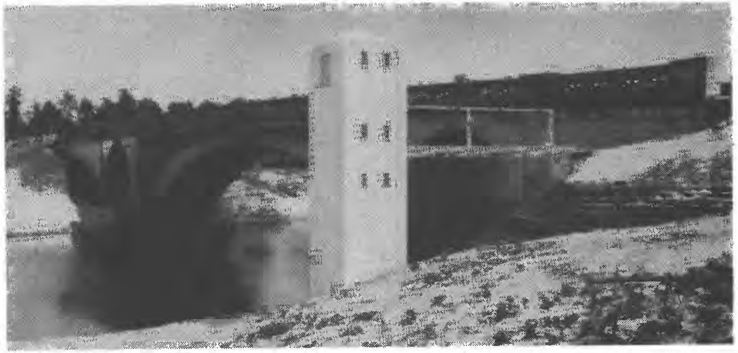
At some gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources, which necessitates the use of the "slope method," in which the slope or fall in a reach of the stream is a factor in the determination of discharge. Information requisite for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage, and for them the rate of change of stage is used as a factor in the determination of discharge.

At most gaging stations in the northern part of the United States and at some in the mountainous regions of other parts the stage-discharge relation is affected by ice during the winter, which makes it impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and engineers, and comparable records of discharge for stations in the same or nearby basins. For those stations at which the stage-discharge relation is affected by ice, the days included in the periods of ice effect either are indicated in the table by symbols referring to a footnote that states this fact or are given in a general note following the table. The days on which discharge measurements were made during or between periods of ice effect, shortly before the first period, or shortly after the last period are similarly indicated by a footnote.

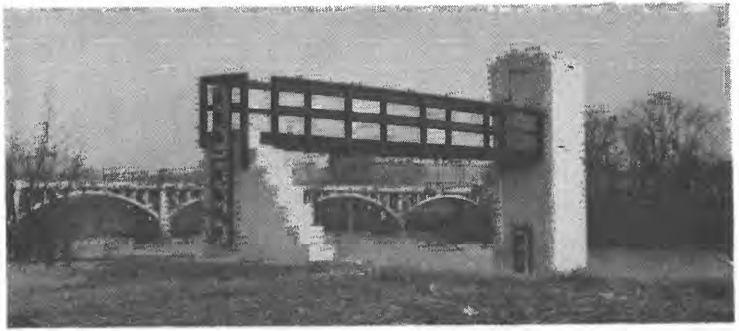
For most of the gaging stations on streams in the area covered by this report the data presented comprise a description of the station, a table showing the daily discharge of



A. PEARL RIVER NEAR COLUMBIA, MISS.



B. LITTLE MANATEE RIVER NEAR WIMAUMA, FLA.



C. CONGAREE RIVER AT COLUMBIA, S. C.

FIGURE 1.—GAGING-STATION STRUCTURES.

the stream, and a table of monthly and yearly discharge and runoff. Skeleton rating tables are published for all stations except those at which the 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, location, drainage area, records available, average discharge, extremes of discharge, general remarks, and notations of revisions of previously published record. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having less than 10 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "Extremes" are given 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 (also the minimum discharge if useful); and the minimum gage height (unless 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. Information pertaining to the accuracy of the records and conditions which affect the natural flow at the gaging station is given under "Remarks."

For some stations previously published records have been found to be in error on the basis of data or information obtained subsequently. Revisions of such records are usually published along with the current records in one of the annual reports. In order to make it easier to find such revised records, a paragraph headed "Revisions (water years)" has been added to the station description of all stations for which revised records have been published. Listed therein are all the reports in which revisions appear, each followed by the water years for which figures are revised in that report. In listing the report number, W. means Water-Supply Paper. In listing the years, water years are indicated by only 1 year, for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If there were no daily, monthly, or annual figures of discharge involved in the revision, that fact is brought out by notations after the year dates as follows: (M) means that only the instantaneous maximum discharge was revised; (m) that only the instantaneous minimum was revised; and (P) that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which second-feet per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of second-feet per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

For stations equipped with water-stage recorders, except those on streams subject to sudden or rapid fluctuation, the table gives the discharge corresponding to the daily mean gage height. For stations subject to such fluctuation the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day or by using the discharge integrator, an instrument for obtaining the daily mean discharge from a continuous gage-height graph and containing as an essential element a curve representing the stage-discharge relation at the station. For stations equipped with nonrecording gages, the table of daily discharge gives the discharge corresponding to either once-daily readings of the gage, the mean of twice-daily readings, or the mean gage height determined from gage-height graphs based on gage readings. For periods of rapidly changing stage, the daily mean discharge is determined from gage-height graphs based on gage readings, the frequency of which is stated in the station description.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the figures given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge, not the momentary discharge when the water surface was at crest stage. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" gives the average flow in cubic feet per second during the month.

Peak discharges with the times of their occurrence are listed below the table of monthly discharge for most stations. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is usually given in the first report in which data for a station are published but is omitted from succeeding reports.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily on (1) the permanency of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements and (2) the accuracy of observations 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 error in the daily records is believed to be less than 5 percent; "good," less than 10 percent; "fair," less than 15 percent; and "poor," probably more than 15 percent. The records of monthly and yearly mean discharge and runoff are, in general, more accurate than the daily records.

Yield at some stations as indicated by monthly means may vary widely from natural yield, owing to diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or other factors. For such stations figures of "second-feet per square mile" and "runoff in inches" are not published unless storage or diversion records are included indicating the extent of the regulation or diversion or unless satisfactory adjustments can be made for changes in contents or reservoirs or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless its inclusion is indicated. Even at those stations where adjustments are made, in some instances large errors in computed yields may occur when relatively large negative adjustments are applied or when evaporation is large in comparison with the observed discharge. Figures of second-feet per square mile and runoff in inches are also omitted if the drainage area includes large noncontributing areas or if the average annual rainfall over the drainage area 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, and therefore 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 presents in summary the distribution of the flow past the station. The table of daily discharge affords opportunity for more detailed studies of the variation in flow. As further observations in each succeeding year may be expected to throw new light on data previously published, it should be borne in mind that such data are subject to revision in succeeding water-supply papers.

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 on 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 offices of the water resources diversion of the Geological Survey as follows:

East of the Mississippi River:
Albany, N. Y., 526 Federal Building.
Asheville, N. C., 220 Post Office Building.
Atlanta, Ga., 411 Grand Theater Building.
Augusta, Maine, 420 Statehouse.
Baton Rouge, La., 538 Florida Street.
Boston, Mass., 939 Post Office Building.
Champaign, Ill., 605 South Neil Street.
Charleston, W. Va., 408 Union Building.
Charlottesville, Va., Cabell Hall, University of Virginia.
Chattanooga, Tenn., 442 Post Office Building.
College Park, Md., 106 Engineering Building, University of Maryland.
Columbia, S. C., 207 Creason Building.
Columbus, Ohio, 2590 West Hardin Street, Ohio State University.
Harrisburg, Pa., 490 Education Building.
Hartford, Conn., 203 Federal Building.
Indianapolis, Ind., 311 West Washington Street.
Jackson, Miss., 208 Millsaps Building.
Knoxville, Tenn., 337 Post Office Building.
Louisville, Ky., 531 Federal Building.
Madison, Wis., 666 State Office Building.
Montgomery, Ala., 507 Post Office Building.
New Philadelphia, Ohio, Muskingum Watershed Conservancy District Building.
Ocala, Fla., 302 Post Office Building.
Pittsburgh, Pa., 515 Plaza Building.
Raleigh, N. C., 908 Capitol Club Building.
St. Paul, Minn., 1427 New Post Office Building.
Trenton, N. J., 228 Federal Building.
Washington, D. C., General Services Administration Building.

West of the Mississippi River:
  Austin, Tex., 302 West Fifteenth Street.
  Bismarck, N. Dak., 7 Eltinge Building.
  Boise, Idaho, 429 Federal Building.
  Denver, Colo., 126 New Customhouse.
  Fort Smith, Ark., 6 Post Office Building.
  Helena, Mont., 408 Federal Building.
  Honolulu, Hawaii, 225 Federal Building.
  Idaho Falls, Idaho, 204 Federal Building.
  Iowa City, Iowa, 508 Hydraulic Laboratory, University of Iowa.
  Lincoln, Nebr., 510 Rudge-Guenzel Building.
  Los Angeles, Calif., 429-F United States Post Office and Courthouse.
  Oklahoma City, Okla., 203 Council Building.
  Pierre, S. Dak., 207 Federal Building.
  Portland, Oreg., 606 Post Office Building.
  Rolla, Mo., 211 Ramsey Building.
  St. Louis, Mo., 1004 New Federal Building.
  Salt Lake City, Utah, 303 Federal Building.
  San Francisco, Calif., 702 Appraisers Building.
  Santa Fe, N. Mex., 204 United States Courthouse.
  Tacoma, Wash., 207 Federal Building.
  Topeka, Kans., 305 Federal Building.
  Tucson, Ariz., 210 Post Office Building.

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

Prior to publication, records of discharge in provisional form for individual stations may usually be obtained from the district offices listed above.

Early records of the flow of streams in the United States are published in the reports listed below. In many of these reports records for years earlier than those indicated have been included for some streams.

Stream-flow data for the years 1884-1901, 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 September 1890.
12th A, pt. 2	....do..	1884 to June 30, 1891.
13th A, pt. 3	....do..	1884-92.
14th A, pt. 2	Monthly discharge...	1888-93.
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.	1895.
W 11.........	Gage heights..	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge...	1895-96.
W 15.........	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
W 16.........	Descriptions, measurements, and gage heights of stream west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge.	1897.
W 27.........	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
W 28.........	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge...	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.

Papers on surface water supply containing records from 1899 to date, grouped by years and drainage basins, are listed by number on page 8. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data for 1910 to 1920 for any 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.

Numbers of water-supply papers containing results of stream measurements, 1899-1948 (for basins included see p. 6).

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a	35	b35, 36	36	36	36	c36, 37	37	37	d37, 38	38, e39	38, f39	38	38	38
1900 g	47, h48	48	48, 149	49	49	49, j50	50	50	50	51	51	51	51	51
1901	65, 75	65, 75	65, 75	65, 75	k65, 66, 75	66, 75	k65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902	82	b82, 83	83	m82, 83	k83, 85	84	k83, 84	84	85	85	85	85	85	85
1903	97	b97, 98	98	97	k98, 99, n100	99	k98, 99	99	100	100	100	100	100	100
1904	o124, p125, q126	q126, 127	128	129	k128, 130	130, r131	k128, 131	132	133	133, s134	134	135	135	135
1905	o165, p166, q167	q167, 168	169	170	171	172	k169, 173	174	175, t177	176, s177	177	178	178	u177, 178
1906	o201, p202, q203	q203, 204	205	206	207	208	k205, 209	210	211, t213	212, s213	213	214	214	214
1907-8	241	242	243	244	245	246	247	248	249	250, s251	251	252	252	252
1909	281	262	263	264	265	266	267	268	269	270, s271	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
1939	871	872	873	874	875	876	877	878	879	880	881	882	883	884
1940	891	892	893	894	895	896	897	898	899	900	901	902	903	904
1941	921	922	923	924	925	926	927	928	929	930	931	932	933	934
1942	951	952	953	954	955	956	957	958	959	960	961	962	963	964
1943	971	972	973	974	975	976	977	978	979	980	981	982	983	984
1944	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014
1945	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044
1946	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064
1947	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094
1948	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124

a Rating tables and index to WSP 35-39 contained in WSP 39. 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.
g Rating tables and index to WSP 47-52 contained in WSP 52. Monthly discharge for 1900 in 22d Annual Report, part 4.
h Schuylkill River 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.
q Susquehanna River to Yadkin River.
r Platte and Kansas Rivers.
s The Great Basin in California, except Truckee and Carson River Basins.
t Below mouth of Gila River.
u Rogue, Umpqua, and Siletz Rivers only.

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.

Each of the reports on surface water supply for the year 1939, issued as Water-Supply Papers 871 to 884 (see table on p. 8), contains, for the area covered by that report, a summary of yearly discharge at gaging stations at which 10 or more complete years of record have been collected. These summaries are available also as separate reprints.

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 alphabetically, some by States and some by drainage basins.

Reports containing compilations of records of discharge by States and drainage basins

Report	Period	Water-Supply Paper
STATE		
Alabama, Water powers of, with an appendix on stream measurements in Mississippi.	1895-1903	107
California, Water resources of, part 1, Stream measurements in Sacramento River Basin.	1887-1912	298
California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.	1878-1912	299
California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific Coast river basins.	1891-1912	300
California, southern, Surface water supply of Pacific slope of	1890-1918	447
Celifornia, Surface water supply of Sacramento River Basin	1895-1927	597-E
California, Surface water supply of San Joaquin River Basin	1895-1927	636-D
California, southern, Surface water supply of Pacific slope basins in	1894-1927	636-E
California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.	1895-1927	637-A
Colorado, Water resources of	1884-1900	74
Georgia, Water resources of	1895-1905	197
Massachusetts, Surface waters of	1848-1915	415
Massachusetts, Hydrology of, Part 1, Summary of stream-flow and precipitation records.	1863-1945	1105
Nebraska, Surface water supply of	1894-1906	230
Oregon, Surface water supply of	1878-1910	370
Texas, Summary of records of surface waters of	1898-1937	850
Vermont, Surface waters of	1875-1916	424
Washington, Summary of hydrometric data in	1878-1919	492
Washington, Summary of records of surface waters of	1919-35	870
Wisconsin, northern, Water power of	1895-1905	156
Wyoming, Surface waters of, and their utilization	1894-1921	469
DRAINAGE BASIN		
Colorado River (Ariz., Colo., N. Mex., Utah, Wyo.) and its utilization	1888-1914	395
Colorado River, upper (Colo., Utah), and its utilization	1897-1927	617
Colorado River Basin (Ariz., Calif., Colo., Utah, Wyo.), Surface waters at base stations in.	1891-1938	918
Colorado River Basin (Ariz., Calif., Nev., N. Mex., Utah), Surface waters at stations on tributaries in lower.	1888-1938	1049
Columbia River Basin, upper (Mont., Idaho), Surface waters of	1898-1938	916
Great Salt Lake Basin, Water powers of	1889-1920	517
Green River (Colo., Utah, Wyo.) and its utilization	1894-1926	618
Kennebec River Basin (Maine), Water resources of	1890-1906	198
Milk River. See St. Mary and Milk Rivers		
Missouri and St. Mary River Basins (Mont.), Surface waters of	1881-1938	917
New-Kanawha River Basin (N. C., Va., W. Va.), Surface water supply of	1895-1920	536
Penobscot River Basin (Maine), Water resources of	1904-9	279
Potomac River Basin (D. C., Md., W. Va.)	1895-1908	192
Rio Grande Basin (Colo., N. Mex., Tex.), Water resources of	1888-1913	358
St. Mary and Milk Rivers (Mont., Canada), Water supply of	1698-1917	491
St. Mary River. See St. Mary and Milk Rivers; Missouri and St. Mary River Basin.		
Sevier Lake Basin (Utah), Utilization of aurface water resources of	1889-1937	920
Susquehanna River Basin (Pa., Md.) Hydrography of	1890-1904	109

Records of discharge have been publiehed also 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 compilations of records of discharge

State	Period	Report	Issued by
Alabama	1895-1915	Bull. 17, Water powers of Alabama	Geological Survey of Alabama.
Do	1904-47	Special Report 20, Water Resources and Hydrology of southeastern Alabama.	Do
Arkansas	1857-1928	Stream-gaging Rept. 1	Arkansas Geological Survey.
Colorado	1881-1935	Water resources of Colorado, Appendix 2, Data on stream-gaging stations of Colorado.[1]	State Planning Commission, Water Conservation Board, State engineer.
Do	1881-1938	Water resources of Colorado, Appendix 3, vols. 1 and 2, Stream-flow data of Colorado.	Do.
Connecticut	1900-1927	Bull. 44, Water resources of Connecticut	State Geological and Natural History Survey.
Do	1912-33	5th biennial report	State Water Commission.
Florida	1898-1946	Bull. 31, Springs of Florida	Florida Geological Survey.
Georgia	1895-1906	Bull. 16, Water powers of Georgia	Geological Survey of Georgia.
Do	1907-19	Bull. 38, Water powers of Georgia	Do.
Illinois	1908-11	Water resources of Illinois	Rivers and Lakes Commission.
Do	1900-1934	Stream-flow data of Illinois	Division of Waterways.
Indiana	1923-27	Pub. 72, Surface water supply of Indiana	Department of Conservation.
Do	1927-30	Pub. 112, Surface water supply of Indiana	Do.
Iowa	1873-1932	Stream-flow records of Iowa	State Planning Board.
Do	1873-1940	Water-Supply Bull. 1, Summaries of yearly and flood flow relating to Iowa streams	Iowa Geological Survey.
Do	1941-42	Water-Supply Bull. 2, Surface water resources of Iowa.	Do.
Kansas	1895-1919	Surface waters of Kansas	Kansas Water Commission.
Do	1919-24	....do	Do.
Do	1924-28	Report of Division of Water Resources	State Board of Agriculture.
Do	1928-35	Stream-flow data of Kansas	Do.
Do	1935-39	....do	Do.
Kentucky	1910-20	Surface waters of Kentucky	Kentucky Geological Survey.
Louisiana	1903-38	Geol. Bull. 16, Surface water supply of Louisiana.	Department of Conservation.
Maine	1887-1920	1st annual report	Maine Water Power Commission.
Maryland	1929-37	Flow data and draft storage curves for major streams in Maryland.	State Planning Commission and Water Resources Commission.
Do	1892-1943	Bull. 1, Summary of records of surface waters of Maryland and the Potomac River Basin.	Department of Geology, Mines, and Water Resources.
Minnesota	1909-12	Water-resources investigation of Minnesota.	State Drainage Commission.
Missouri	1857-1926	Vol. 20, 2d series, Water resources of Missouri.	Missouri Bureau of Geology and Mines.
Do	1927-39	Vol. 26, 2d series, Surface waters of Missouri.	Missouri Geological Survey and Water Resources.
Montana	1889-1911	5th biennial report	Office of the State Engineer.
Do	1881-1938	Special Rept. 10, vols. 1-4, Water resources of Montana.	Montana Agricultural Experiment Station.
Nebraska	1894-1914	1st hydrographic report	Bureau of Water Power, Irrigation, and Drainage.
Do	1914-28	2d hydrographic report	Do.
New Hampshire	1889-1922	Annual and statistical report, vol. 12	Public Service Commission.
New Jersey	1892-1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do	1928-34	Special Rept. 5, Surface water supply of New Jersey.	State Water Policy Commission.
Do	1934-40	Special Rept. 9, Surface water supply of New Jersey.	Do.
New Mexico	1888-1925	Surface water supply of New Mexico	Office of the State Engineer.
North Carolina	1889-1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Do	1889-1936	Bull. 39, Discharge records of North Carolina streams.[2]	Do.
Do	1866-1945	Hydrologic Data on the Neuse River Basin.	Do.
Do	1820-1945	Hydrologic Data on the Cape Fear River Basin.	Do.
Do	1866-1945	Hydrologic Data on the Yadkin-Pee Dee River Basin.	Do.
Do	1872-1945	Hydrologic Data on the Catawba and Broad River Basins	Do.
North Dakota	1919-21	Report to Governor of North Dakota on flood control.	State chief engineer.
Do	1882-1938	Surface water in North Dakota	State Planning Board.
Do	1882-1944	Supplement B, 4th biennial report	State Water Conservation Commission.
Ohio	1898-1921	Bull. 73, Ohio stream flow, Part 1	Engineering Experiment Station, Ohio State University.
Do	1898-1944	Bull. 127, Ohio stream flow, Part 2	Do.
Do	1902-39	Bull. 200, Compilation of stream-flow records of Ohio.	Department of Agriculture, Division of Conservation and Natural Resources.
Do	1898-1939	Bull. 111, Ohio stream-drainage areas and flow-duration tables.	Engineering Experiment Station, Ohio State University.
Oregon	1878-1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do	1914-24	Bull. 7, Water resources of the State of Oregon.	Do.
Do	1924-30	Bull. 8, Water resources of the State of Oregon.	Do.
Do	1930-36	Bull. 9, Water resources of the State of Oregon.	Do.
Do	1936-41	Bull. 10, Water resources of the State of Oregon.	Do

[1] Contains records of yearly discharge only.

[2] Contains records of maximum and minimum daily, weekly, and monthly discharge and yearly mean discharge.

State reports containing compilations of records of discharge--Continued

State	Period	Report	Issued by
Pennsylvania..	1890-1911	Report of the Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.........	1928-32	Stream-flow records of Pennsylvania........	Department of Forests and Waters.
Rhode Island..	1929-41	7th annual report.........................	Department of Public Works.
South Carolina	1884-1946	Bull. 17, Summary of records of surface water supply of South Carolina.	South Carolina Research, Planning and Development Board.
Tennessee.....	1874-1924	Bull. 34, Water resources of Tennessee[3]....	Department of Education.
Do.........	1920-30	Bull. 40, Surface waters of Tennessee......	Do.
Utah..........	1889-1905	5th biennial report.......................	Office of the State Engineer.
Do.........	1906-10	7th biennial report.......................	Do.
Do.........	1911-16	10th biennial report......................	Do.
Virginia......	1895-1927	Bull. 31, Water resources of Virginia......	Virginia Geological Survey.
Do.........	1927-42	Bull. 4, Surface water supply of Virginia (Potomac, Rappahannock, and York River Basins).	Virginia Conservation Commission.
Do.........	1927-42	Bull. 5, Surface water supply of Virginia (James River Basin).	Do.
Do.........	1927-42	Bull. 6, Surface water supply of Virginia (Roanoke and Chowan River Basins).	Do.
Do.........	1927-42	Bull. 7, Surface water supply of Virginia (New, Tennessee, and Big Sandy River Basins).	Do.
Washington....	1878-1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin.....	1888-1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.........	1914-23	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

[3] Includes records of discharge for all stations in North Carolina in the Tennessee River Basin.

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, Connecticut, Idaho, Indiana, Kansas, Maine, Missouri, Montana, Nebraska, Nevada, New Mexico, New York (also New York City Board of Water Supply and city of Rochester), North Dakota, Oregon, Pennsylvania, Rhode Island, Washington, and Wyoming.

The reports listed in the foregoing tables contain the customary records of discharge collected during the systematic operation of gaging stations. Detailed information on the stage and discharge of many streams during major floods has been included in special reports on these floods published by the Geological Survey. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilations of data relating to earlier noteworthy floods. The following list gives the numbers and titles of these reports:

Water-Supply Paper	Title
88	The Passaic flood of 1902.
92	The Passaic flood of 1903.
98	Destructive floods in the United States in 1903.
147	Destructive floods in the United States in 1904.
162	Destructive floods in the United States in 1905.
334	The Ohio Valley flood of March-April 1913.
426	Southern California floods of January 1916.
487	The Arkansas River flood of June 3-5, 1921.
488	The floods in central Texas in September 1921.
520-G	Some floods in the Rocky Mountain region.
636-C	The New England flood of November 1927.
771	Floods in the United States, magnitude and frequency.
773-E	The New York State flood of July 1935.
796-B	Flood on Republican and Kansas Rivers, May and June 1935.
796-C	Flood in La Canada Valley, Calif., January 1, 1934.
796-G	Major Texas floods of 1935.
798	The floods of March 1936, part 1, New England rivers.
799	The floods of March 1936, part 2, Hudson River to Susquehanna River region.
800	The floods of March 1936, part 3, Potomac, James, and upper Ohio Rivers.
816	Major Texas floods of 1936.
836-A	Stages and flood discharges of the Connecticut River at Hartford, Conn.
838	Floods of Ohio and Mississippi Rivers, January-February, 1937.
842	Floods in Canadian and Pecos River Basins of New Mexico, May and June 1937.
843	Floods of December 1937 in northern California.
844	Floods of March 1938 in southern California.
847	Maximum discharges at stream-measurement stations through September 1938.
867	Hurricane floods of September 1938.
869	Flood of August 1935 in Muskingum River Basin, Ohio.
914	Texas floods of 1938 and 1939.
966	Minor floods of 1938 in North Atlantic States.
967-A	Floods of September 1939 in Colorado River Basin below Boulder (Hoover) Dam.
967-B	Flood of July 5, 1939, in eastern Kentucky.
967-C	Flood of August 21, 1939, in town of Baldwin, Maine.
994	Cloudburst floods in Utah, 1850 to 1938.
997	Floods in Colorado.
1046	Texas floods of 1940.
1066	Floods of August 1940 in the southeastern States.
1080	Floods of May-June 1948 in Columbia River Basin.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The city of Lynchburg, Va., has collected records of daily discharge of Pedlar River at Pedlar Dam, Va., since August 1921. These records have not been published.

The Soil Conservation Service of the United States Department of Agriculture has collected records of runoff in selected areas in the south Atlantic slope basins as follows: In Virginia, from 3 areas of less than 20 acres each near Chatham beginning in 1938 and from 3 areas of less than 20 acres each near Blacksburg beginning in 1939; in Georgia, from 1 area of 19.2 acres near Watkinsville beginning in 1939. These records are not published but are available in the files of the Soil Conservation Service.

COOPERATION

The work in the several States was done under cooperative agreements with the organizations listed below:

Alabama: State Geological Survey, W. B. Jones, State geologist, State Highway Department, W. W. McFarland, director.

Florida: State Division of Water Survey and Research, A. G. Matthews, chief engineer; State Road Department, F. E. Bayless, chairman; State Geological Survey, Herman Gunter, director; State Trustees of Internal Improvement Fund, F. C. Elliot, engineer and secretary; Pinellas County, W. A. McMullen, Jr., county engineer; the city of Jacksonville, G. A. Pierce, chairman of city commission; the cities of Miami and Miami Beach, W. A. Glass, director, Miami Department of Water and Sewers; the city of Perry, J. H. Kansinger, mayor; the city of Tampa, J. S. Long, superintendent of water department; and the Everglades Drainage District, Lamar Johnson, chief engineer.

Georgia: State Department of Mines, Mining and Geology, Garland Peyton, director, and State Highway Department, J. L. Gillis, director.

Louisiana: State Department of Public Works, D. L. Pyburn, director, succeeded by J. L. White.

Mississippi: State Geological Survey, W. C. Morse, director.

North Carolina: State Department of Conservation and Development, R. B. Etheridge, director.

South Carolina: State Highway Department, C. R. McMillan, chief highway commissioner; State Public Service Authority, R. M. Jefferies, general manager; State Research, Planning and Development Board, L. W. Bishop, director; the city of Spartanburg, J. F. Helderman, chairman of commissioners of public works.

Virginia: State Department of Conservation and Development, W. A. Wright, director; the city of Clifton Forge, B. F. Berkaw, city manager; the city of Norfolk, C. A. Harrell, city manager; the Newport News Waterworks Commission, E. F. Dugger, general manager.

Assistance in the form of funds or services was furnished by the Corps of Engineers in collecting records published herein for 240 gaging stations, of which 33 were in Alabama, 33 in Florida, 50 in Georgia, 1 in Louisiana, 23 in Mississippi, 33 in North Carolina, 20 in South Carolina, and 47 in Virginia.

Assistance was also furnished by the Weather Bureau of the United States Department of Commerce.

Assistance in collecting records was also rendered by the following organizations:

Florida: Florida Power Corporation.

Georgia: The Georgia Power Co., Crisp County Power Commission, and the cities of Augusta, Cairo, Carrollton, and Dalton.

North Carolina: State Highway and Public Works Commission, Carolina Power & Light Co., Duke Power Co., and the city of Durham.

South Carolina: Greenwood County Electric Power Commission, South Carolina Electric & Gas Co., and South Carolina Public Service Authority.

Virginia: Appalachian Electric Power Co., Virginia Electric & Power Co., and Camp Manufacturing Co.

DIVISION OF WORK

The stream-gaging work was conducted by the water resources division of the Geological Survey--Carl G. Paulsen, chief hydraulic engineer, and Joseph V. B. Wells, chief of the surface water branch. The data for stations in the several States were collected and prepared for publication under the supervision of district engineers as follows: In Alabama (except for Chattahoochee River at Columbia), M. R. Williams; in Florida, A. O. Patterson; in Georgia (except for Augusta Canal near Augusta and Savannah River at Augusta, at Burtons Ferry Bridge, near Millhaven, and near Clyo) and for Chattahoochee River at Columbia, Ala., M. T Thomson; in Louisiana, W. R. Eaton; in Mississippi, I. E. Anderson; in North Carolina, E. B. Rice; in South Carolina and for Augusta Canal near Augusta, Ga., and Savannah River at Augusta, at Burtons Ferry Bridge, near Millhaven, and near Clyo, Ga., A. E. Johnson; in Virginia, D. S. Wallace.

The records were reviewed and the manuscript prepared for publication under the direction of B. J. Peterson, chief, annual reports section.

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 town of Falling Spring, Alleghany County, and 1½ miles downstream from Falling Springs Creek. Datum of gage is 1,333.49 feet above mean sea level (levels by Corps of Engineers).
Drainage area.- 409 square miles.
Records available.- April 1925 to September 1948.
Average discharge.- 23 years, 461 second-feet.
Extremes.- Maximum discharge during year, 11,600 second-feet Feb. 14 (gage height, 11.33 feet); minimum, 73 second-feet Oct. 6 (gage height, 2.94 feet).
1925-48: Maximum discharge, 24,700 second-feet Mar. 17, 1936 (gage height, 14.74 feet), from rating curve extended above 9,000 second-feet on basis of records for other stations in James River Basin; minimum, 36 second-feet Oct. 12, 1946 (gage height, 2.65 feet); minimum daily, 58 second-feet Sept. 28, 29, 30, Oct. 1, 3, 5, 1930.
Remarks.- Records good except those for periods of ice effect, which are fair. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.
Revisions (water years).- W 952: 1926-30 (maximum only 1926, 1928), 1932-40.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

2.9	67	4.6	548	7.5	2,640
3.0	82	5.0	740	8.0	3,220
3.2	118	5.5	1,010	8.5	4,000
3.5	184	6.0	1,340	9.5	6,160
3.8	263	6.5	1,710	10.5	8,980
4.2	392	7.0	2,140		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	232	315	179	b150	715	1,070	439	980	257	165	145
2	80	194	281	217	b140	665	980	462	640	217	318	134
3	79	1,660	260	275	*b160	765	865	1,010	506	192	302	128
4	79	2,700	243	281	b180	815	740	1,340	436	172	501	122
5	76	1,410	235	275	202	790	665	2,800	364	158	1,010	120
6	74	840	241	*257	230	715	640	1,960	315	186	790	124
7	74	580	225	235	235	1,350	1,340	2,720	396	192	486	153
8	87	462	214	217	217	2,530	1,900	2,430	466	184	357	189
9	120	382	219	225	199	1,830	2,480	1,590	403	156	284	160
10	199	315	235	219	174	1,440	1,550	1,160	347	145	241	196
11	189	308	357	199	174	1,240	1,200	890	299	136	212	347
12	149	458	396	189	186	1,070	1,010	740	266	134	287	257
13	128	490	374	257	1,440	890	1,340	665	246	138	428	206
14	118	428	344	364	8,080	765	6,020	580	235	162	318	184
15	108	478	315	290	3,740	865	3,660	506	214	375	260	167
16	107	570	364	312	2,000	616	2,180	451	230	290	219	149
17	112	865	478	308	1,670	665	1,550	447	235	238	199	138
18	130	580	466	252	1,920	616	1,160	414	219	199	189	134
19	158	494	428	b200	1,790	593	920	368	204	172	217	128
20	147	421	374	b190	1,870	640	790	331	189	170	227	136
21	130	368	331	235	1,480	740	690	312	174	179	217	142
22	120	327	302	227	1,130	690	616	312	172	174	222	151
23	118	308	278	212	865	1,340	527	287	249	177	232	153
24	110	315	257	165	690	3,740	474	266	257	212	263	147
25	105	790	232	b175	593	2,230	439	252	284	209	252	136
26	101	815	219	b180	715	1,520	443	246	243	179	214	128
27	99	616	217	b175	1,010	2,140	767	227	241	158	186	120
28	296	502	204	b170	1,010	2,380	540	217	527	153	187	118
29	466	424	186	b160	840	1,630	531	252	337	145	151	126
30	382	364	172	b150	-	1,240	482	592	315	134	145	189
31	284	-	184	b150	-	1,010	-	1,200	-	128	145	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,507	466	74	145	0.355	0.41
November	18,496	2,700	194	617	1.51	1.68
December	8,946	478	172	289	.707	.82
Calendar year 1947	132,035	3,780	74	362	.885	12.01
January	6,940	364	150	224	.548	.63
February	33,090	8,080	140	1,141	2.79	3.01
March	38,035	3,740	593	1,227	3.00	3.46
April	37,569	6,020	439	1,252	3.06	3.41
May	25,466	2,800	217	821	2.01	2.32
June	9,989	980	172	333	.814	.91
July	5,721	375	128	185	.452	.52
August	9,204	1,010	145	297	.726	.84
September	4,727	347	118	158	.386	.43
Water year 1947-48	202,690	8,080	74	554	1.35	18.44

Peak discharge (base, 4,000 sec.-ft.).- Feb. 14 (5 p.m.) 11,600 sec.-ft.; Mar, 24 (8:30 a.m.) 4,480 sec.-ft.; Apr. 14 (1:30 p.m.) 9,300 sec.-ft.

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

James River at Lick Run, Va.

Location.- Water-stage recorder, lat. 37°47', long. 79°47', at old highway bridge at Lick Run, Botetourt County, 1,000 feet downstream from bridge on U. S. Highway 220, three-quarters of a mile downstream from confluence of Cowpasture and Jackson Rivers. Datum of gage is 978.30 feet above mean sea level (levels by Corps of Engineers).
Drainage area.- 1,369 square miles.
Records available.- April 1925 to September 1948.
Average discharge.- 23 years, 1,500 second-feet.
Extremes.- Maximum discharge during year, 26,400 second-feet Feb. 15 (gage height, 16.10 feet); minimum, 246 second-feet Oct. 7, 8 (gage height, 1.65 feet).

1925-48: Maximum discharge, 66,600 second-feet Mar. 18, 1936 (gage height, 25.65 feet), from rating curve extended above 33,000 second-feet on basis of records for other stations in James River Basin; minimum, 153 second-feet Oct. 11, 1930.

Flood in November 1877 reached a stage of about 33 feet (discharge, about 120,000 second-feet). Flood in March 1913 reached a stage of 30.4 feet, from floodmarks (discharge, about 98,000 second-feet).

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.
Revisions (water years).- W 852: 1936-37. W 972: 1877(M), 1913(M), 1927, 1930(M), 1932(M), 1935-36.

Rating table, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.6	222	4.0	1,890	10.0	11,600
2.0	430	4.5	2,390	12.0	15,900
2.5	735	5.0	3,000	15.0	23,300
3.0	1,080	6.0	4,410		
3.5	1,460	8.0	7,690		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	302	905	a880	563	b490	1,890	4,260	1,380	2,620	1,380	716	397
2	296	754	a760	631	b440	1,710	4,110	1,760	1,840	1,010	1,150	375
3	286	7,950	a740	787	419	1,840	3,000	1,980	1,540	814	1,150	348
4	276	11,200	a700	828	503	1,980	2,440	3,400	1,340	664	2,080	322
5	271	5,340	a680	807	*905	2,280	2,080	7,500	1,150	569	3,000	312
6	271	3,060	a680	768	1,460	1,980	1,940	6,480	975	657	2,500	338
7	261	2,130	a660	716	1,500	3,320	3,400	7,160	1,380	768	1,660	458
8	276	1,710	a620	644	1,340	9,170	5,660	8,230	1,540	735	1,220	458
9	312	1,460	a600	*624	1,220	5,980	9,360	5,180	1,300	569	975	468
10	905	1,220	a650	650	1,080	4,560	5,340	3,540	1,080	480	814	436
11	1,180	1,180	849	605	1,010	3,680	3,820	2,740	940	436	702	545
12	828	1,660	1,260	533	975	3,000	3,200	2,230	828	414	639	842
13	638	1,660	1,260	702	7,380	2,440	5,120	2,280	774	414	905	593
14	545	1,550	1,120	1,120	22,000	2,080	13,700	2,030	754	436	870	527
15	503	1,890	1,040	1,040	17,200	1,840	11,800	1,710	735	1,010	690	563
16	463	2,390	1,080	905	7,160	1,760	6,820	1,540	709	1,260	593	441
17	474	2,280	1,340	1,040	5,340	1,980	4,710	1,420	780	975	527	392
18	575	2,080	1,380	940	5,820	1,980	3,400	1,340	748	905	497	359
19	702	1,760	1,340	618	5,500	1,840	2,680	1,180	696	676	575	348
20	683	1,540	1,180	605	5,340	1,800	2,280	1,080	670	563	612	343
21	575	1,380	1,080	828	4,410	1,980	2,030	1,010	593	545	569	354
22	497	1,180	975	800	3,330	1,940	1,800	975	527	521	639	392
23	452	1,120	940	735	2,560	3,400	1,620	940	569	491	728	380
24	419	a1,200	856	557	2,030	16,600	1,460	856	1,010	485	593	375
25	397	a1,800	787	b520	1,760	9,170	1,340	800	1,040	503	575	359
26	375	a2,250	722	b560	1,890	5,340	1,300	814	905	452	515	338
27	348	a1,650	696	b580	2,390	7,160	1,610	774	821	414	449	317
28	937	a1,400	664	569	2,440	8,980	1,540	761	1,080	419	397	312
29	1,890	a1,150	612	491	2,230	5,500	1,580	754	1,500	441	380	402
30	1,460	a1,000	557	474	-	3,960	1,460	1,120	2,030	397	364	670
31	1,120	-	527	b480	-	3,260	-	1,940	-	375	359	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	18,517	1,890	261	597	0.436	0.50
November	67,849	11,200	754	2,262	1.65	1.84
December	27,255	1,380	527	879	.642	.74
Calendar year 1947	454,334	15,200	246	1,245	.909	12.35
January	21,720	1,120	474	701	.512	.59
February	110,122	22,000	419	3,797	2.77	2.99
March	124,400	16,600	1,710	4,013	2.93	3.38
April	114,860	13,700	1,300	3,829	2.80	3.12
May	74,904	8,230	754	2,416	1.76	2.03
June	32,474	2,620	527	1,082	.790	.88
July	19,778	1,380	375	638	.466	.54
August	27,438	3,000	359	885	.646	.74
September	12,764	842	312	425	.310	.35
Water year 1947-48	652,081	22,000	261	1,782	1.30	17.70

Peak discharge (base, 12,000 sec.-ft.).- Nov. 3 (11:30 p.m.) 17,500 sec.-ft.; Feb. 15 (12:30 a.m.) 26,400 sec.-ft.; Mar. 24 (2:30 p.m.) 20,200 sec.-ft.; Apr. 14 (10 p.m.) 16,600 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, recorded range in stage, and records for James River at Buchanan and Cowpasture River near Clifton Forge.

b Stage-discharge relation affected by ice.

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 1½ miles downstream from Looney Creek. Datum of gage is 802.56 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 2,084 square miles.

Records available.- August 1895 to September 1948. February 1898 to September 1916 (revised) in Virginia Geological Survey Bulletin 31.

Average discharge.- 49 years (1898-1912, 1913-47), 2,469 second-feet.

Extremes.- Maximum discharge during year, 38,800 second-feet Feb. 15 (gage height, 16.25 feet); minimum, 395 second-feet Oct. 8, 9 (gage height, 1.91 feet).

1895-1948: Maximum discharge, about 105,000 second-feet Mar. 27, 1913 (gage height, 31 feet, from floodmarks), from rating curve extended above 47,000 second-feet by logarithmic plotting and records for other stations in James River Basin; minimum, 255 second-feet several days in September 1932 (gage height, 1.60 feet).

Flood in November 1877 reached a stage of 34.9 feet, from floodmark (discharge, about 125,000 second-feet).

Remarks.- Records good. Records of chemical analyses and water temperatures for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 582: Drainage area. W 602: 1917-24, W 952: 1913(M). W 972: 1935-36. See also Records available.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.9	390	3.5	1,780	8.0	11,700
2.1	500	4.5	3,110	10.0	17,900
2.5	790	5.3	4,520	12.0	24,200
2.8	1,040	6.7	7,930	15.0	34,400

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	514	1,840	1,490	894	766	2,890	7,660	2,150	4,320	2,610	1,510	689
2	482	1,550	1,390	959	846	2,610	7,660	2,340	3,420	1,780	2,410	647
3	458	11,400	1,240	1,030	870	2,540	5,540	2,890	2,610	1,390	2,600	633
4	440	26,800	1,200	1,160	854	2,750	4,220	3,760	2,280	1,140	5,700	570
5	420	12,000	1,170	1,140	1,080	2,890	3,590	7,850	1,960	986	8,200	535
6	410	6,380	1,160	1,100	2,080	2,750	3,340	11,400	1,720	934	6,880	528
7	400	4,030	1,130	1,060	2,680	3,420	4,740	9,890	2,080	1,080	3,760	1,160
8	395	3,110	1,070	1,000	2,480	12,600	12,300	14,500	2,480	1,130	2,610	1,290
9	619	2,540	1,020	934	2,280	10,800	19,400	9,310	2,280	986	1,960	950
10	2,600	2,150	1,010	968	2,080	7,660	11,700	6,140	1,780	846	1,600	846
11	3,760	1,960	1,160	950	1,840	6,140	7,660	4,520	1,550	766	1,340	782
12	2,340	2,340	1,550	902	1,720	4,850	6,020	3,680	1,340	718	1,240	950
13	1,840	2,540	1,840	986	8,500	3,940	7,140	5,660	1,190	703	1,160	995
14	1,600	2,340	1,720	1,550	32,600	3,340	10,500	5,190	1,100	734	1,390	830
15	1,340	2,610	1,550	1,840	31,900	2,960	17,200	3,590	1,080	798	1,180	854
16	1,140	3,760	1,550	1,490	14,800	2,820	11,100	3,040	1,290	1,720	1,040	790
17	1,200	3,590	1,660	1,600	10,200	2,960	7,660	2,680	1,390	1,390	959	668
18	2,540	3,260	1,900	1,550	9,600	3,340	5,540	2,410	1,390	1,290	902	598
19	2,480	2,820	1,900	1,240	9,030	3,110	4,320	2,150	1,390	1,110	934	563
20	2,020	2,480	1,780	926	7,930	3,040	3,680	1,900	1,240	959	902	535
21	1,600	2,150	1,600	1,220	7,140	3,040	3,180	1,720	1,160	886	894	535
22	1,290	1,900	1,490	1,290	5,300	3,040	2,890	1,600	1,060	830	814	549
23	1,100	1,780	1,390	1,240	4,120	3,340	2,610	1,490	1,090	758	968	577
24	986	1,720	1,290	1,020	3,340	18,500	2,340	1,390	1,440	703	950	570
25	894	1,840	1,240	703	2,890	17,900	2,150	1,340	1,600	682	886	570
28	822	2,750	1,150	790	2,750	9,600	2,020	1,290	1,440	682	830	542
27	774	2,540	1,090	1,020	3,180	9,890	2,150	1,220	1,390	675	750	514
28	774	2,150	1,060	1,030	3,500	15,100	2,480	1.150	1,240	682	675	500
29	4,540	1,900	995	918	3,260	10,200	2,340	1,130	1,900	661	619	584
30	3,340	1,660	934	870	-	6,880	2,280	2,800	3,040	742	598	1,060
31	2,410	-	886	854	-	8,200	-	2,960	-	682	718	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	45,528	4,540	395	1,469	0.705	0.81
November	119,890	26,800	1,550	3,996	1.92	2.14
December	41,615	1,900	886	1,342	.644	.74
Calendar year 1947	749,318	26,800	371	2,053	.985	13.37
January	34,234	1,840	703	1,104	.530	.61
February	179,616	32,600	766	6,194	2.97	3.20
March	193,100	18,500	2,540	6,229	2.99	3.45
April	185,410	19,400	2,020	6,180	2.97	3.31
May	123,140	14,500	1,130	3,972	1.91	2.20
June	53,250	4,320	1,060	1,775	.852	.95
July	31,053	2,610	661	1,002	.481	.55
August	56,979	8,200	598	1,838	.882	1.02
September	21,414	1,290	500	714	.343	.38
Water year 1947-48	1,085,229	32,600	395	2,965	1.42	19.36

Peak discharge (base, 21,000 sec.-ft.).- Nov. 4 (7 a.m.) 32,300 sec.-ft.; Feb. 15 (4:30 a.m.) 38,800 sec.-ft.; Mar. 24 (10 p.m.) 26,100 sec.-ft.; Apr. 9 (9:30 a.m.) 22,000 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. Datum of gage is 548.53 feet above mean sea level, datum of 1929.

Drainage area.- 3,250 square miles.

Records available.- January 1900 to September 1915 (gage heights only), August 1931 to September 1948. December 1926 to June 1931 at Salt Creek, 2 miles downstream.

Average discharge.- 20 years (1927-30, 1931-48), 3,585 second-feet.

Extremes.- Maximum discharge during year, 47,600 second-feet Feb. 15 (gage height, 19.9 feet); minimum, 194 second-feet July 15 (gage height, 3.38 feet); minimum daily, 645 second-feet Oct. 4.

1926-48: Maximum discharge, 115,000 second-feet Mar. 18, 1936 (gage height, 30.78 feet), from rating curve extended above 41,000 second-feet on basis of records for other stations in James River Basin; minimum, 100 second-feet Sept. 21, 1941 (gage height, 3.02 feet); minimum daily, 223 second-feet July 28, 1930.

Flood in March 1913 reached a stage of 31.3 feet, from floodmarks (discharge, 118,000 second-feet, from rating curve extended above 41,000 second-feet on basis of records for other stations in James River Basin).

Remarks.- Records good except those for period of ice effect, which are fair. Flow regulated by power plants above station. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 972: 1913(M), 1932-33, 1935(M), 1936.

Rating table, water year 1947-48, except period of ice effect (gage height, in feet, and discharge, in second-feet)

4.0	560	5.5	2,540	10.0	11,800
4.2	735	6.0	3,370	12.0	17,000
4.5	1,050	7.0	5,200	15.0	27,100
5.0	1,760	8.0	7,250	19.0	43,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	885	2,480	2,380	1,500	1,200	4,380	19,800	3,580	5,200	3,900	5,140	1,280
2	835	2,110	2,380	1,600	1,360	3,900	15,000	3,600	5,200	2,680	7,690	1,120
3	805	8,100	2,040	1,650	1,510	3,930	11,000	4,120	3,880	2,160	4,600	1,120
4	645	28,300	2,030	1,700	1,610	3,810	8,570	4,800	3,340	1,740	14,700	950
5	700	15,300	1,980	1,860	1,720	4,500	7,040	9,450	3,080	1,600	14,500	954
6	700	8,790	1,910	1,740	2,580	4,580	6,200	13,700	2,620	1,610	10,800	796
7	740	6,000	1,820	1,680	3,420	5,540	7,040	12,700	2,820	1,460	7,040	1,600
8	665	4,840	*1,840	1,620	3,460	14,200	12,200	16,100	3,560	1,780	5,020	2,080
9	1,040	4,090	1,570	1,560	3,220	14,500	20,800	12,700	3,280	1,610	3,920	1,780
10	3,380	3,350	1,660	1,510	2,860	10,600	16,400	9,010	2,710	1,370	3,120	1,530
11	5,200	3,260	1,820	1,480	2,720	8,790	11,500	7,040	2,430	1,380	2,620	1,360
12	3,940	3,690	1,990	1,480	2,510	7,250	9,450	5,600	2,180	1,570	2,520	1,320
13	2,820	4,120	2,520	2,520	5,600	6,000	9,900	8,790	2,050	895	2,300	1,640
14	2,420	3,840	2,320	2,980	36,800	5,100	12,200	9,670	1,800	1,100	1,960	1,440
15	2,100	3,680	2,320	2,990	42,100	*4,740	18,200	7,040	1,780	1,670	2,220	1,200
16	2,000	4,890	2,440	2,720	20,100	4,080	14,800	5,600	2,140	2,150	1,930	1,300
17	1,920	5,400	2,600	2,640	13,700	4,380	10,800	5,040	2,180	2,380	1,720	1,190
18	2,780	4,940	2,780	2,570	12,700	4,720	8,570	4,640	2,080	1,860	1,660	910
19	3,300	4,360	2,790	2,190	12,000	4,470	6,830	4,260	2,020	1,900	1,600	1,030
20	2,960	3,870	2,720	1,680	10,800	4,350	5,800	3,980	1,950	1,540	1,890	915
21	2,330	3,440	2,420	1,920	9,900	4,210	5,200	3,300	1,760	1,610	1,580	920
22	2,030	3,070	2,320	2,120	8,130	4,230	4,610	3,020	1,780	1,600	1,900	940
23	1,680	2,870	2,250	2,000	6,410	5,400	4,260	2,900	1,670	1,240	1,320	1,020
24	1,480	2,720	2,000	1,880	5,400	17,000	3,900	2,660	2,080	1,170	1,840	990
25	1,290	2,950	1,900	1,260	4,680	23,500	3,480	2,700	2,220	1,130	1,670	920
28	1,260	3,260	1,920	1,200	4,320	13,700	3,370	2,600	2,320	1,120	1,470	848
27	1,210	3,920	1,780	b1,400	4,580	12,700	3,030	2,260	2,120	1,130	1,260	885
28	1,440	3,470	1,660	b1,500	4,960	18,500	3,970	2,040	2,120	1,260	1,140	835
29	3,050	3,040	1,640	b1,500	4,910	14,500	4,020	2,050	2,280	1,130	1,180	1,240
30	4,760	2,660	1,550	b1,400	-	10,600	3,720	3,410	3,410	1,240	1,220	1,960
31	3,160	-	1,460	b1,350	-	10,400	-	3,540	-	1,330	1,190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	63,525	5,200	645	2,049	0.630	0.73
November	156,810	28,300	2,110	5,227	1.61	1.80
December	64,810	2,790	1,460	2,091	.643	.74
Calendar year 1947	1,087,241	28,300	640	2,979	.917	12.45
January	57,200	2,990	1,200	1,845	.568	.65
February	235,260	42,100	1,220	8,112	2.50	2.70
March	258,570	23,500	3,810	8,341	2.57	2.96
April	271,660	20,800	3,030	9,055	2.79	3.11
May	181,900	16,100	2,040	5,868	1.81	2.09
June	78,060	5,200	1,670	2,602	.801	.89
July	50,315	3,900	895	1,623	.499	.58
August	112,720	14,700	1,140	3,636	1.12	1.29
September	36,073	2,080	796	1,202	.370	.41
Water year 1947-48	1,566,903	42,100	645	4,281	1.32	17.95

Peak discharge (base, 25,500 sec.-ft.).- Nov. 4 (12:30 p.m.) 32,500 sec.-ft.; Feb. 15 (2:30 a.m.) 47,600 sec.-ft.; Mar. 25 (3:30 a.m.) 29,000 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

James River at Bent Creek, Va.

Location.- Water-stage recorder, lat. 37°32', long. 78°50', at highway bridge at town of Bent Creek, Appomattox County, 150 feet downstream from Bent Creek and 1 mile downstream from Gladstone. Datum of gage is 381.39 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 3,671 square miles.

Records available.- March 1925 to September 1948.

Average discharge.- 23 years, 4,002 second-feet.

Extremes.- Maximum discharge during year, 49,500 second-feet Feb. 15 (gage height, 15.05 feet); minimum, 398 second-feet Oct. 7 (gage height, 2.45 feet); minimum daily, 691 second-feet Oct. 7.

1925-48: Maximum discharge, 115,000 second-feet Mar. 18, 1936 (gage height, 23.02 feet), from rating curve extended above 74,000 second-feet on basis of velocity-area studies and records for other stations in James River Basin; minimum, 222 second-feet Oct. 13, 14, 1930 (gage height, 2.21 feet); minimum daily, 222 second-feet Oct. 13, 1930.

Remarks.- Records good except those for periods of ice effect or fragmentary gage-height record, which are fair. Flow regulated by power plants above station. Records of chemical analyses and water temperatures for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 742: 1931(m). W 972: 1935-36. W 1066: 1940.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

2.7	675	4.0	2,940	9.0	18,800
2.9	935	5.0	5,260	11.0	27,600
3.2	1,390	6.0	8,090	13.0	38,000
3.5	1,930	7.5	13,000	15.0	49,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,020	2,860	2,800	1,900	b1,700	5,360	28,100	4,200	4,950	4,580	2,000	1,300
2	1,000	2,500	2,520	1,860	b1,500	5,640	18,800	4,100	6,020	f3,200	9,270	1,660
3	942	3,180	2,400	1,660	b1,800	4,550	13,800	4,260	5,030	f2,600	5,770	1,190
4	942	23,800	2,250	1,820	2,190	4,840	10,600	5,110	4,300	f2,100	17,900	1,390
5	712	20,800	2,090	2,030	2,490	5,050	8,700	8,390	f3,700	f1,800	20,000	1,310
6	885	11,300	1,970	1,960	2,990	5,490	8,700	13,400	f3,300	f1,600	13,000	1,320
7	691	7,320	2,120	1,820	4,000	6,050	8,090	14,500	f3,200	f1,500	8,700	1,120
8	903	6,520	1,940	1,720	4,500	10,900	11,600	15,600	3,780	1,680	6,320	2,340
9	853	5,480	2,200	*1,940	3,680	16,000	20,400	14,900	f3,900	2,160	5,020	2,210
10	2,500	3,960	1,950	1,600	4,120	12,700	19,200	11,300	3,580	1,420	3,660	1,880
11	5,540	3,900	1,880	1,700	3,740	11,000	13,000	8,390	f2,800	1,480	3,120	1,680
12	5,420	4,830	1,960	1,740	3,360	9,320	10,600	7,200	f2,500	2,460	2,900	1,740
13	3,360	4,500	2,190	4,780	5,070	8,090	10,300	8,090	f2,200	1,200	3,160	1,620
14	2,900	4,500	2,640	4,610	28,500	7,360	12,700	11,600	f2,300	994	2,380	2,000
15	2,220	4,730	2,830	3,580	47,700	*5,560	17,600	8,700	f2,200	1,440	2,520	1,660
16	2,540	4,760	2,670	3,570	28,700	5,140	17,200	7,260	f2,300	2,380	2,070	1,600
17	2,320	5,440	2,670	2,720	16,800	5,520	12,700	6,020	f2,500	2,780	2,220	1,460
18	2,530	5,690	2,900	3,190	14,500	5,150	9,960	5,450	f2,400	2,500	2,080	1,320
19	3,660	5,440	2,980	2,660	13,800	5,650	8,090	4,340	f3,000	1,840	2,020	1,220
20	3,100	4,840	2,860	2,510	12,300	5,030	7,280	4,170	f2,200	2,170	1,920	1,300
21	2,960	3,780	2,860	1,860	11,300	4,960	6,520	3;840	f2,000	1,740	1,860	1,200
22	2,140	3,840	2,630	2,300	9,640	5,040	5,790	f3,400	f2,000	1,660	2,200	1,280
23	2,260	3,310	2,470	2,350	8,020	6,740	5,140	f3,300	f2,500	1,810	2,200	995
24	1,600	3,240	2,130	2,290	6,920	12,500	4,540	f3,000	f2,100	1,270	1,700	1,210
25	1,860	3,210	2,120	b2,000	5,950	26,700	4,420	f3,000	f2,400	1,600	2,020	1,080
26	1,560	3,280	1,900	1,920	5,480	16,800	4,180	f3,200	f2,200	1,030	1,840	1,120
27	1,180	4,340	1,940	1,680	5,280	14,100	3,570	f3,100	f2,500	1,330	1,660	1,020
28	1,330	4,080	1,980	b1,900	5,680	19,200	4,420	f2,700	f2,400	1,540	1,280	1,220
29	1,730	3,530	2,040	b2,000	6,090	17,600	4,590	f2,700	f2,100	1,520	1,510	1,180
30	4,880	3,210	1,580	b2,000	-	12,700	4,550	f2,900	3,250	1,380	1,460	2,530
31	4,480	-	1,540	1,950	-	10,600	-	f3,500	-	1,560	1,660	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	70,018	5,540	691	2,259	0.615	0.71
November	172,170	23,800	2,500	5,739	1.56	1.74
December	71,010	2,980	1,540	2,291	.624	.72
Calendar year 1947	1,218,737	25,200	617	3,339	.910	12.35
January	71,620	4,780	1,600	2,310	.629	.73
February	267,800	47,700	1,500	9,234	2.52	2.72
March	291,340	26,700	4,550	9,398	2.56	2.95
April	315,140	28,100	3,570	10,500	2.86	3.19
May	201,620	15,600	2,700	6,504	1.77	2.04
June	89,610	6,020	2,000	2,987	.814	.91
July	58,324	4,580	994	1,881	.512	.59
August	135,420	20,000	1,280	4,368	1.19	1.37
September	44,155	2,530	995	1,472	.401	.45
Water year 1947-48	1,788,227	47,700	691	4,886	1.33	18.12

Peak discharge (base, 26,500 sec.-ft.).- Nov. 4 (9 p.m.) 32,100 sec.-ft.; Feb. 15 (3 a.m.) 49,500 sec.-ft.; Mar. 25 (9:30 a.m.) 29,600 sec.-ft.; Apr. 1 (7:30 a.m.) 36,400 sec.-ft.; Aug. 4 (9 p.m.) 38,000 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

f Fragmentary gage-height record; discharge computed on basis of fragmentary gage-height record and records for stations at Holcombs Rock and at Scottsville.

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 downstream from Willis River. Datum of gage is 161.57 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 6,242 square miles.

Records available.- January 1899 to September 1948.

Average discharge.- 48 years (1899-1904, 1905-48), 7,079 second-feet.

Extremes.- Maximum discharge during year, 83,500 second-feet Apr. 2 (gage height, 22.1 feet); minimum, 1,170 second-feet Oct. 9 (gage height, 0.81 foot); minimum daily, 1,330 second-feet Oct. 9.

1899-1948: Maximum discharge, 180,000 second-feet Sept. 20, 1944 (gage height, 29.6 feet, from floodmark in gage well); minimum, 320 second-feet Sept. 22, 1932; minimum daily, 348 second-feet Oct. 5, 1930; minimum gage height, 0.10 foot Oct. 2, 1941.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair. Flow regulated by power plants above station. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 582: Drainage area. W 972: 1936(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 1						Apr. 2 to Sept. 30			
0.9	1,290	3.0	4,470	10.0	23,600	1.0	1,520	8.0	16,900
1.0	1,420	5.0	8,420	15.0	44,500	2.0	3,130	10.0	23,600
2.0	2,860	7.0	13,300	20.0	70,200	4.0	6,910	15.0	44,500
						6.0	11,400	20.0	70,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,710	5,400	4,650	2,940	2,710	7,790	54,000	7,740	8,380	4,760	2,290	d2,600
2	1,640	3,640	4,130	3,240	2,410	7,380	69,600	7,320	7,530	5,910	10,200	d2,200
3	1,760	3,640	3,880	4,130	3,160	8,850	33,300	7,530	8,160	5,140	13,400	2,290
4	1,520	9,590	3,720	3,400	3,400	7,580	22,500	7,740	7,320	3,750	24,400	2,370
5	1,490	31,200	3,640	3,320	3,960	7,580	16,300	11,400	6,310	3,300	66,400	2,020
6	1,420	19,100	3,480	3,160	4,300	7,180	13,400	16,300	5,710	2,960	34,200	2,210
7	1,360	11,400	3,320	3,480	4,650	10,200	14,000	20,700	5,520	3,130	20,700	2,290
8	1,420	10,200	3,240	3,080	5,400	16,300	16,300	24,400	6,510	2,620	13,200	2,370
9	1,330	12,200	3,160	3,010	5,980	20,600	22,900	22,900	5,710	2,620	9,260	2,960
10	1,630	8,210	3,160	2,940	5,400	21,300	29,500	18,400	5,710	2,620	7,740	3,390
11	3,080	6,780	3,010	3,160	5,210	15,700	22,500	13,700	5,140	2,700	7,320	3,390
12	6,380	11,000	3,400	2,640	5,590	12,800	16,900	11,400	4,660	2,290	6,910	3,040
13	6,380	9,520	3,560	9,200	6,180	11,000	17,200	14,000	4,290	2,540	7,950	2,790
14	4,650	7,790	3,160	23,200	24,200	9,520	17,500	20,400	4,110	4,200	6,110	d2,500
15	3,880	7,180	4,130	10,700	64,200	8,850	20,000	16,900	4,020	3,480	5,140	d2,400
16	3,240	7,790	4,300	7,580	61,400	7,790	25,500	12,700	3,930	4,570	4,570	d2,500
17	3,320	7,380	5,400	6,580	34,600	8,210	20,700	11,600	4,020	3,570	4,380	d2,200
18	3,800	7,580	4,830	5,400	24,400	8,210	16,000	9,720	4,380	4,380	4,110	d2,000
19	5,020	7,380	4,470	5,020	19,800	7,580	13,200	8,600	4,020	4,200	3,750	d1,800
20	5,210	7,180	4,470	4,040	17,600	7,580	14,000	7,320	3,930	d2,800	4,290	d1,700
21	4,300	6,380	4,300	4,830	15,000	6,980	12,900	6,710	3,570	d3,700	4,760	1,700
22	4,300	5,210	4,220	4,470	13,600	6,980	9,490	6,310	3,300	3,130	4,290	2,130
23	3,320	5,400	3,880	4,300	11,700	8,000	8,600	5,710	4,470	3,750	4,480	1,960
24	3,010	5,400	3,800	3,960	9,980	20,600	7,740	5,710	4,950	d3,000	4,110	1,940
25	2,560	6,380	3,720	3,160	9,290	29,100	7,320	4,760	4,380	d2,500	3,300	1,660
26	2,640	5,980	3,320	2,780	9,290	32,500	7,110	6,110	4,290	d2,300	3,300	1,850
27	2,410	5,590	3,240	3,640	8,420	22,500	6,710	6,510	3,840	d2,100	d3,200	1,610
28	2,190	5,980	3,240	3,400	7,580	27,100	7,530	5,710	4,480	2,290	d2,900	1,580
29	2,480	5,590	3,160	3,880	7,790	27,100	9,260	4,950	4,200	2,700	d2,700	1,820
30	2,940	5,020	2,940	3,880	-	21,300	8,160	5,140	3,660	2,790	d2,500	3,390
31	4,770	-	2,940	3,480	-	15,400	-	6,910	-	2,540	d2,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	95,160	6,380	1,330	3,070	0.492	0.57
November	251,090	31,200	3,640	8,370	1.34	1.50
December	115,870	5,400	2,940	3,738	.599	.69
Calendar year 1947	1,956,450	36,700	1,170	5,360	.859	11.65
January	152,000	23,200	2,640	4,903	.785	.90
February	397,200	64,200	2,410	13,700	2.19	2.36
March	429,560	32,500	6,980	13,860	2.22	2.56
April	560,120	69,600	6,710	18,670	2.99	3.34
May	335,300	24,400	4,760	10,820	1.73	1.99
June	150,500	8,380	3,300	5,017	.804	.90
July	102,340	5,910	2,100	3,301	.529	.61
August	294,260	66,400	2,290	9,492	1.52	1.75
September	68,660	3,390	1,580	2,289	.367	.41
Water year 1947-48	2,952,060	69,600	1,330	8,066	1.29	17.58

Peak discharge (base, 40,000 sec.-ft.).- Feb. 15 (7:30 p.m.) 69,600 sec.-ft.: Apr. 2 (3 a.m.) 83,500 sec.-ft.; Aug. 5 (2 p.m.) 72,600 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for James River at Scottsville and sum of records for James River near Richmond and James River & Kanawha Canal near Richmond.

James River at Scottsville, Va.

Location.- Water-stage recorder, lat. 37°48', long. 78°30', at highway bridge at Scottsville, Albemarle County, 6 miles upstream from Hardware River. Datum of gage is 253.18 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 4,571 square miles.

Records available.- February 1925 to September 1948.

Average discharge.- 23 years, 4,992 second-feet.

Extremes.- Maximum discharge during year, 59,600 second-feet Apr. 1 (gage height, 18.4 feet); minimum, 768 second-feet Oct. 8 (gage height, 2.12 feet); minimum daily, 930 second-feet Oct. 8.

1925-48: Maximum discharge, 133,000 second-feet Sept. 19, 1944 (gage height, 26.0 feet); minimum, 302 second-feet Oct. 1, 1930 (gage height, 1.46 feet); minimum daily, 307 second-feet Oct. 15, 1930.

Records available for other outstanding floods:

Date	Gage height (feet)	Discharge (second-feet)	Remarks
October 1870	30.7	-	Gage heights from information by local resident.
November 1877	27.9	About 160,000	....do......................
March 1913	25.16	121,000	Floodmarks.
Mar. 19, 1936	25.46	126,000	Floodmarks.
Aug. 16, 1940	25.84	130,000	Recorder graph.

Remarks.- Records excellent except those for period of ice effect, which are fair. Flow regulated by power plants above station. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 727: 1931(m). W 972: 1913(M), 1936(M), 1940(M). W 1066: 1940.

Rating table, water year 1947-48, except period of ice effect (gage height, in feet, and discharge, in second-feet)

2.3	930	3.5	2,280	6.0	6,640	10.0	18,100	18.0	57,000
2.5	1,120	4.0	3,010	7.0	8,870	12.0	25,900		
3.0	1,650	5.0	4,700	8.0	11,500	15.0	39,600		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,380	4,170	3,660	1,960	b2,000	6,640	47,300	5,630	4,700	4,170	2,220	1,890
2	1,430	3,170	3,410	2,710	b2,500	6,030	30,100	5,440	6,850	5,060	8,320	1,710
3	1,170	3,240	3,250	2,560	b2,800	6,030	20,000	5,630	6,230	2,940	8,870	1,890
4	1,170	15,500	3,010	2,490	b3,000	5,630	14,600	5,630	5,060	2,860	20,900	1,380
5	1,220	27,600	2,860	2,350	b3,300	5,630	11,500	10,100	4,700	2,640	37,600	1,600
6	1,000	14,300	2,860	2,780	b3,700	6,030	9,850	13,000	4,170	2,350	17,100	1,650
7	1,070	9,110	2,490	2,350	b4,100	7,280	10,600	18,500	4,000	1,890	11,800	1,650
8	930	8,400	2,780	2,220	b4,600	11,200	11,200	18,500	4,260	2,080	8,400	2,150
9	1,220	7,720	2,350	2,150	b4,500	18,900	20,700	19,200	4,700	2,020	6,430	2,940
10	1,710	5,830	2,490	2,640	b4,400	15,700	24,700	13,600	4,260	2,350	5,250	2,560
11	4,520	5,060	2,780	1,960	b4,500	11,800	16,700	10,400	3,920	1,770	4,520	2,220
12	5,830	7,280	2,780	2,080	b5,200	10,100	13,000	8,630	3,250	1,890	4,000	2,080
13	5,250	6,230	2,560	6,660	6,640	8,630	12,400	9,850	3,010	2,710	3,740	1,960
14	3,830	5,830	3,330	10,100	25,000	7,720	13,600	14,300	3,010	1,480	3,490	1,890
15	2,860	5,630	3,010	5,440	55,100	7,060	17,100	11,500	2,780	2,950	2,940	2,220
16	2,860	6,030	3,920	*4,700	41,000	6,430	21,500	9,110	3,010	2,420	3,010	1,960
17	3,010	6,430	3,920	4,700	21,900	6,640	15,700	8,170	3,010	3,090	2,940	1,770
18	3,580	6,640	3,490	4,000	17,400	6,430	12,100	7,060	3,090	3,580	2,280	1,710
19	4,260	6,430	3,830	3,740	16,000	6,430	9,850	6,030	4,520	2,420	2,710	1,430
20	4,700	6,230	3,740	3,490	14,300	6,230	8,630	5,440	2,860	2,560	2,560	1,480
21	3,920	5,250	3,580	3,170	12,700	5,830	7,940	4,880	2,640	2,780	2,560	1,710
22	3,170	4,520	3,410	2,710	11,500	*5,830	7,060	4,880	2,560	2,640	2,860	1,330
23	2,640	4,340	3,170	3,330	9,350	7,720	6,430	4,170	3,170	2,280	3,090	1,650
24	2,490	4,260	3,250	3,250	8,170	14,000	6,030	4,170	2,780	2,080	2,220	1,300
25	2,220	5,060	2,560	2,500	7,500	28,400	5,440	3,920	3,170	1,650	2,420	1,540
26	2,220	4,700	2,710	b2,400	6,850	23,100	5,060	4,170	2,780	1,710	2,420	1,280
27	1,830	4,520	2,640	b2,700	6,230	17,800	5,250	4,000	3,250	1,480	2,350	1,330
28	1,540	5,440	2,640	b2,600	6,430	21,500	5,440	3,490	2,940	1,770	2,020	1,320
29	2,350	4,700	2,220	b2,800	6,230	22,300	6,030	3,410	2,710	1,960	1,600	1,650
30	2,740	4,080	2,490	b2,700	-	16,000	5,830	3,580	2,780	1,960	1,830	3,620
31	5,830	-	2,150	b2,500	-	12,700	-	5,060	-	1,650	1,890	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October..............................	83,950	5,830	930	2,708	0.592	0.68
November.............................	207,700	27,600	3,170	6,923	1.51	1.68
December.............................	93,340	3,920	2,150	3,011	.659	.76
Calendar year 1947	1,541,884	31,000	930	4,224	.924	12.53
January..............................	101,740	10,100	1,960	3,282	.718	.83
February.............................	316,900	55,100	2,000	10,930	2.39	2.58
March................................	341,720	28,400	5,630	11,020	2.41	2.78
April................................	401,640	47,300	5,060	13,390	2.93	3.27
May..................................	251,450	19,200	3,410	8,111	1.77	2.04
June.................................	110,170	6,850	2,560	3,672	.803	.90
July.................................	75,190	5,060	1,480	2,425	.531	.61
August...............................	184,340	37,600	1,600	5,946	1.30	1.50
September............................	54,870	3,620	1,280	1,829	.400	.45
Water year 1947-48	2,223,010	55,100	930	6,074	1.33	18.08

Peak discharge (base, 27,000 sec.-ft.).- Nov. 5 (5:30 a.m.) 32,300 sec.-ft.; Feb. 15 (11:30 a.m.) 57,000 sec.-ft.; Mar. 25 (6 p.m.) 32,700 sec.-ft.; Apr. 1 (2:30 p.m.) 59,600 sec.-ft.; Aug. 5 (4:30 a.m.) 52,100 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Warm Spring at Warm Springs, Va.

Location.- Staff gage, lat. 38°30'11", long. 79°46'52", just above V-shaped weir, about 200 feet downstream from Warm Spring in town of Warm Springs, Bath County. Datum of gage is 2,316.22 feet above mean sea level, unadjusted.

Records available.- June 1928 to September 1944, October 1944 to September 1948 (monthly readings only).

Average discharge.- 14 years (1930-44), 2.24 second-feet.

Extremes.- 1928-48: Maximum daily discharge recorded, 5.45 second-feet Nov. 18, 1929 (flow probably increased somewhat by local surface runoff); minimum daily recorded, 1.35 second-feet Feb. 25, 26, 1931.

Remarks.- Gage read about once monthly.

Gage height, in feet, and discharge, in second-feet, water year October 1947 to September 1948

Date	Gage height (feet)	Discharge (second-feet)	Date	Gage height (feet)	Discharge (second-feet)
Oct. 7	1.14	1.15	Apr. 8	1.41	3.09
Nov. 4	1.18	1.70	June 14	1.28	2.25
Dec. 9	1.16	1.60	July 20	1.29	2.23
Jan. 6	1.18	1.70	Aug. 18	1.27	2.18
Feb. 3	1.18	1.70	Sept. 7	1.27	2.18
Mar. 8	1.27	2.18			

Falling Springs Creek near Falling Spring, Va.

Location.- Water-stage recorder and concrete control (wall to collecting basin), lat. 37°52', long. 79°59', at bridge on U. S. Highway 220, 1.2 miles downstream from Falling Spring (the source), 2.1 miles southeast of town of Falling Spring, and 10 miles northeast of Covington, Alleghany County.

Records available.- November 1947 to September 1948 (fragmentary November to February).

Extremes.- Maximum stage during period, 3.0 feet Feb. 14, from recorded range in stage (discharge not determined); minimum discharge, 4.6 second-feet Sept. 28 (gage height, 0.35 foot).

Remarks.- Records good except those for periods of no gage-height record, which are fair. Regulation at low flow by cress beds 2,000 to 3,000 feet above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	-	-	-	21	36	18	a20	10	10	8.8
2		-	-	-	-	20	31	18	18	9.0	11	9.2
3		-	-	-	6.4	19	27	19	18	8.0	12	8.0
4		-	-	-	6.7	18	25	20	17	7.5	a14	6.8
5		59	-	-	9.5	17	24	29	17	7.5	a15	6.8
6		40	-	7.1	9.5	17	24	30	16	7.5	12	7.2
7		32	-	7.1	9.5	28	24	43	17	8.5	12	8.0
8		28	-	7.1	9.5	44	27	42	22	8.0	10	7.6
9		24	9.0	7.5	9.0	36	32	36	17	8.0	9.6	7.6
10		21	9.5	7.5	9.0	34	30	32	17	8.5	9.6	8.0
11		20	10	7.5	-	30	30	29	16	7.5	10	8.4
12		20	12	7.5	-	27	29	28	15	7.5	10	8.4
13		-	12	9.0	-	24	38	26	15	7.5	9.6	8.0
14		-	12	-	-	23	42	22	13	7.5	10	11
15		-	12	-	-	22	47	20	12	7.5	9.6	15
16		-	13	-	-	22	42	18	12	7.5	9.2	12
17		-	13	-	-	22	38	17	12	8.0	9.2	10
18		-	-	-	-	20	34	16	12	8.0	9.2	9.6
19		-	-	-	-	21	31	16	12	8.5	8.4	9.6
20		-	-	-	33	22	28	15	12	7.5	8.4	9.6
21		-	-	-	30	22	26	15	12	7.5	8.8	10
22		-	-	-	28	21	24	a15	12	8.5	8.8	9.2
23		-	-	-	26	30	23	a15	12	8.5	8.4	8.8
24		-	-	-	23	121	22	a15	12	9.0	8.8	8.4
25		-	-	-	22	71	20	15	12	8.5	9.2	8.0
26		-	-	-	22	49	20	15	12	8.0	8.4	7.2
27		-	-	-	22	85	20	15	12	7.5	8.4	6.8
28		-	-	-	22	79	20	15	12	8.0	8.8	6.4
29		-	-	-	22	53	19	16	12	8.0	8.8	8.4
30		-	-	-	-	43	18	15	11	8.5	8.4	14
31		-	-	-	-	39	-	17	-	8.5	9.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January	-	-	-	-		
February	-	-	-	-		
March	1,100	121	17	35.5		
April	851	47	18	28.4		
May	662	43	15	21.4		
June	429	22	11	14.3		
July	250.0	10	7.5	8.06		
August	304.8	15	8.4	9.83		
September	266.8	15	6.4	8.89		
Water year	-	-	-	-		

a No gage-height record; discharge computed on basis of records for Smith Creek near Clifton Forge and Jackson River at Falling Spring.

James River near Richmond, Va.

Location.- Water-stage recorder, lat. 37°33'47", long. 77°32'50", at Westham Bridge, 1¾ miles downstream from Bosher Dam and 3 miles west of city limits of Richmond, Henrico County. Datum of gage is 98.82 feet above mean sea level, datum of 1929.

Drainage area.- 6,757 square miles.

Records available.- October 1934 to September 1948.

Average discharge.- 13 years (1935-48), 7,365 second-feet (adjusted).

Extremes.- Maximum discharge during year, 75,000 second-feet Apr. 2 (gage height, 16.45 feet); minimum daily, 570 second-feet Oct. 8.
1934-48: Maximum discharge, 175,000 second-feet Mar. 19, 1936 (gage height, 23.42 feet); minimum daily, 46 second-feet Sept. 18-20, 25-27, Oct. 1-4, 7, 1941, Sept. 8, 9, 12, 1944.

Remarks.- Records good except those below 1,000 second-feet and those for periods of no gage-height record, which are fair. Flow regulated by power plants above station. James River and Kanawha Canal diverts water around station. For canal records, see page 46.

Revisions (water years).- W 972: 1936(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.3	470	4.5	3,290	8.0	16,100
3.5	880	5.0	4,720	10.0	26,600
3.7	1,300	6.0	8,040	12.0	39,800
4.0	2,000	7.0	11,800	16.0	71,100

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,480	5,360	4,720	a2,600	4,120	7,690	30,400	7,690	8,760	3,290	2,250	1,480
2	985	4,570	4,270	a2,600	3,160	8,040	69,400	7,170	7,170	4,880	3,910	1,900
3	901	3,290	3,840	a3,100	2,760	9,120	49,400	7,170	8,040	5,360	14,300	1,480
4	1,010	4,120	3,560	a3,800	3,840	9,120	24,800	7,520	7,340	3,420	20,400	1,660
5	775	21,300	3,420	a3,100	4,270	8,040	18,000	8,400	6,180	3,050	55,500	1,450
6	754	26,600	3,290	a2,900	4,880	7,520	14,300	15,200	5,520	2,730	54,000	1,370
7	650	14,800	3,160	a2,900	5,200	9,490	13,000	18,400	5,200	2,320	23,700	1,500
8	570	10,600	3,020	a3,000	5,840	16,100	16,100	23,100	5,840	2,180	15,600	1,590
9	650	12,600	2,890	2,550	7,000	18,000	18,400	22,000	5,520	1,920	10,200	1,880
10	630	10,600	a2,800	2,580	6,670	22,600	26,600	19,400	5,360	1,850	7,520	3,020
11	1,050	8,040	a2,800	2,580	5,840	18,000	25,400	14,800	4,880	2,200	6,840	2,710
12	3,700	10,200	2,790	2,400	6,180	14,300	18,000	11,800	4,420	1,680	6,670	2,580
13	6,010	13,000	2,990	4,850	7,000	11,800	16,600	11,400	3,700	1,680	7,000	2,280
14	5,520	9,490	2,760	24,300	16,700	11,000	17,500	18,400	3,420	2,450	6,500	1,950
15	3,840	7,860	3,130	17,400	50,100	9,120	19,400	18,400	3,560	3,700	5,040	1,590
16	2,970	7,520	3,980	9,120	65,200	8,400	23,100	13,900	3,700	3,420	3,700	1,880
17	2,600	7,860	5,040	7,340	47,100	8,220	22,600	11,000	3,560	3,290	3,560	1,680
18	2,890	7,690	a5,200	6,180	26,600	8,580	17,000	10,200	3,420	3,560	3,240	1,640
19	3,840	7,690	a4,700	5,040	21,000	8,040	13,900	8,580	3,560	3,700	3,020	1,450
20	4,570	7,340	a4,300	4,570	18,400	7,860	11,800	7,340	3,260	2,970	2,990	1,450
21	4,720	7,170	a4,200	4,720	16,100	7,520	10,200	6,500	3,260	2,320	3,980	1,240
22	3,840	6,180	a4,100	5,360	14,300	7,000	9,490	6,010	2,860	3,020	3,700	1,200
23	3,290	5,360	a3,900	4,880	13,000	7,170	8,580	5,680	2,710	3,180	3,840	1,610
24	2,580	5,680	a3,700	4,420	11,000	15,200	7,860	5,040	4,720	3,070	3,420	1,430
25	2,420	5,680	a3,500	2,920	9,860	25,400	7,690	4,880	3,840	3,020	3,050	1,300
26	1,950	6,670	a3,300	2,350	9,860	33,600	6,670	6,180	3,980	1,700	2,400	1,090
27	2,000	6,010	a3,000	2,600	9,860	26,000	6,340	7,340	3,210	1,590	2,600	1,240
28	1,920	5,520	a2,900	3,980	8,400	25,400	7,170	6,500	3,840	1,320	2,400	1,050
29	2,500	6,180	a2,900	3,840	8,040	26,000	9,120	5,200	3,840	1,820	2,420	1,010
30	2,810	5,520	a2,800	4,420	-	23,100	8,400	4,880	3,210	2,020	1,800	1,660
31	2,890	-	a2,600	4,570	-	17,000	-	6,500	-	1,880	2,380	-

Month	Observed				Diversion (second-feet)†	Adjusted for diversion		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	76,315	6,010	570	2,462	889	3,351	0.496	0.57
November	260,500	26,600	3,290	8,683	1,014	9,697	1.44	1.61
December	109,560	5,200	2,600	3,534	907	4,441	.657	.76
Calendar year 1947	1,817,276	34,000	353	4,979	908	5,887	.871	11.83
January	156,970	24,300	2,350	5,064	850	5,914	.875	1.01
February	412,280	65,200	2,760	14,220	981	15,200	2.25	2.43
March	434,430	33,600	7,000	14,010	1,019	15,030	2.22	2.56
April	547,220	69,400	6,340	18,240	1,102	19,340	2.86	3.19
May	326,580	23,100	4,880	10,530	948	11,480	1.70	1.96
June	137,880	8,760	2,710	4,596	903	5,499	.814	.91
July	84,590	5,360	1,320	2,729	851	3,580	.530	.61
August	287,930	55,500	1,800	9,288	914	10,200	1.51	1.74
September	49,370	3,020	1,010	1,646	841	2,487	.368	.41
Water year 1947-48	2,883,625	69,400	570	7,879	934	8,813	1.30	17.76

Peak discharge (base, 50,000 sec.-ft.).- Feb. 16 (12:30 p.m.) 66,000 sec.-ft.; Apr. 2 (8:30 p.m.) 75,000 sec.-ft.; Aug. 6 (4 a.m.) 66,800 sec.-ft.

† Diversion by James River & Kanawha Canal.

a No gage-height record; discharge computed on basis of weather records and records for James River at Cartersville and James River & Kanawha Canal near Richmond.

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. Datum of gage is 1,294.21 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 166 square miles.

Records available.- December 1928 to September 1948.

Average discharge.- 19 years (1929-48), 153 second-feet.

Extremes.- Maximum discharge observed during year, 6,380 second-feet Feb. 14 (gage height, 9.22 feet); minimum observed, 20 second-feet Sept. 26 (gage height, 1.12 feet).
1928-48: Maximum discharge, 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 records for other stations in James River Basin; minimum observed, 8 second-feet Aug. 27, 28, 30, 1932 (gage height, 0.88 foot).

Remarks.- Records fair except those for periods of ice effect or no gage-height record, which are poor. Gage read twice daily.

Revisions (water years).- W 972: 1929-30, 1932-34, 1942.

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 3

1.1	18	2.0	162	4.0	1,000
1.2	27	2.3	236	5.0	1,730
1.3	38	2.7	352	6.5	3,060
1.5	67	3.0	460	8.0	4,660
1.7	101	3.5	700	9.0	6,040

Nov. 4 to Sept. 30

2.0	162	3.5	745
2.3	237	4.0	1,030
2.6	333	4.5	1,350
3.0	496		

Note.- Same as preceding table below 2.1 and above 4.3 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	105	67	58	b50	174	266	120	411	198	44	48
2	30	a90	67	67	b50	162	237	391	198	132	112	34
3	29	5,040	61	64	b50	162	198	371	140	101	90	28
4	27	1,280	60	60	*b50	140	174	266	120	88	107	25
5	27	496	61	58	266	a130	162	1,350	97	75	237	23
6	25	282	61	56	266	a180	162	638	80	77	162	25
7	23	210	58	*b50	237	a350	800	1,090	118	81	110	35
8	25	174	56	52	210	a700	1,490	745	140	67	85	34
9	34	136	*55	54	185	613	1,030	453	114	55	70	29
10	128	116	60	55	174	453	564	316	90	48	58	29
11	140	116	162	48	151	352	411	237	77	41	52	29
12	101	151	198	49	162	266	333	198	67	44	49	26
13	80	151	174	77	3,560	224	1,350	174	61	41	45	26
14	67	134	162	124	4,910	185	2,050	151	61	42	45	26
15	61	266	138	122	1,210	174	1,350	128	56	140	38	25
16	55	333	140	b120	664	162	745	116	80	83	34	23
17	64	316	136	b110	496	237	496	112	75	140	36	22
18	87	237	136	b95	453	237	333	97	62	120	46	22
19	120	198	128	b90	371	224	252	87	67	80	36	22
20	94	162	118	b85	316	210	224	80	64	66	34	22
21	77	136	109	b80	252	210	198	67	56	61	29	22
22	64	120	101	b75	224	210	174	70	52	52	29	25
23	58	116	97	b70	185	910	151	67	55	46	28	23
24	51	112	83	b60	162	4,080	136	61	55	41	32	23
25	46	112	77	b60	140	1,090	128	55	58	36	31	23
26	44	103	75	a60	151	588	118	55	52	32	26	22
27	38	96	70	b60	198	1,090	122	52	60	31	25	22
28	185	88	70	b60	210	855	140	49	94	31	25	22
29	250	81	58	b60	198	518	136	62	78	38	23	24
30	162	73	55	b60	-	371	126	80	97	29	23	26
31	120	-	58	b55	-	298	-	496	-	29	41	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,346	250	23	75.7	0.456	0.53
November	11,030	5,040	73	368	2.22	2.48
December	2,951	198	55	95.2	.573	.66
Calendar year 1947	51,215	5,040	15	140	.843	11.48
January	2,194	124	48	70.8	.427	.49
February	15,551	4,910	50	536	3.23	3.48
March	15,555	4,080	130	502	3.02	3.48
April	14,056	2,050	118	469	2.83	3.16
May	8,234	1,350	49	266	1.60	1.84
June	2,835	411	52	94.5	.569	.63
July	2,145	198	29	69.2	.417	.48
August	1,802	237	23	58.1	.350	.40
September	785	48	22	26.2	.158	.18
Water year 1947-48	79,484	5,040	22	217	1.31	17.81

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Jackson River at Falling Spring.

b Stage-discharge relation affected by ice.

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. Datum of gage is 1,257.61 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 158 square miles.

Records available.- December 1928 to September 1948.

Average discharge.- 19 years (1929-48), 163 second-feet.

Extremes.- Maximum discharge observed during year, 5,480 second-feet Feb. 14 (gage height, 7.72 feet); minimum observed, 25 second-feet Oct. 6, 7 (gage height, 1.46 feet).
1928-48: Maximum discharge observed, 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 observed, 13 second-feet Nov. 29, 1930 (gage height, 1.30 feet).

Remarks.- Records fair except those for periods of ice effect, which are poor. Gage read twice daily.

Revisions (water years).- W 727: 1931.

Rating tables, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 15 to Sept. 8)

Oct. 1 to Nov. 2, Sept. 9-30

1.5	29	2.2	196
1.6	43	2.4	285
1.7	60	2.6	396
1.8	80	3.0	674
2.0	129		

Nov. 3 to Sept. 8

1.5	24	2.2	196	5.0	2,320
1.6	33	2.4	285	6.0	3,270
1.7	44	2.7	460	7.0	4,460
1.8	61	3.0	674	7.5	5,180
2.0	120	4.0	1,470		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	154	77	66	b60	188	434	188	180	276	83	54
2	32	126	74	72	b55	188	372	311	155	204	221	42
3	32	2,410	77	66	b55	180	311	285	134	144	110	40
4	29	1,230	77	61	*b50	167	266	262	127	114	171	35
5	27	674	77	59	171	144	243	790	114	94	529	35
6	26	460	77	58	280	127	238	564	91	110	316	38
7	26	327	72	*51	234	372	712	870	213	101	204	72
8	32	257	66	43	213	712	2,410	751	180	80	148	61
9	58	209	66	61	200	*600	1,470	529	134	66	114	52
10	428	184	66	58	176	600	870	422	114	61	91	50
11	238	180	117	47	163	529	637	327	101	58	77	48
12	157	196	130	56	176	409	529	276	88	58	74	45
13	138	163	110	75	1,960	321	712	295	77	58	66	40
14	119	152	107	b110	4,740	280	830	238	74	72	56	40
15	101	311	101	b110	1,390	252	870	200	72	120	52	39
16	92	266	130	b110	830	257	674	188	127	104	49	37
17	126	247	127	b100	674	415	564	180	141	104	47	37
18	154	225	124	b90	564	355	422	152	114	98	49	35
19	135	213	120	b80	494	316	349	134	144	85	52	35
20	119	188	114	b85	422	295	306	124	141	77	46	35
21	103	167	107	b80	355	276	285	117	120	72	43	35
22	92	138	98	b80	316	252	238	114	94	59	44	37
23	78	134	98	b75	262	409	221	101	127	49	43	40
24	74	134	85	b60	225	1,630	188	94	171	47	41	35
25	68	134	80	b60	213	990	176	88	134	43	40	35
26	62	124	77	b70	221	674	167	88	114	42	37	35
27	60	110	77	b70	221	910	192	83	107	40	37	35
28	600	101	72	b60	217	751	200	77	94	42	32	32
29	396	94	58	b60	204	564	204	94	384	44	33	55
30	262	88	66	b60	-	494	200	88	529	38	34	57
31	196	-	72	b60	-	415	-	155	-	38	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,095	600	26	132	0.835	0.96
November	9,396	2,410	88	313	1.98	2.21
December	2,799	130	58	90.3	.572	.66
Calendar year 1947	52,367	2,410	18	143	.905	12.33
January	2,203	110	43	71.1	.450	.52
February	15,141	4,740	50	522	3.30	3.56
March	14,072	1,630	127	454	2.87	3.31
April	15,290	2,410	167	510	3.23	3.60
May	8,185	870	77	264	1.67	1.92
June	4,395	529	72	146	.924	1.03
July	2,598	276	38	83.8	.530	.61
August	2,982	529	32	96.2	.609	.70
September	1,266	72	32	42.2	.267	.30
Water year 1947-48	82,422	4,740	26	225	1.42	19.38

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Smith Creek above old dam, near Clifton Forge, Va.

Location.- Staff gage, lat. 37°51, long. 79°51', at bridge on city of Clifton Forge highway, a quarter of a mile upstream from old water-supply dam, three-quarters of a mile upstream from new water-supply dam, 3 miles northwest of Clifton Forge, Alleghany County, and about 3½ miles upstream from mouth.

Drainage area.- 13.5 square miles.

Records available.- May 1947 to September 1948. July 1944 to March 1947 at site a quarter of a mile downstream, published as Smith Creek near Clifton Forge, Va. (records not equivalent because of diversion and spring inflow).

Extremes.- Maximum discharge observed during year, 323 second-feet Feb. 14 (gage height, 4.33 feet); minimum observed, 2.3 second-feet Aug. 29, Sept. 5 (gage height, 1.05 feet).
1947-48: Maximum discharge observed, that of Feb. 14, 1948; minimum observed, 2.1 second-feet Sept. 4, 5, 1947; minimum gage height observed, that of Aug. 29, Sept. 5, 1948.

Remarks.- Records fair except those for periods of ice effect or no gage-height record, which are poor. Gage read twice daily. No diversion above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	19	13	7.7	b6	17	42	17	33	6.7	6.1	2.8
2	3.0	15	12	10	b6	17	36	19	22	5.5	5.5	2.5
3	2.9	237	11	8.8	*b6	17	34	20	18	5.0	6.7	2.5
4	2.9	221	10	8.6	b7	16	29	20	15	4.5	14	2.4
5	2.8	94	11	8.6	14	15	25	86	12	4.0	15	2.4
6	2.8	55	10	8.4	14	14	23	66	10	4.2	11	3.1
7	2.8	40	8.8	*8.4	14	34	26	105	15	3.9	7.6	6.2
8	4.6	31	9.2	8.3	15	65	34	86	14	3.7	6.1	3.9
9	5.6	24	8.4	8.4	13	*58	46	61	13	3.5	5.0	3.5
10	23	20	8.4	8.1	14	47	43	43	11	3.4	4.2	4.3
11	19	22	10	7.5	12	38	42	32	9.1	3.4	4.2	4.1
12	14	26	10	7.5	13	30	33	25	8.3	3.4	4.3	3.3
13	11	25	11	12	126	24	52	26	7.6	3.5	3.6	3.0
14	9.2	22	11	12	287	20	80	20	7.3	3.5	3.5	6.4
15	8.1	28	12	b12	139	18	92	18	6.7	3.7	3.2	5.3
16	8.1	38	15	b12	92	18	68	16	6.7	3.7	3.0	4.0
17	11	45	14	12	80	18	49	16	6.1	4.0	3.0	3.5
18	16	39	15	12	80	18	40	14	5.8	3.3	3.5	3.3
19	24	34	15	b12	68	18	29	13	5.8	3.0	3.7	3.3
20	20	26	14	b12	61	19	25	11	5.1	3.3	3.3	3.3
21	16	22	14	b11	43	18	21	10	4.8	5.0	3.1	3.1
22	12	19	13	b10	33	17	18	9.3	5.0	4.2	3.0	4.7
23	9.2	a19	12	b9	22	34	16	8.6	4.8	3.5	2.9	3.7
24	8.1	19	11	b8	20	205	15	7.8	6.8	3.1	3.0	3.5
25	7.4	19	11	b7	20	a160	14	7.4	6.1	3.0	2.8	3.3
26	7.5	19	10	b7	21	a100	14	7.3	4.7	2.8	2.6	3.2
27	7.0	18	9.5	b6	20	237	17	7.2	4.5	2.7	2.5	3.1
28	49	17	8.8	b6	20	112	18	6.7	5.3	4.7	2.4	3.1
29	52	16	8.1	b6	18	74	18	8.6	8.6	3.1	2.4	5.7
30	35	15	7.5	b6	-	47	18	13	8.6	3.9	2.4	12
31	25	-	7.4	b6	-	43	-	24	-	4.0	2.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	422.0	52	2.8	13.6	1.01	1.16
November	1,244	237	15	41.5	3.07	3.42
December	341.1	15	7.4	11.0	.815	.94
Calendar year	-	-	-	-	-	-
January	278.3	12	6	8.98	.663	.77
February	1,284	287	6	44.3	3.28	3.54
March	1,568	237	14	50.6	3.75	4.32
April	1,017	92	14	33.9	2.51	2.80
May	823.9	105	6.7	26.6	1.97	2.27
June	290.7	33	4.5	9.69	.718	.80
July	118.3	6.7	2.7	3.82	.283	.33
August	146.2	15	2.4	4.72	.350	.40
September	118.5	12	2.4	3.95	.293	.33
Water year 1947-48	7,652.0	287	2.4	20.9	1.55	21.08

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Cowpasture River near Clifton Forge and Jackson River near Falling Spring.

b Stage-discharge relation affected by ice.

Cowpasture River near Clifton Forge, Va.

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

Drainage area.- 456 square miles.

Records available.- May 1907 to August 1908, March 1925 to September 1948.

Average discharge.- 23 years (1925-48), 495 second-feet.

Extremes.- Maximum discharge during year, 7,610 second-feet Feb. 15 (gage height, 9.08 feet); minimum, 83 second-feet Oct. 6; minimum gage height, 1.84 feet Oct. 6, 7.

1907-8, 1925-48: Maximum discharge, 34,200 second-feet Mar. 18, 1936 (gage height, 18.62 feet), from rating curve extended above 13,000 second-feet on basis of records for other stations in James River Basin; minimum, 38 second-feet Sept. 2, 1932 (gage height, 1.70 feet).

Flood in March 1913 reached a stage of 20.8 feet, from floodmarks (discharge, about 45,000 second-feet), from rating curve extended above 13,000 second-feet on basis of records for other stations in James River Basin.

Remarks.- Records good except those for period of ice effect, which are fair. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 952: 1925-41 (maximum only 1925, 1941). W 972: 1913(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	190	291	159	b150	675	2,250	389	608	258	366	126
2	89	168	254	184	b140	603	2,200	438	500	213	420	134
3	87	2,010	236	254	b160	720	1,440	490	389	181	372	116
4	85	2,100	223	265	b180	851	1,090	1,280	342	159	1,060	109
5	85	1,200	213	254	*b250	1,200	879	2,630	310	145	1,200	105
6	85	701	213	240	b400	922	774	2,200	306	187	795	105
7	87	490	210	226	b470	1,760	1,010	2,580	415	283	495	156
8	89	398	196	200	424	3,960	1,800	2,800	415	265	355	165
9	102	338	187	*196	372	2,250	2,520	1,710	338	190	280	159
10	219	287	193	206	342	1,580	1,530	1.200	283	156	230	156
11	230	326	226	187	302	1,200	1,160	886	247	142	203	232
12	168	626	322	171	283	1,010	1,010	707	219	132	193	306
13	145	536	334	226	2,120	809	1,760	830	200	132	272	210
14	132	438	294	346	4,490	675	3,090	795	193	142	244	193
15	122	531	265	332	5,100	603	3,700	603	184	558	193	219
16	119	753	283	302	2,410	574	2,100	510	178	461	178	165
17	122	682	406	346	1,950	638	1,480	461	181	314	162	142
18	132	574	429	314	2,520	597	1,090	433	184	250	154	132
19	137	475	393	250	2,410	547	851	380	174	206	210	124
20	137	415	346	b250	2,520	552	707	330	156	174	233	124
21	129	359	306	b250	1,950	638	620	306	148	178	196	132
22	122	314	276	b230	1,320	638	542	291	140	165	280	145
23	114	294	254	b220	975	1,310	475	280	145	159	314	137
24	112	291	236	b200	760	5,350	429	254	306	162	219	137
25	109	568	213	b190	644	2,970	398	244	406	154	171	126
26	107	781	200	b195	788	1,710	372	272	310	134	156	119
27	105	574	196	b200	1,010	2,960	376	247	283	124	145	112
28	124	452	187	b180	922	3,570	415	236	360	137	134	109
29	244	380	174	b160	802	2,050	480	236	442	148	216	137
30	293	330	162	b150	-	1,400	424	322	310	129	119	258
31	219	-	159	b160	-	1,200	-	372	-	126	126	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,131	283	85	133	0.292	0.34
November	17,581	2,100	168	586	1.29	1.44
December	7,877	429	159	254	.557	.64
Calendar year 1947	144,721	6,120	74	396	.868	11.83
January	7,043	346	150	227	.498	.57
February	36,164	5,100	140	1,247	2.73	2.94
March	45,522	5,350	547	1,468	3.22	3.71
April	36,972	3,700	372	1,232	2.70	3.01
May	24,712	2,800	236	797	1.75	2.02
June	8,667	603	140	289	.634	.71
July	6,164	558	124	199	.436	.50
August	9,601	1,200	119	310	.680	.78
September	4,590	306	105	153	.336	.37
Water year 1947-48	209,024	5,350	85	571	1.25	17.03

Peak discharge (base, 5,000 sec.-ft.).- Feb. 15 (2 a.m.) 7,610 sec.-ft.; Mar. 24 (5:30 p.m.) 5,960 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

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 northwest of Parr, Botetourt County, and 12 miles upstream from mouth. Datum of gage is 992.50 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 331 square miles.

Records available.- April 1925 to September 1948.

Average discharge.- 23 years, 370 second-feet.

Extremes.- Maximum discharge during year, 9,510 second-feet Nov. 3 (gage height, 11.75 feet); minimum, 58 second-feet Sept. 27, 28 (gage height, 3.60 feet).

1925-48: Maximum discharge observed, 16,700 second-feet Jan. 23, 1935 (gage height, 15.85 feet), from rating curve extended above 11,000 second-feet; minimum, 26 second-feet Dec. 23, 1943 (gage height, 3.26 feet), result of low temperature.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 852: 1937. W 892: 1935-36.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

3.6	58	5.0	510	8.0	3,470
3.8	88	5.5	780	9.0	4,950
4.0	122	6.0	1,140	11.0	8,150
4.2	172	6.5	1,620		
4.5	284	7.0	2,180		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	520	244	140	142	379	810	a360	720	a300	a1,100	90
2	91	415	225	161	b150	357	768	a400	570	a200	a900	94
3	83	3,900	214	179	b160	357	648	a500	438	a150	a800	80
4	78	5,430	203	158	*179	335	560	a500	415	a100	a1,500	72
5	74	1,900	199	150	233	301	500	a1,600	379	a180	a3,500	69
6	68	1,060	203	150	565	272	480	a1,300	326	a150	a1,200	75
7	66	774	189	140	665	415	1,660	a2,100	309	a120	a650	172
8	65	632	179	*137	585	1,660	3,870	a1,500	357	a100	a500	252
9	136	530	172	140	525	1,180	a3,000	a1,200	313	a100	a400	166
10	1,840	442	166	140	480	1,020	a2,000	a800	264	a100	a300	122
11	1,320	397	192	137	428	840	a1,500	a640	229	a100	a250	108
12	670	446	236	129	406	698	a1,000	a520	192	a100	233	99
13	600	424	244	155	2,340	575	a850	a1,800	166	a100	203	90
14	510	392	233	352	7,190	500	a800	a1,300	152	a140	164	82
16	397	451	229	348	4,950	446	a1,000	a600	150	a230	142	77
16	330	632	236	326	2,240	428	a950	a500	192	a170	126	74
17	494	621	268	348	1,620	632	a800	a420	335	a230	118	71
18	1,230	535	260	288	1,370	698	a700	a380	264	a170	126	68
19	966	465	260	b270	1,060	600	a600	a350	236	a160	122	65
20	670	446	252	b260	875	570	a530	309	264	a140	113	64
21	485	397	233	b250	720	550	a500	272	217	a130	104	64
22	379	357	225	b250	621	505	a450	252	186	a100	113	64
23	309	335	214	244	545	575	a420	229	284	a90	129	64
24	264	335	203	236	470	2,420	a370	203	276	a80	117	62
25	225	374	189	196	424	2,110	a360	192	214	a70	99	62
26	196	361	179	b190	424	1,230	a350	179	172	a70	98	62
27	175	339	169	b190	433	1,320	a350	166	152	a150	88	58
28	749	313	164	189	424	1,840	a350	164	144	a250	80	58
29	2,600	288	155	172	406	1,230	a350	166	a200	a200	77	a80
30	1,000	264	144	161	-	896	a350	280	a400	a100	75	a100
31	676	-	140	161	-	750	-	570	-	a90	85	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,847	2,600	65	543	1.64	1.89
November	23,795	5,430	264	793	2.40	2.68
December	6,419	268	140	207	.625	.72
Calendar year 1947	139,849	5,430	45	383	1.16	15.70
January	6,347	352	129	205	.619	.71
February	30,630	7,190	142	1,056	3.19	3.44
March	25,889	2,420	272	829	2.50	2.88
April	26,876	3,870	350	896	2.71	3.02
May	19,752	2,100	164	637	1.92	2.21
June	8,516	720	144	284	.858	.96
July	4,370	300	70	141	.426	.49
August	13,310	3,500	75	429	1.30	1.50
September	2,664	252	58	88.8	.268	.30
Water year 1947-48	185,215	7,190	58	506	1.53	20.80

Peak discharge (base, 4,200 sec.-ft.).- Nov. 3 (11 p.m.) 9,510 sec.-ft.; Feb. 14 (10:30 p.m.) 8,150 sec.-ft.; Apr. 8 (11:30 p.m.) 6,710 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Johns Creek at Newcastle and Catawba Creek near Catawba.

b Stage-discharge relation affected by ice.

Meadow Creek at Newcastle, Va.

Location.- Water-stage recorder and sharp-crested weir, lat. 37°29'35", long. 80°06'35", at southern town limits of Newcastle, Craig County, 800 feet upstream from Newcastle-Salem highway bridge and half a mile upstream from mouth. Datum of gage is 1,337.32 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 13.8 square miles.

Records available.- September 1929 to September 1948.

Average discharge.- 17 years (1929-36, 1938-48), 15.0 second-feet.

Extremes.- Maximum discharge during year, 277 second-feet Nov. 3 (gage height, 4.15 feet); minimum, 2.6 second-feet Oct. 4 (gage height, 1.64 feet); minimum daily, 5.0 second-feet Oct. 7.

1929-48: Maximum discharge, 700 second-feet Aug. 16, 1940 (gage height, 4.80 feet), from rating curve extended above 300 second-feet on basis of records for Johns Creek at Newcastle and Craig Creek at Parr; minimum, 0.5 second-foot July 1, 1945 (gage height, 1.27 feet); minimum daily, 1.3 second-feet Sept. 4, 1930.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Diurnal fluctuation at low flow caused by power plant above station.

Revisions (water years).- W 1002: 1938-43.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 3, Apr. 9 to Sept. 30						Nov. 4 to Apr. 8	
1.8	4.2	2.6	22	3.6	132	1.9	5.2
1.9	5.6	2.8	31	3.8	174	2.1	8.2
2.0	7.2	3.0	48	4.0	227	2.3	12
2.2	11	3.2	70			2.5	18
2.4	15	3.4	98				

Note.- Same as preceding table above 2.4 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.7	28	a9	8.6	a7	a15	30	14	28	15	19	10
2	6.9	24	a8	10	a7	a14	26	16	24	13	22	9.0
3	6.6	214	a8	8.4	a7	a14	23	15	24	12	20	8.6
4	5.8	199	a8	8.4	a9	a13	21	16	23	11	70	8.5
5	5.2	109	a8	a8	11	a12	20	33	20	11	127	8.5
6	5.2	84	a8	a8	11	a11	20	28	17	22	64	10
7	5.0	a42	a8	a7	a28	a25	65	82	19	14	41	15
8	5.8	a34	a7	a7	a22	a60	169	63	16	12	28	15
9	35	a25	a7	7.9	a20	a50	182	45	14	11	23	12
10	88	a19	a6	7.4	a18	a40	121	33	13	10	20	11
11	60	a17	a10	6.5	a17	37	78	28	12	9.4	18	10
12	48	a19	10	6.2	a18	30	56	24	12	10	17	9.4
13	45	a17	10	11	a90	26	44	65	12	10	15	8.5
14	33	a17	9.1	a14	a250	24	37	47	11	12	14	8.3
15	25	a22	9.1	a13	a200	22	33	35	11	14	13	8.1
16	24	a25	11	a14	a90	25	30	30	16	12	13	8.1
17	67	a22	10	a12	a70	28	27	26	12	16	13	7.7
18	80	a20	9.1	a11	a50	26	24	22	11	13	12	7.6
19	56	a18	9.1	a11	a45	26	23	20	11	12	12	7.6
20	39	a15	9.1	a11	a35	26	21	17	12	11	11	7.7
21	28	a14	8.9	a10	a30	23	20	16	11	11	29	7.7
22	23	a13	8.9	a10	a25	22	18	15	12	10	21	7.7
23	19	a13	8.9	a10	a20	32	17	14	13	9.4	15	7.7
24	16	a14	8.4	a9	a20	55	16	14	12	9.0	13	7.7
25	15	a14	8.0	a8	a18	53	15	13	11	8.1	12	7.6
26	14	a13	8.0	a8	a18	44	17	13	11	7.9	11	7.0
27	13	a12	7.9	a8	a18	57	17	12	9.6	7.9	10	7.2
28	82	a11	7.7	a8	a18	57	16	12	10	13	10	7.0
29	70	a10	7.4	a7	a16	45	15	16	14	9.4	9.4	13
30	48	a10	7.4	a7	-	37	14	20	21	8.1	9.4	12
31	35	-	7.4	a7	-	33	-	26	-	7.6	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,011.2	88	5.0	32.6	2.36	2.72
November	1,074	214	10	35.8	2.59	2.89
December	262.4	11	6	8.46	.613	.71
Calendar year 1947	6,131.2	214	3.1	16.8	1.22	16.51
January	282.4	14	6.2	9.11	.660	.76
February	1,188	250	7	41.0	2.97	3.20
March	982	60	11	31.7	2.30	2.65
April	1,215	182	14	40.5	2.93	3.27
May	830	82	12	26.8	1.94	2.24
June	442.6	28	9.6	14.8	1.07	1.19
July	351.8	22	7.6	11.3	.819	.94
August	722.8	127	9.4	23.3	1.69	1.95
September	275.2	15	7.0	9.17	.664	.74
Water year 1947-48	8,637.4	250	5.0	23.6	1.71	23.26

Peak discharge (base, 100 sec.-ft.).- Oct. 10 (10 a.m.) 104 sec.-ft.; Oct. 28 (12:30 p.m.) 114 sec.-ft.; Nov. 3 (2:30 p.m.) 277 sec.-ft.; Apr. 8 (8 p.m.) 224 sec.-ft.; Aug. 5 (8 a.m.) 146 sec.-ft.; Aug. 21 (3 p.m.) 132 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Johns Creek at Newcastle and Craig Creek at Parr.

Johns Creek at Newcastle, Va.

Location.- Water-stage recorder, lat. 37°30', long. 80°06', at highway bridge 800 feet northeast of town limits of Newcastle, Craig County, and 1,700 feet upstream from mouth. Datum of gage is 1,254.43 feet above mean sea level, unadjusted.

Drainage area.- 106 square miles.

Records available.- April 1926 to September 1948.

Average discharge.- 22 years, 121 second-feet.

Extremes.- Maximum discharge during year, 3,890 second-feet Feb. 14 (gage height, 9.20 feet); minimum, 16 second-feet Oct. 6, 7; minimum gage height, 2.94 feet Sept. 27, 28.
1926-48: Maximum discharge observed, 8,000 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, 6 second-feet Dec. 5, 1946 (gage height, 2.72 feet); minimum daily, 7 second-feet Aug. 11, Sept. 3, 6, 7, 1930.

Remarks.- Records good except those for periods of ice effect and those below 20 second-feet, which are fair.

Revisions (water years).- W 972: 1935(M), 1936(M), 1940(M).

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 18 to Sept. 30)

2.8	9	3.6	70	5.2	350	7.2	1,380
3.0	18	4.0	120	5.6	496	8.0	2,070
3.2	32	4.4	174	6.0	680	8.5	2,670
3.4	49	4.8	246	6.5	930	9.0	3,490

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	133	70	49	49	115	317	88	98	82	314	31
2	21	112	68	59	b40	115	259	133	69	56	370	25
3	19	1,760	64	52	b45	112	215	164	63	43	184	22
4	18	875	62	47	*b50	103	185	156	62	34	698	20
5	17	426	63	47	147	90	164	530	52	31	1,240	19
6	16	273	63	44	236	84	159	341	44	59	396	24
7	16	203	57	42	213	268	932	705	75	40	222	38
8	18	171	55	*43	179	492	2,110	472	62	32	156	34
9	159	141	52	42	159	389	1,270	326	48	27	117	28
10	326	117	52	40	146	344	575	242	43	25	97	26
11	195	119	77	38	130	270	418	193	38	24	82	26
12	147	137	88	38	146	217	332	161	34	26	70	24
13	132	119	82	83	1,560	177	270	601	32	28	58	22
14	110	108	77	129	3,220	157	253	259	33	32	47	20
15	90	149	74	97	1,170	143	344	190	34	74	40	20
16	84	204	90	120	630	176	300	157	88	54	37	19
17	140	174	94	94	496	326	255	138	107	78	39	18
18	140	153	92	88	429	257	212	117	76	49	40	18
19	123	143	90	84	353	222	184	100	84	37	38	18
20	106	130	82	88	292	212	164	87	75	34	31	19
21	88	114	80	82	230	204	150	77	57	32	37	19
22	75	103	75	80	203	187	134	72	55	28	38	19
23	66	100	72	72	170	450	120	62	68	25	30	19
24	58	104	68	68	146	880	111	57	53	24	30	19
25	52	112	62	b65	138	575	103	54	43	21	30	19
26	48	103	62	b60	145	404	107	52	37	19	26	18
27	45	97	59	b60	140	630	106	51	33	19	23	17
28	674	90	54	62	137	561	107	47	40	82	22	17
29	393	82	53	58	126	389	104	60	59	68	21	31
30	226	76	50	57	-	303	100	67	132	34	20	34
31	168	-	50	54	-	259	-	114	-	27	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,793	674	16	122	1.15	1.33
November	6,628	1,760	76	221	2.08	2.32
December	2,136	94	50	68.9	.650	.75
Calendar year 1947	42,310	1,760	11	116	1.09	14.84
January	2,042	129	38	65.9	.622	.72
February	11,125	3,220	40	384	3.62	3.90
March	9,111	880	84	294	2.77	3.19
April	10,060	2,110	100	335	3.16	3.53
May	5,874	705	47	189	1.78	2.05
June	1,794	132	32	59.8	.564	.63
July	1,244	82	19	40.1	.378	.44
August	4,578	1,240	20	148	1.40	1.61
September	683	38	17	22.8	.215	.24
Water year 1947-48	59,068	3,220	16	161	1.52	20.71

Peak discharge (base, 2,100 sec.-ft.).- Nov. 3 (12 m.) 2,470 sec.-ft.; Feb. 14 (12 m.) 3,890 sec.-ft.; Apr. 8 (7 p.m.) 2,970 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Catawba Creek near Catawba, Va.

Location.- Vertical staff gage, lat. 37°28'05", long. 80°00'20", at highway bridge, 1 mile downstream from Little Catawba Creek, 1½ miles upstream from Stone Cool Creek, and 8¼ miles northeast of Catawba, Roanoke County. Datum of gage is 1,299.96 feet above mean sea level, datum of 1929.

Drainage area.- 34 square miles.

Records available.- September 1943 to September 1948.

Extremes.- Maximum discharge observed during year, 1,330 second-feet Nov. 3 (gage height, 3.90 feet); minimum observed, 7.4 second-feet Sept. 26-28 (gage height, 0.76 foot).

1943-48: Maximum discharge observed, that of Nov. 3, 1947; minimum observed, 2.2 second-feet Sept. 7, 8, 9, 10, 11, 1944 (gage height, 0.54 foot).

Flood of August 1940 reached a stage of 13.26 feet, from information by observer.

Remarks.- Records good except those for period of ice effect, which are fair. Gage read twice daily.

Rating table, water year 1947-48, except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.7	5.5	1.2	42	2.3	340
.8	8.6	1.3	57	2.7	510
.9	13	1.5	95	3.1	730
1.0	24	1.7	145	3.6	1,080
1.1	31	1.9	205		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	51	27	16	b14	34	142	30	28	24	35	12
2	12	42	27	23	b14	34	105	41	24	23	23	10
3	11	1,080	25	17	b15	32	79	32	25	21	14	9.5
4	11	322	24	15	*17	30	70	31	24	20	110	8.6
5	10	160	26	15	26	31	59	89	24	13	132	8.6
6	10	110	25	15	31	32	57	57	22	23	50	11
7	9.5	81	25	*13	40	108	252	160	31	23	31	15
8	11	66	25	13	39	130	560	105	24	17	29	21
9	440	56	24	13	38	105	252	71	23	13	24	13
10	400	45	26	13	31	77	154	56	21	13	22	15
11	175	71	26	13	30	62	128	48	18	13	20	14
12	130	56	23	13	38	52	93	42	17	13	22	11
13	118	45	22	32	610	45	77	160	17	13	20	10
14	83	40	20	31	670	41	73	79	17	21	16	9.5
15	61	61	24	30	235	39	66	61	16	24	13	8.6
16	73	51	24	30	172	45	59	51	36	24	17	8.6
17	305	44	22	25	166	52	52	44	24	35	13	8.6
18	340	41	20	24	151	42	45	39	61	23	17	8.3
19	205	41	20	25	126	42	41	33	95	20	22	8.0
20	110	36	20	25	100	42	39	30	45	17	20	8.0
21	79	32	18	24	71	39	38	29	32	14	21	8.0
22	61	31	17	22	68	36	38	28	41	14	16	8.0
23	50	30	17	22	57	135	34	27	32	13	12	8.0
24	41	34	17	24	51	187	31	25	30	12	11	8.0
25	38	31	17	b20	44	115	39	24	28	11	10	8.0
26	33	30	17	b18	50	93	35	26	24	11	10	7.4
27	31	28	15	b16	42	190	33	24	31	11	9.5	7.4
28	172	27	15	b14	41	135	32	23	28	17	8.6	7.4
29	125	27	15	b15	39	105	31	24	35	13	8.6	34
30	81	27	15	b15	-	89	30	26	28	12	8.6	28
31	61	-	15	b15	-	95	-	30	-	12	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mi	Runoff in inches
October	3,299.5	440	9.5	106	3.12	3.60
November	2,796	1,080	27	93.2	2.74	3.06
December	653	27	15	21.1	.621	.72
Calendar year 1947	17,423.0	1,080	5.0	47.7	1.40	19.04
January	606	32	13	19.5	.574	.86
February	3,028	670	14	104	3.06	3.30
March	2,296	190	30	74.1	2.18	2.51
April	2,735	560	30	91.2	2.68	2.99
May	1,545	160	23	49.8	1.46	1.68
June	901	95	16	30.0	.882	.98
July	533	35	11	17.2	.506	.58
August	775.3	132	8.6	25.0	.735	.85
September	342.5	34	7.4	11.4	.335	.37
Water year 1947-48	19,510.3	1,080	7.4	53.3	1.57	21.30

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Calfpasture River above Mill Creek, at Goshen, Va.

Location.- Water-stage recorder and concrete control, lat. 37°59'15", long. 79°29'40", at highway bridge at Goshen, Rockbridge County, 400 feet upstream from Mill Creek. Datum of gage is 1,384.84 feet above mean sea level, datum of 1929, Parkersburg Uniontown supplementary adjustment of 1944.

Drainage area.- 147 square miles.

Records available.- January 1939 to September 1948. March 1925 to December 1938 at site 500 feet downstream from Mill Creek; records not equivalent.

Extremes.- Maximum discharge during year, 3,910 second-feet Feb. 14 (gage height, 7.00 feet); minimum, 8.5 second-feet Oct. 7 (gage height, 1.71 feet).

1939-48: Maximum discharge, 10,200 second-feet May 16, 1942 (gage height, 10.38 feet); minimum, 1.8 second-feet Oct. 9, 1941 (gage height, 1.22 feet).

Remarks.- Records good except those between 10 and 30 second-feet and those for periods of doubtful or no gage-height record, which are fair, and those below 10 second-feet, which are poor. Discharge given herein includes diversion 50 feet above control by Stillwater Worsted Mill.

Revisions (water years).- W 972: 1936(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 13

1.7	8.3	2.2	25	2.8	88
1.8	10	2.4	38	3.0	136
1.9	13	2.5	46	3.1	168
2.0	17	2.6	56	3.3	260

Note.- Same as following table above 3.3 feet.

Feb. 14 to Sept. 30

1.8	10	2.5	51	4.0	660
1.9	13	2.6	65	4.5	1,020
2.0	17	2.8	102	5.0	1,480
2.2	25	3.0	150	6.0	2,600
2.3	31	3.2	220	7.0	3,910
2.4	40	3.5	368		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	26	81	40	d40	178	1,480	196	102	67	46	17
2	10	25	70	53	d42	174	860	182	142	49	79	15
3	9.8	89	64	64	d42	192	526	302	114	40	77	15
4	9.8	692	59	79	d44	546	368	474	94	34	139	13
5	9.6	336	55	84	d60	610	282	1,030	75	36	228	12
6	9.2	176	52	84	d70	435	244	750	65	58	185	12
7	8.7	118	48	79	d70	634	252	770	96	55	130	19
8	9.4	97	45	79	d70	a1,100	573	825	86	38	100	21
9	14	81	43	70	d70	a740	757	550	70	29	77	21
10	23	67	41	67	d70	a500	503	385	61	25	62	23
11	18	67	46	59	d70	a370	379	276	52	23	51	62
12	15	134	50	56	d70	a300	309	213	46	20	57	62
13	14	158	50	67	d80	a250	654	325	40	24	67	44
14	12	133	48	110	2,870	228	988	346	36	71	54	36
15	11	120	50	99	1,520	192	980	260	33	94	44	29
16	12	133	67	97	711	168	648	210	36	64	35	24
17	14	142	115	88	580	174	463	185	40	57	30	22
18	13	149	133	62	648	154	325	150	33	43	34	20
19	13	126	123	d55	617	145	244	130	29	36	30	19
20	12	106	106	d65	648	154	202	111	25	38	29	20
21	12	92	92	d70	492	164	174	98	22	33	34	19
22	12	81	83	d70	363	171	150	90	27	30	111	21
23	12	74	75	d60	260	236	135	79	46	34	80	19
24	12	74	67	d50	210	1,110	120	68	65	37	55	17
25	12	157	60	d55	182	860	111	64	86	31	41	16
26	12	215	55	d60	213	509	102	57	72	26	33	15
27	12	165	52	d60	240	897	148	51	77	23	31	13
28	13	131	49	d55	236	1,220	232	47	174	24	24	12
29	28	110	44	d50	210	629	271	47	111	23	22	15
30	25	95	41	d45	-	435	228	49	92	21	19	28
31	26	-	39	d45	-	390	-	68	-	21	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	423.5	28	8.7	13.7	0.093	0.11
November	4,169	692	25	139	.946	1.06
December	2,003	133	39	64.6	.439	.51
Calendar year 1947	43,861.8	2,180	7.2	120	.816	11.12
January	2,077	110	40	67.0	.456	.53
February	10,798	2,870	40	372	2.53	2.73
March	13,865	1,220	145	447	3.04	3.50
April	12,708	1,480	102	424	2.88	3.21
May	8,388	1,030	47	271	1.84	2.12
June	2,047	174	22	68.2	.464	.52
July	1,204	94	20	38.8	.264	.30
August	2,022	228	18	65.2	.444	.51
September	681	62	12	22.7	.154	.17
Water year 1947-48	60,385.5	2,870	8.7	165	1.12	15.27

Peak discharge (base, 2,500 sec.-ft.).- Feb. 14 (3 p.m.) 3,910 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Maury River at Rockbridge Baths.

d Doubtful gage-height record; discharge computed on basis of weather records and records for Maury River at Rockbridge Baths.

Maury 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. Datum of gage is 1,100.33 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 329 square miles.

Records available.- October 1928 to September 1948 (prior to October 1945, published as North River at Rockbridge Baths.

Average discharge.- 19 years (1929-48), 338 second-feet.

Extremes.- Maximum discharge during year, 7,280 second-feet Feb. 14 (gage height, 7.75 feet); minimum, 28 second-feet Oct. 6-8 (gage height, 1.14 feet).
1928-48: Maximum discharge, 33,000 second-feet Mar. 17, 1936 (gage height, 13.07 feet), from rating curve extended above 16,000 second-feet by logarithmic plotting; minimum, 11 second-feet Nov. 28, 1930 (gage height, 0.76 foot).

Remarks.- Records good except those for periods of ice effect, which are fair.

Revisions (water years).- W 972: 1929-40, 1941(M). W 1002: 1930(m).

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.1	24	1.8	170	4.0	1,400
1.2	35	2.0	240	5.0	2,370
1.3	50	2.5	450	6.0	3,650
1.4	68	3.0	720	7.0	5,500
1.6	112	3.5	1,030		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	63	170	100	89	372	3,110	415	233	170	496	46
2	31	59	152	149	b90	380	1,850	392	256	123	540	41
3	31	388	140	155	*b90	460	1,170	499	211	98	320	38
4	31	1,170	129	161	100	845	840	465	184	85	774	35
5	30	630	129	170	140	900	696	1,840	152	81	840	34
6	30	380	126	*164	161	678	612	1,320	132	173	525	34
7	28	272	112	152	152	1,860	672	1,500	240	170	352	70
8	31	222	107	143	170	2,600	1,290	1,540	204	120	256	66
9	41	187	100	146	158	1,360	1,620	1,030	155	94	194	59
10	100	155	98	140	140	995	1,030	744	134	79	155	74
11	78	187	123	120	152	774	840	565	115	69	129	112
12	61	360	146	112	155	624	708	460	100	61	129	105
13	55	356	146	170	831	510	1,580	836	89	59	126	78
14	48	296	129	292	5,500	440	1,950	810	85	249	110	66
15	44	316	126	215	3,100	392	1,850	624	81	440	94	68
16	44	415	204	244	1,580	410	1,240	510	132	222	81	57
17	50	376	284	236	1,360	440	930	450	120	187	72	50
18	47	352	300	194	1,440	372	702	368	91	133	94	46
19	44	308	276	146	1,320	368	570	304	81	107	91	42
20	42	264	233	152	1,240	388	490	252	68	112	83	47
21	40	218	204	177	930	388	420	222	59	119	74	47
22	40	190	184	161	738	384	368	204	57	107	154	55
23	36	177	173	146	560	960	324	173	105	87	140	54
24	36	184	152	100	450	2,850	288	155	190	87	105	46
25	35	324	134	b100	440	1,670	264	149	248	79	85	42
26	35	392	134	b150	535	1,100	244	137	149	63	72	41
27	35	332	123	149	525	2,120	360	132	167	59	63	38
28	52	272	120	120	490	2,320	556	118	348	73	57	35
29	83	226	107	107	425	1,320	618	123	272	87	50	42
30	74	197	94	100	-	930	500	187	236	64	46	103
31	64	-	94	96	-	1,150	-	272	-	61	46	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,429	100	28	46.1	0.140	0.16
November	9,268	1,170	59	309	.939	1.05
December	4,749	300	94	153	.465	.54
Calendar year 1947	93,026	4,530	26	255	.775	10.52
January	4,767	292	96	154	.468	.54
February	23,061	5,500	89	795	2.42	2.61
March	30,360	2,850	368	979	2.98	3.44
April	27,692	3,110	244	923	2.81	3.14
May	16,796	1,840	118	542	1.65	1.90
June	4,694	348	57	156	.474	.53
July	3,698	440	59	119	.362	.42
August	6,353	840	46	205	.623	.72
September	1,671	112	34	55.7	.169	.19
Water year 1947-48	134,538	5,500	28	368	1.12	15.24

Peak discharge (base, 4,500 sec.-ft.).- Feb. 14 (3 p.m.) 7,280 sec.-ft.
* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Maury 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. Datum of gage is 906.56 feet above mean sea level (levels by Corps of Engineers).
Drainage area.- 487 square miles.
Records available.- August 1925 to September 1948 (prior to October 1945, published as North River near Lexington).
Average discharge.- 20 years (1928-48), 482 second-feet.
Extremes.- Maximum discharge during year, 8,630 second-feet Feb. 14 (gage height, 10.80 feet); minimum, 69 second-feet Oct. 7, 8 (gage height, 2.06 feet).
1925-48: Maximum discharge, 40,000 second-feet Mar. 18, 1936 (gage height, 23.58 feet, from floodmarks), from rating curve extended above 9,000 second-feet by logarithmic plotting and on basis of records for other stations in James River Basin; minimum, 34 second-feet Sept. 6, 1930, Sept. 18, 1932.
Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair.
Revisions (water years).- W 952: 1936(M). W 972: 1936.

Rating table, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 28 to Sept. 30)

2.0	61	3.0	336	7.0	3,360
2.1	75	3.4	510	8.5	5,280
2.2	92	4.0	815	10.0	7,400
2.4	138	5.0	1,460		
2.7	228	6.0	2,280		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	113	242	a160	133	501	4,230	595	360	298	1,230	138
2	77	109	218	a200	*155	496	2,680	575	372	228	1,250	126
3	75	484	209	a220	146	580	1,710	595	336	193	685	120
4	75	1,420	196	a230	160	1,110	1,320	900	306	169	1,890	120
5	74	842	190	*a230	202	1,120	1,060	2,010	266	152	1,680	116
6	72	520	190	228	228	842	960	1,680	235	222	1,060	118
7	71	368	178	212	231	1,830	1,090	1,750	352	255	735	172
8	72	309	166	199	242	3,480	1,740	1,880	336	212	560	181
9	92	266	163	209	235	1,920	2,240	1,360	269	166	440	152
10	175	228	a155	196	242	1,390	1,530	1,020	238	146	368	175
11	160	248	a180	175	222	1,090	1,250	788	212	133	336	225
12	133	458	a200	169	218	900	1,090	660	196	126	328	222
13	118	463	a210	231	1,070	735	1,970	1,150	181	126	298	178
14	109	397	a200	405	6,680	635	2,330	1,150	178	479	273	155
15	102	418	a190	306	4,230	575	2,330	900	169	750	242	155
16	102	580	a230	328	2,240	565	1,680	760	215	389	218	144
17	107	525	a310	328	1,830	640	1,320	685	222	306	206	128
18	109	482	a400	273	1,880	545	1,020	575	184	245	209	123
19	102	422	a360	206	1,640	515	870	477	166	202	321	118
20	98	372	a330	218	1,560	530	760	414	152	218	222	126
21	89	313	a300	255	1,250	540	660	372	138	262	196	128
22	89	280	a270	235	990	525	580	348	146	209	235	146
23	85	259	a250	222	788	952	510	309	238	181	298	138
24	84	262	a230	187	650	3,360	468	280	321	175	228	126
25	82	372	a210	b150	600	2,240	432	329	368	160	196	120
26	82	491	a200	b210	685	1,500	405	280	273	144	175	113
27	82	427	a190	b190	685	2,420	501	255	262	136	158	111
28	98	360	a170	b170	660	3,090	701	238	458	172	152	109
29	141	309	a160	160	585	1,790	842	235	468	262	144	128
30	138	273	a150	160	-	1,320	710	336	380	166	138	222
31	120	-	a140	136	-	1,600	-	418	-	149	141	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,093	175	71	99.8	0.205	0.24
November	12,370	1,420	109	412	.846	.94
December	6,787	400	140	219	.450	.52
Calendar year 1947	131,840	5,040	71	361	.741	10.07
January	6,798	405	136	219	.450	.52
February	30,437	6,680	133	1,050	2.16	2.33
March	39,336	3,480	496	1,269	2.61	3.01
April	38,989	4,230	405	1,300	2.67	2.98
May	23,324	2,010	235	752	1.54	1.78
June	7,997	468	138	267	.548	.61
July	7,031	750	126	227	.466	.54
August	14,612	1,890	138	471	.967	1.11
September	4,333	225	109	144	.296	.33
Water year 1947-48	195,107	6,680	71	533	1.09	14.91

Peak discharge (base, 5,000 sec.-ft.).- Feb. 14 (5:30 p.m.) 8,630 sec.-ft.
* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for stations at Rockbridge Baths and near Buena Vista.
b Stage-discharge relation affected by ice.

Maury River near Buena Vista, Va.

Location.- Water-stage recorder, lat. 37°45'45", long. 79°23'30", half a mile downstream from South River and 2½ miles northwest of Buena Vista, Rockbridge County. Datum of gage is 846.58 feet above mean sea level, datum of 1929.

Drainage area.- 649 square miles.

Records available.- March 1939 to September 1948 (prior to October 1945, published as North River near Buena Vista).

Extremes.- Maximum discharge during year, 10,700 second-feet Feb. 14 (gage height, 11.54 feet); minimum, 92 second-feet Oct. 7 (gage height, 1.80 feet).

1939-48: Maximum discharge, 21,700 second-feet May 22, 1942 (gage height, 16.00 feet); minimum, 20 second-feet Oct. 10, 1941 (gage height, 1.23 feet), occurred during filling of a small reservoir 2 miles upstream.

Flood of Mar. 18, 1936, reached a stage of about 22 feet, from information by local residents.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Records of chemical analyses for the water year 1948 are given in Water Supply Paper 1132.

Revisions (water years).- W 952: 1940-41.

Rating table, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-23, Aug. 23 to Sept. 30)

1.7	81	3.3	603	6.0	2,460
2.0	140	4.0	960	7.0	3,560
2.3	217	4.5	1,240	8.5	5,560
2.7	349	5.0	1,580	10.5	8,840

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	167	327	a220	b210	674	6,010	798	544	420	3,420	241
2	107	162	299	a270	b210	674	3,800	798	522	320	2,400	226
3	105	628	a280	a280	b220	747	2,460	798	492	273	1,180	212
4	101	1,740	a270	a300	232	905	1,780	1,100	449	241	4,990	204
5	101	1,070	a250	*a295	*286	1,280	1,440	2,510	403	223	3,200	201
6	99	698	a240	296	331	1,020	1,310	2,120	360	247	1,780	201
7	97	517	a235	282	342	2,150	1,660	2,170	474	324	1,220	250
8	101	453	a232	269	345	4,050	2,560	2,360	509	286	960	286
9	110	395	229	263	342	2,360	2,980	1,700	403	232	798	247
10	174	338	226	263	303	1,700	2,080	1,280	357	206	698	247
11	212	395	273	238	317	1,310	1,660	1,040	324	190	603	303
12	180	626	286	229	317	1,120	1,480	878	296	180	580	296
13	154	626	296	408	1,490	932	2,460	1,640	279	174	517	266
14	140	539	282	626	8,300	851	2,870	1,700	266	473	474	232
15	131	603	269	496	5,410	772	2,870	1,280	263	798	420	220
16	133	722	360	474	2,870	747	2,080	1,070	306	522	379	214
17	142	650	a440	492	2,360	824	1,620	960	320	379	357	195
18	206	603	a540	424	2,360	722	1,280	824	282	320	338	187
19	193	553	a490	327	2,040	698	1,100	722	257	273	441	182
20	164	492	a430	320	1,900	698	988	626	238	342	376	182
21	152	428	a400	364	1,510	698	905	580	217	391	335	185
22	140	383	a350	349	1,220	698	798	539	214	327	349	206
23	131	364	a320	327	1,020	1,180	747	487	378	266	470	204
24	133	368	a290	266	851	4,050	674	445	432	241	403	187
25	129	470	a270	220	798	2,870	650	445	479	223	327	174
26	127	603	a270	286	878	1,900	603	526	399	201	293	167
27	125	535	a250	299	878	2,980	674	416	349	185	276	162
28	142	462	a230	269	824	3,800	905	383	479	214	257	154
29	182	403	a210	244	772	2,310	1,040	376	626	320	244	185
30	195	368	a200	235	-	1,660	905	500	535	226	238	320
31	177	-	a200	217	-	2,350	-	626	-	232	247	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,395	212	97	142	0.219	0.25
November	16,361	1,740	162	545	.840	.94
December	9,244	540	200	298	.459	.53
Calendar year 1947	180,227	6,010	97	494	.761	10.33
January	9,848	626	217	318	.490	.56
February	38,936	8,300	210	1,343	2.07	2.23
March	48,730	4,050	674	1,572	2.42	2.79
April	52,389	6,010	603	1,746	2.69	3.00
May	31,697	2,510	376	1,022	1.57	1.81
June	11,452	626	214	382	.589	.66
July	9,249	798	174	298	.459	.53
August	28,570	4,990	238	922	1.42	1.64
September	6,536	320	154	218	.336	.37
Water year 1947-48	267,407	8,300	97	731	1.13	15.31

Peak discharge (base, 6,200 sec.-ft.).- Feb. 14 (5 p.m.) 10,700 sec.-ft.; Apr. 1 (8:30 a.m.) 6,950 sec.-ft.; Aug. 1 (5 p.m.) 7,780 sec.-ft.; Aug. 4 (2 p.m.) 7,110 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage and records for station near Lexington.

b Stage-discharge relation affected by ice.

Kerrs Creek near Lexington, Va.

Location.- Wire-weight gage, lat. 37°49'33", long. 79°26'28", at highway bridge 1¼ miles upstream from mouth and 2½ miles north of Lexington, Rockbridge County. Datum of gage is 972.04 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 34 square miles.

Records available.- January 1927 to September 1948 (fragmentary prior to August 1930).

Average discharge.- 18 years (1930-48), 35.8 second-feet.

Extremes.- Maximum discharge observed during year, 2,740 second-feet Feb. 13 (gage height, 9.17 feet); minimum observed, 10 second-feet Oct. 4, 5, 6, 7 (gage height, 4.17 feet).

1927-48: Maximum discharge, 7,600 second-feet Mar. 17, 1936 (gage height, 12.82 feet, from floodmarks), from rating curve extended above 800 second-feet by logarithmic plotting, and on basis of records for other stations in James River Basin; minimum, 4 second-feet on many days in August and September 1932 and on Sept. 12, 1934,-July 17, Nov. 21, 1938.

Remarks.- Records fair except those for periods of ice effect, which are poor. Gage read twice daily.

Revisions (water years).- W 972: 1927-33 (maximum only, 1930-33), 1936-39. W 1052: 1940.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	17	17	16	b13	38	200	30	31	36	214	14
2	11	17	16	18	*b13	113	125	37	29	25	82	15
3	12	133	15	17	b14	40	85	31	27	24	55	14
4	11	89	14	18	14	38	71	29	27	21	405	14
5	11	47	14	*16	30	34	63	108	25	19	219	13
6	11	40	13	16	26	31	58	60	40	20	84	14
7	11	36	14	16	24	276	96	135	30	20	63	18
8	11	27	14	16	23	135	260	82	25	18	45	18
9	17	24	13	14	23	*99	137	63	23	17	36	17
10	30	18	14	14	26	89	79	51	20	15	33	24
11	25	44	21	14	24	87	76	42	17	14	31	19
12	20	40	22	14	22	56	59	40	16	14	28	14
13	18	32	20	26	1,910	47	115	127	17	14	24	14
14	17	28	18	30	820	42	89	89	15	26	24	14
15	17	68	17	26	186	40	82	60	15	47	20	14
16	18	62	40	24	113	45	71	47	22	31	20	14
17	20	44	27	24	108	50	65	44	22	25	18	14
18	18	41	25	23	97	47	62	38	17	20	20	14
19	18	31	24	24	85	47	48	36	17	18	21	13
20	17	28	22	19	69	48	42	33	14	15	18	12
21	18	25	21	19	60	41	38	29	14	15	18	12
22	18	24	19	18	52	38	38	27	16	14	18	14
23	15	19	18	16	47	168	38	25	20	17	17	13
24	17	22	18	16	45	555	36	25	24	17	18	12
25	17	24	18	b17	42	99	33	24	25	16	15	12
26	17	23	17	b18	44	79	31	30	27	14	15	13
27	17	21	15	b18	45	260	33	27	31	17	17	12
28	31	21	13	17	42	115	29	26	48	17	15	12
29	20	21	14	14	40	94	24	25	113	15	14	13
30	18	21	13	14	-	72	29	31	92	14	14	14
31	17	-	13	b13	-	940	-	38	-	15	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	530	31	11	17.1	0.503	0.58
November	1,087	133	17	36.2	1.06	1.18
December	559	40	13	18.0	.529	.61
Calendar year 1947	9,652.4	655	7.2	26.4	.776	10.56
January	565	30	13	18.2	.535	.62
February	4,057	1,910	13	140	4.12	4.44
March	3,863	940	31	125	3.68	4.24
April	2,212	260	24	73.7	2.17	2.42
May	1,489	135	24	48.0	1.41	1.63
June	859	113	14	28.6	.841	.94
July	610	47	14	19.7	.579	.67
August	1,546	405	14	49.9	1.47	1.70
September	430	24	12	14.3	.421	.47
Water year 1947-48	17,807	1,910	11	48.7	1.43	19.50

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Pedlar River near Pedlar Mills, Va.

Location.- Water-stage recorder, lat. 37°32'35", long. 79°15'10", at highway bridge, 1 mile south of Pedlar Mills, Amherst County, 1.7 miles downstream from Horsley Mill Creek, and 3.7 miles upstream from mouth.

Drainage area.- 91 square miles.

Records available.- July 1942 to September 1948.

Extremes.- Maximum discharge during year, 4,860 second-feet Apr. 1 (gage height, 9.84 feet); minimum, 10 second-feet Oct. 5-8 (gage height, 2.07 feet).

1942-48: Maximum discharge, 11,200 second-feet Aug. 8, 1942 (gage height, 14.1 feet, from floodmark in gage well), from rating curve extended above 1,800 second-feet by logarithmic plotting; minimum, 2.3 second-feet Sept. 8, 1944 (gage height, 1.83 feet).

Remarks.- Records fair except those for periods of ice effect or doubtful or no gage-height record, which are poor. Diversion above station for municipal supply of city of Lynchburg.

Cooperation.- Records of monthly diversions and change in contents of Lynchburg Reservoir furnished by city of Lynchburg.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-9, Dec. 30 to Jan. 13)

Oct. 1-10				Oct. 11 to Sept. 30					
2.0	9	2.4	41	2.2	19	2.6	66	3.6	326
2.1	14	2.5	54	2.3	27	2.7	85	4.5	738
2.2	21	2.6	70	2.4	37	2.9	127	5.5	1,220
2.3	30	2.7	89	2.5	50	3.3	227	6.8	1,960

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	35	58	36	54	91	1,950	a120	a110	a60	424	30
2	11	32	53	56	56	99	d980	a130	a110	a50	378	27
3	11	171	50	40	53	97	d400	a120	a90	a40	240	25
4	11	175	49	36	56	91	d300	a110	a90	a40	1,890	24
5	11	118	49	34	103	79	d250	a240	a90	a35	808	23
6	10	91	47	32	93	76	d220	a170	a90	a40	346	44
7	10	72	44	31	83	332	d280	a280	a370	a45	219	116
8	12	129	44	28	76	308	d240	a250	a130	32	168	95
9	27	99	40	31	66	203	d250	a210	a110	28	132	47
10	89	79	42	30	68	168	d230	a180	a100	27	112	40
11	76	142	53	25	*58	143	d200	a160	a90	25	95	45
12	58	178	50	*26	78	123	d200	a130	a80	26	95	35
13	45	125	44	410	517	109	d350	a310	a70	26	79	31
14	37	101	41	269	1,170	101	d290	a350	a70	30	68	29
15	31	134	40	138	668	95	d250	a250	a70	44	63	31
16	34	143	105	118	367	105	d230	a200	a90	38	58	25
17	92	116	89	97	304	118	d210	a180	a90	46	53	25
18	165	97	76	79	296	99	d190	a160	a80	32	50	23
19	87	91	66	55	247	99	d170	a140	a70	27	90	24
20	61	83	56	60	208	101	d160	132	a60	30	72	24
21	47	72	53	76	170	97	d150	a130	a50	40	50	25
22	41	66	49	74	150	95	d140	a120	a50	49	81	29
23	35	70	46	61	129	462	d120	a110	a60	32	50	31
24	31	95	44	47	116	1,070	d110	a100	a70	26	42	25
25	29	148	40	b50	118	452	d110	a100	a70	23	38	24
26	27	114	40	b55	127	282	d110	a100	a60	21	35	22
27	26	95	37	b55	116	644	d110	a100	a60	21	33	21
28	45	81	37	b60	112	402	d130	a100	a50	34	30	21
29	63	72	33	52	99	282	d120	a130	a40	35	27	84
30	44	64	30	50	-	227	a110	a120	a60	26	32	266
31	38	-	31	42	-	858	-	a130	-	180	32	-

Month	Observed				Diversion and change in contents (equivalent, second-feet)†	Adjusted		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	1,316	165	10	42.5	-13.0	55.5	0.610	0.70
November	3,088	178	32	103	-12.4	115	1.26	1.41
December	1,536	105	30	49.5	-12.2	61.7	.678	.78
Calendar year 1947	28,301.8	762	7.0	77.5	-12.7	90.2	.991	13.46
January	2,253	410	25	72.7	-12.1	84.8	.932	1.07
February	5,758	1,170	53	199	-12.1	211	2.32	2.50
March	7,508	1,070	76	242	-12.1	254	2.79	3.22
April	8,560	1,950	110	285	-12.2	297	3.26	3.64
May	5,062	350	100	163	-12.6	176	1.93	2.22
June	2,630	370	40	87.7	-14.1	102	1.12	1.25
July	1,208	180	21	39.0	-14.0	53.0	.582	.67
August	5,890	1,890	27	190	-13.9	204	2.24	2.58
September	1,311	266	21	43.7	-13.6	57.3	.630	.70
Water year 1947-48	46,120	1,950	10	126	-12.9	139	1.53	20.74

Peak discharge (base, 1,300 sec.-ft.).- Feb. 14 (1 p.m.) 1,600 sec.-ft.; Mar. 24 (5:30 a.m.) 1,780 sec.-ft.; Mar. 27 (10 a.m.) 1,370 sec.-ft.; Apr. 1 (12:30 a.m.) 4,860 sec.-ft.; Aug. 4 (3:30 p.m.) 2,820 sec.-ft.

* Winter discharge measurement made on this day.

† Diversion for municipal supply of Lynchburg and change in contents of Lynchburg Reservoir.

a No gage-height record; discharge computed on basis of records for Pedlar River at Lynchburg Reservoir and Tye River near Lovingston.

b Stage-discharge relation affected by ice.

d Doubtful gage-height record; discharge computed on basis of records for Pedlar River at Lynchburg Reservoir and Tye River near Lovingston.

Buffalo River near Norwood, Va.

Location.- Water-stage recorder, lat. 37°38', long. 78°53', 1 mile downstream from Tye River, 3 miles upstream from Rucker Run, and 4½ miles upstream from mouth and Norwood, Nelson County. Datum of gage is 400.78 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 360 square miles.

Records available.- March 1940 to September 1948.

Extremes.- Maximum discharge during year, 14,600 second-feet Aug. 4 (gage height, 10.78 feet); minimum, 118 second-feet Oct. 7, 8 (gage height, 2.17 feet).

1940-48: Maximum discharge, 33,500 second-feet Oct. 15, 1942, Sept. 19, 1944 (gage height, 18.1 feet, from floodmarks), from rating curve extended above 13,000 second-feet by logarithmic plotting; minimum, 30 second-feet Oct. 10, 1941 (gage height, 1.64 feet).

Remarks.- Records good except those for periods of ice effect or doubtful gage-height record, which are fair.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 2-18)

2.1	103	2.7	390	5.0	3,250
2.2	133	3.0	630	6.5	5,730
2.3	168	3.3	910	8.0	8,570
2.4	210	3.6	1,250		
2.5	260	4.1	1,900		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	302	405	255	b310	505	8,090	570	529	250	1,230	197
2	140	290	383	362	b320	570	3,150	675	481	202	1,350	181
3	136	626	369	278	b330	d580	2,110	613	450	189	1,680	172
4	130	976	348	260	b350	d460	1,630	588	442	181	8,550	168
5	127	792	341	255	b400	d440	1,350	1,510	420	168	3,410	164
6	121	675	334	245	b450	420	1,180	998	390	176	1,700	176
7	118	562	308	240	b360	1,050	1,230	2,180	529	168	1,170	398
8	118	976	302	230	355	1,130	1,260	1,580	435	168	890	376
9	144	684	284	*240	355	932	1,130	1,260	376	164	738	278
10	341	570	284	230	390	850	998	1,060	362	158	639	240
11	272	848	334	210	*314	756	943	910	348	154	562	260
12	327	1,100	302	220	334	693	910	830	341	161	529	210
13	348	860	284	1,650	1,220	648	1,320	2,110	320	158	450	197
14	320	747	272	1,110	2,860	596	1,020	1,530	308	780	405	185
15	290	792	272	666	2,260	579	1,040	1,140	320	728	369	197
16	314	783	513	588	1,540	588	943	998	362	278	334	176
17	369	657	412	529	1,270	702	880	965	320	348	320	161
18	1,040	596	369	481	1,130	588	810	830	278	235	302	161
19	720	570	348	376	976	562	765	738	278	210	302	158
20	579	537	334	412	880	596	729	675	250	450	355	158
21	481	489	314	450	792	579	693	648	235	477	334	158
22	412	458	308	420	756	562	648	613	250	334	320	176
23	362	473	296	376	702	1,370	613	562	290	245	284	168
24	320	665	284	250	675	2,560	596	521	327	206	266	154
25	290	801	278	b230	684	1,630	570	513	284	181	250	147
26	272	648	272	b240	702	1,310	562	521	235	168	230	147
27	255	579	260	b240	666	2,260	562	505	245	168	220	147
28	350	529	255	b300	613	1,760	774	481	220	202	206	150
29	412	481	240	308	529	1,350	657	497	206	225	197	330
30	341	450	235	302	-	1,150	613	588	230	176	189	1,250
31	320	-	240	296	-	2,070	-	666	-	168	189	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,919	1,040	118	320	0.889	1.02
November	19,516	1,100	290	651	1.81	2.02
December	9,780	513	235	315	.875	1.01
Calendar year 1947	159,048	1,780	98	436	1.21	16.44
January	12,249	1,650	210	395	1.10	1.27
February	22,523	2,860	310	777	2.16	2.33
March	29,846	2,560	420	963	2.67	3.08
April	37,776	8,090	562	1,259	3.50	3.90
May	27,875	2,180	481	899	2.50	2.88
June	10,061	529	206	335	.931	1.04
July	7,876	780	154	254	.706	.81
August	27,970	8,550	189	902	2.51	2.89
September	7,040	1,250	147	235	.653	.73
Water year 1947-48	222,431	8,550	118	608	1.69	22.98

Peak discharge (base, 3,000 sec.-ft.).- Feb. 14 (9 a.m.) 3,570 sec.-ft.; Mar. 24 (3:30 a.m.) 3,490 sec.-ft.; Mar. 27 (11:30 a.m.) 3,570 sec.-ft.; Apr. 1 (1:30 a.m.) 12,600 sec.-ft.; May 7 (7:30 a.m.) 3,010 sec.-ft.; Aug. 4 (1:30 p.m.) 14,600 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

d Doubtful gage-height record; discharge computed on basis of records for Tye River near Lovingston and Pedlar River near Pedlar Mills.

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. Datum of gage is 578.39 feet above mean sea level, datum of 1929.

Drainage area.- 92 square miles.

Records available.- August 1938 to September 1948.

Average discharge.- 10 years, 141 second-feet.

Extremes.- Maximum discharge during year, 3,510 second-feet Apr. 1 (gage height, 7.63 feet) minimum, 29 second-feet July 27; minimum gage height, 1.04 feet Oct. 7.

1938-48: Maximum discharge, 9,670 second-feet Sept. 19, 1944 (gage height, 13.7 feet); minimum, 4.5 second-feet Oct. 9, 1941; minimum gage height, 0.29 foot Oct. 4, 1943.

Remarks.- Records fair except those for periods of ice effect or no gage-height record, which are poor.

Revisions (water years).- W 892: 1938.

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 1

1.0	33	1.9	163	4.0	965
1.2	53	2.2	232	5.5	1,820
1.4	78	2.7	393	6.5	2,600
1.6	106	3.3	630		

Apr. 2 to Sept. 30

1.4	23	2.5	165	4.0	700
1.5	31	2.8	220	5.0	1,360
1.7	51	3.1	300	6.0	2,160
2.0	91	3.5	460		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	123	144	100	b80	163	2,440	196	176	61	513	51
2	48	118	138	125	a85	186	1,150	206	158	54	355	46
3	45	416	131	102	a85	180	760	202	150	48	500	40
4	42	466	123	94	b85	a180	572	190	142	44	1,680	40
5	40	331	123	94	83	198	478	359	140	44	988	41
6	39	262	116	91	b95	196	407	347	124	49	572	a45
7	38	220	113	87	b100	442	399	620	166	49	355	165
8	38	311	108	84	100	448	407	514	130	44	238	126
9	68	244	103	87	98	376	359	407	118	38	190	94
10	114	220	106	83	98	311	328	343	112	37	174	85
11	102	352	121	75	*92	268	314	285	105	37	154	88
12	123	393	108	*83	106	238	297	255	99	36	147	69
13	127	348	102	358	289	217	424	505	97	36	130	59
14	113	298	97	268	992	200	332	383	97	66	116	56
15	103	305	102	198	630	186	321	324	94	108	108	52
16	127	274	180	191	466	196	294	282	98	61	101	49
17	193	232	146	167	411	196	270	258	98	69	95	46
18	429	212	138	152	365	171	252	225	84	51	91	44
19	274	200	132	127	331	174	235	204	83	44	105	44
20	207	186	125	148	305	171	220	188	76	44	101	42
21	174	171	121	140	271	161	208	177	70	54	87	49
22	150	163	114	129	253	157	196	170	80	50	105	72
23	129	167	109	118	227	352	186	158	95	42	87	61
24	114	259	106	74	212	608	177	154	98	37	77	55
25	106	227	102	b80	217	466	170	150	83	34	70	52
26	97	200	100	b80	210	400	166	147	69	30	64	51
27	91	189	94	b80	193	630	172	142	68	29	59	46
28	170	178	91	b85	186	525	260	132	59	40	56	114
29	155	163	87	b85	171	448	225	150	56	49	51	523
30	136	155	87	b80	-	393	206	184	70	38	50	220
31	131	-	88	b80	-	806	-	214	-	68	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,774	429	38	122	1.33	1.53
November	7,383	466	118	246	2.67	2.98
December	3,555	180	87	115	1.25	1.44
Calendar year 1947	53,949	895	35	148	1.61	21.80
January	3,745	358	74	121	1.32	1.52
February	6,836	992	80	236	2.57	2.77
March	9,643	806	157	311	3.38	3.90
April	12,225	2,440	166	408	4.43	4.94
May	8,071	620	132	260	2.83	3.26
June	3,095	176	56	103	1.12	1.25
July	1,491	108	29	48.1	.523	.60
August	7,468	1,680	49	241	2.62	3.02
September	2,525	523	40	84.2	.915	1.02
Water year 1947-48	69,811	2,440	29	191	2.08	28.23

Peak discharge (base, 1,000 sec.-ft.).- Feb. 14 (9 a.m.) 1,270 sec.-ft.; Apr. 1 (3 a.m.) 3,510 sec.-ft.; Aug. 1 (7 p.m.) 1,150 sec.-ft.; Aug. 4 (3 p.m.) 2,800 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Buffalo River near Norwood and Rockfish River near Greenfield.

b Stage-discharge relation affected by ice.

Rockfish River near Greenfield, Va.

Location.- Water-stage recorder, lat. 37°52', long. 78°49', at bridge on State Highway 634, 2¾ miles downstream from confluence of North and South Forks and 4¾ miles south of Greenfield, Nelson County. Datum of gage is 530.29 feet above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Drainage area.- 96 square miles.

Records available.- April 1943 to September 1948.

Extremes.- Maximum discharge during year, 3,050 second-feet Apr. 1 (gage height, 9.28 feet); minimum, 27 second-feet Oct. 7, July 27 (gage height, 1.49 feet).

1943-48: Maximum discharge, 13,700 second-feet Sept. 19, 1944 (gage height, 17.2 feet), from rating curve extended above 8,500 second-feet on basis of slope-area determinations at gage heights 17.2 and 23.4 feet and peak runoff comparison with nearby stations; minimum, 3.0 second-feet July 30, 1944; minimum gage height, 1.25 feet Sept. 17, 18, 19, 1946.

Flood in October 1942 reached a stage of 23.4 feet, from floodmarks (discharge, about 30,000 second-feet).

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating tables, water year 1947-48, except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 31

1.5	28	2.0	102	4.5	535
1.6	39	2.5	177	5.5	790
1.7	53	3.0	254	6.5	1,100
1.8	70	3.5	336		

Apr. 1 to Sept. 30

1.5	28	2.5	187	5.0	810
1.6	39	3.0	280	6.0	1,220
1.7	52	3.5	380	7.5	2,000
1.8	68	4.0	500		
2.0	100	4.5	640		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	106	117	96	b85	135	1,830	189	111	51	362	55
2	37	104	114	120	b90	158	828	185	100	44	214	49
3	34	566	110	97	b90	150	582	183	97	43	165	48
4	32	535	105	94	b90	188	462	173	92	38	1,420	46
5	30	372	105	92	b90	164	402	380	89	42	582	47
6	28	302	100	89	89	158	360	290	84	48	340	63
7	28	246	97	86	86	345	402	513	165	47	252	98
8	30	391	96	84	89	345	449	413	97	40	185	92
9	80	294	92	84	88	302	413	350	87	38	146	78
10	177	254	94	81	89	270	370	310	79	36	147	89
11	129	355	106	76	*83	246	350	270	74	36	173	82
12	120	372	97	*81	91	214	320	242	71	36	149	65
13	118	319	91	286	207	192	380	500	70	38	111	57
14	104	270	86	246	942	174	340	413	70	79	97	52
15	94	278	91	186	535	162	340	350	66	94	89	49
16	135	246	170	165	381	162	310	310	79	62	81	47
17	174	214	132	150	345	153	290	280	74	58	78	43
18	319	192	124	135	310	138	270	242	63	44	89	43
19	238	183	114	128	286	138	252	209	62	52	160	42
20	184	166	110	128	254	136	232	183	55	54	116	40
21	150	152	106	124	230	130	212	167	51	47	138	43
22	128	144	100	117	214	124	194	151	124	43	144	63
23	110	146	99	106	192	254	176	133	118	39	130	47
24	100	174	94	b100	176	440	165	123	73	37	95	43
25	92	171	91	b90	177	363	153	126	65	34	87	43
26	88	154	89	b90	174	310	149	128	57	31	74	40
27	83	146	86	b90	158	430	155	124	55	30	71	38
28	144	138	84	b90	153	372	300	113	58	49	67	37
29	138	130	80	b90	140	328	223	114	52	43	60	a200
30	122	123	78	b85	-	294	201	133	58	36	55	a550
31	114	-	78	b80	-	530	-	146	-	44	55	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,398	319	28	110	1.15	1.33
November	7,243	566	104	241	2.51	2.80
December	3,136	170	78	101	1.05	1.21
Calendar year 1947	46,613	767	22	128	1.33	18.05
Janunry	3,566	286	76	115	1.20	1.38
February	5,934	942	83	205	2.14	2.31
March	7,505	530	124	242	2.52	2.90
April	11,110	1,830	149	370	3.85	4.30
May	7,443	513	113	240	2.50	2.88
June	2,396	165	51	79.9	.832	.93
July	1,413	94	30	45.6	.475	.55
August	5,923	1,420	55	191	1.99	2.29
September	2,289	550	37	76.3	.795	.89
Water year 1947-48	61,356	1,830	28	168	1.75	23.77

Peak discharge (base, 1,200 sec.-ft.).- Feb. 14 (9:30 a.m.) 1,280 sec.-ft.; Apr. 1 (2 a.m.) 3,050 sec.-ft.; Aug. 4 (2 p.m.) 2,690 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Tye River near Lovingston.

b Stage-discharge relation affected by ice.

Hardware River below Briery Run, near Scottsville, Va.

Location.- Water-stage recorder, lat. 37°49', long. 78°28', at highway bridge half a mile downstream from Briery Run, 2 miles northeast of Scottsville, Albemarle County, and 9 miles upstream from mouth. Datum of gage is 294.96 feet above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943.

Drainage area.- 116 square miles.

Records available.- December 1938 to September 1948.

Extremes.- Maximum discharge during year, 5,200 second-feet Apr. 1 (gage height, 14.50 feet); minimum daily, 30 second-feet Oct. 6-8.

1938-48: Maximum discharge, 23,000 second-feet Sept. 19, 1944 (gage height, 23.8 feet, from floodmark in gage house), by slope-area method; minimum, 2.8 second-feet Oct. 1, 1941 (gage height, 1.34 feet); minimum daily, 4.8 second-feet Oct. 5, 1941.

Remarks.- Records good except those for period of ice effect, which are fair. Occasional small diurnal fluctuation at low flow caused by dam and gristmill 2 miles above station.

Revisions (water years).- W 952: 1941(M). W 1002: 1940, 1943. W 1032: 1940, 1944.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	38	72	63	b55	106	3,290	167	130	68	212	68
2	33	37	69	129	b65	139	882	168	119	64	348	63
3	33	112	69	99	b70	147	419	169	113	58	123	62
4	33	212	68	83	b70	147	325	158	113	56	1,460	60
5	32	105	67	78	b75	134	280	460	109	54	1,290	59
6	30	81	65	72	b75	123	258	235	106	53	258	59
7	30	68	~~72~~	70	b80	378	400	400	164	57	172	69
8	30	318	60	65	b75	332	415	288	120	52	137	76
9	33	168	59	67	b65	212	362	212	106	49	119	67
10	62	112	59	64	*b55	198	272	190	101	47	130	67
11	59	186	77	59	b60	172	250	171	98	46	147	74
12	47	250	72	60	b100	157	235	164	97	46	174	62
13	45	141	67	700	212	143	370	507	98	56	228	58
14	41	112	62	445	899	134	272	430	109	108	126	56
15	40	113	64	180	874	130	258	250	98	72	109	54
16	44	120	160	*141	362	137	220	205	104	60	98	52
17	59	99	109	119	340	140	205	220	101	99	91	51
18	99	88	91	109	325	126	190	176	92	62	88	51
19	67	85	83	92	250	125	182	157	94	52	132	51
20	54	83	76	b80	205	126	178	147	88	62	295	51
21	47	74	72	b75	161	120	172	141	84	78	125	52
22	43	73	70	b70	151	*118	164	136	83	57	108	74
23	40	85	69	b60	137	302	160	129	131	51	98	59
24	39	118	65	b40	133	520	155	125	83	49	92	53
25	38	155	63	b45	144	295	154	126	77	46	87	52
26	38	111	63	b55	157	212	148	147	69	44	83	51
27	37	95	60	b60	134	430	151	139	68	43	78	50
28	45	87	59	b65	125	348	400	127	65	62	76	48
29	50	80	59	b65	115	228	228	125	65	62	70	100
30	42	76	63	b65	-	190	184	146	70	49	68	220
31	39	-	67	b60	-	228	-	174	-	44	67	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,363	99	30	44.0	0.379	0.44
November	3,482	318	37	116	1.00	1.12
December	2,221	160	59	71.6	.617	.71
Calendar year 1947	36,189	790	20	99.1	.854	11.61
January	3,435	700	40	111	.957	1.10
February	5,569	899	55	192	1.66	1.79
March	6,297	520	106	203	1.75	2.02
April	11,179	3,290	148	373	3.22	3.59
May	6,389	507	125	206	1.78	2.05
June	2,955	164	65	98.5	.849	.95
July	1,806	108	43	58.3	.503	.58
August	6,689	1,460	67	216	1.86	2.14
September	1,969	220	48	65.6	.566	.63
Water year 1947-48	53,354	3,290	30	146	1.26	17.12

Peak discharge (base, 1,500 sec.-ft.).- Feb. 15 (12:30 a.m.) 1,700 sec,-ft.; Apr. 1 (9 a.m.) 5,200 sec.-ft.; Aug. 4 (11 p.m.) 2,830 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Slate River near Arvonia, Va.

Location.- Water-stage recorder, lat. 37°42', long. 78°21', at Bumpers Bridge, 1 mile upstream from Hunt Creek, 2 miles upstream from mouth, and 2 miles north of Arvonia, Buckingham County. Datum of gage is 238.78 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 235 square miles.

Records available.- April 1926 to September 1948.

Average discharge.- 21 years (1926-35, 1936-48), 223 second-feet.

Extremes.- Maximum discharge during year, 5,180 second-feet Aug. 4 (gage height, 12.74); minimum, 45 second-feet during period Oct. 1-8, from recorded range in stage (gage height, 2.38 feet).

1926-48: Maximum discharge, 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 ice effect or no gage-height record, which are fair. Occasional diurnal fluctuation at low flow caused by gristmill 7½ miles above station.

Revisions (water years).- W 972: 1928-29, 1932, 1933-34(M), 1935.

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 14, June 24 to Sept. 30

2.2	33	3.6	192	7.0	1,450
2.4	46	4.0	272	8.5	2,280
2.7	71	4.4	380	10.0	3,220
3.0	103	5.0	588	12.0	4,650
3.3	142	6.0	986		

Feb. 15 to June 23

2.9	98	4.1	297
3.3	153	4.5	412
3.7	217		

Note.- Same as preceding table above 4.2 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a55	73	114	107	135	187	4,500	219	195	609	92	78
2	a50	70	109	183	174	287	3,510	244	168	201	176	77
3	a45	148	108	155	196	508	645	260	153	135	127	74
4	a45	480	108	124	196	297	429	222	150	115	3,460	73
5	a45	178	107	116	b250	235	344	664	146	107	4,120	71
6	a45	127	108	110	b260	208	307	342	141	103	688	74
7	a50	105	103	107	b260	1,050	1,330	429	165	99	218	79
8	a50	802	101	102	b260	1,030	1,450	356	170	92	171	105
9	a100	608	101	102	b250	415	1,550	250	144	86	147	100
10	a230	205	99	101	226	374	442	219	130	83	134	90
11	a300	424	116	93	220	314	353	198	124	82	144	103
12	a220	1,190	125	92	234	260	383	187	121	84	213	91
13	a160	336	113	1,920	912	228	944	664	118	91	403	78
14	a130	203	105	2,040	*3,160	210	498	516	132	89	163	73
15	a100	208	105	446	3,220	203	645	283	124	483	134	71
16	a100	322	327	246	881	224	446	228	140	181	119	67
17	a110	212	234	222	780	429	353	356	162	160	110	65
18	a100	163	164	188	727	292	290	243	130	152	107	64
19	a90	158	142	152	463	241	266	197	128	104	110	63
20	a90	178	120	155	336	228	254	179	120	102	108	64
21	a85	150	119	201	262	221	243	173	107	105	107	65
22	a80	134	115	240	244	202	228	168	103	110	282	69
23	a70	158	113	188	231	692	219	152	1,050	500	128	67
24	a70	220	109	174	231	1,650	214	152	269	127	111	64
25	a65	309	103	170	270	810	210	154	203	98	103	64
26	a70	203	103	b180	386	399	200	242	147	86	99	63
27	a70	160	101	b180	290	761	205	302	205	84	94	60
28	a80	141	101	b160	241	1,050	358	214	141	103	89	59
29	a100	129	98	b150	214	446	312	187	119	102	85	82
30	a90	122	b95	*b140	-	330	244	289	136	88	81	279
31	a80	-	*b95	b140	-	317	-	252	-	79	79	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,975	300	45	96.0	0.409	0.47
November	7,916	1,190	70	264	1.12	1.25
December	3,761	327	95	121	.515	.59
Calendar year 1947	63,483	2,080	24	174	.740	10.02
January	8,684	2,040	92	280	1.19	1.37
February	15,509	3,220	135	535	2.28	2.46
March	14,098	1,650	187	455	1.94	2.24
April	21,352	4,500	200	712	3.03	3.38
May	8,541	664	152	276	1.17	1.35
June	5,341	1,050	103	178	.757	.84
July	4,645	609	79	150	.638	.74
August	12,202	4,120	79	394	1.68	1.94
September	2,432	279	59	81.1	.345	.38
Water year 1947-48	107,456	4,500	45	294	1.25	17.01

Peak discharge (base, 2,100 sec.-ft.).- Jan. 13 (5 p.m.) 3,020 sec.-ft.; Feb. 14 (5:30 p.m.) 3,980 sec.-ft.; Apr. 1 (10 a.m.) 4,950 sec.-ft.: Apr. 8 (2:30 a.m.) 2,580 sec.-ft.; Aug. 4 (3:30 p.m.) 5,180 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for Willis River at Flanagan Mills and Falling River near Naruna.

b Stage-discharge relation affected by ice.

Mechum River near Ivy, Va.

Location.- Water-stage recorder, lat. 38°06'15", long. 78°35'35", 2.6 miles downstream from Spring Creek, 3.3 miles north of town of Ivy, Albemarle County, and 4.7 miles upstream from confluence with Moormans River.

Drainage area.- 97 square miles.

Records available.- October 1942 to September 1948.

Extremes.- Maximum discharge during year, 3,490 second-feet Aug. 4 (gage height, 10.9 feet); minimum, 21 second-feet Oct. 7 (gage height, 1.24 feet).

1942-48: Maximum discharge, 20,000 second-feet Oct. 15, 1942 (gage height, 30.3 feet, from floodmark), from rating curve extended above 8,000 second-feet by logarithmic plotting; minimum, 0.6 second-foot Sept. 9, 1944 (gage height, 0.51 foot).

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. City of Charlottesville made no diversions during this water year.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	31	57	48	b40	97	1,420	136	173	69	814	49
2	24	30	56	67	b50	95	425	133	149	60	324	44
3	24	298	55	53	b55	103	295	146	138	53	414	43
4	24	289	54	49	b55	116	230	136	132	50	2,060	42
5	22	164	55	50	b50	120	193	312	124	48	490	42
6	22	132	54	47	b50	112	175	199	115	50	250	46
7	22	108	50	45	b55	238	195	387	326	49	175	63
8	22	224	52	43	b55	220	205	312	130	45	152	52
9	26	149	46	45	b60	167	193	248	103	43	147	49
10	66	127	48	43	60	149	171	215	92	42	135	65
11	43	154	58	39	65	133	163	185	82	43	147	63
12	37	184	53	42	*71	127	165	177	77	41	149	46
13	35	140	49	185	134	125	338	350	73	141	120	42
14	32	129	46	170	1,030	118	240	278	80	134	99	40
15	32	125	46	133	416	112	238	221	74	112	88	39
16	46	127	98	b110	256	107	205	203	82	64	77	37
17	56	112	76	b80	231	103	181	187	89	57	73	36
18	92	100	66	b60	215	97	162	167	80	49	74	36
19	63	95	61	*b50	184	91	152	152	79	51	151	35
20	50	91	56	b50	161	91	143	143	67	65	164	35
21	44	83	53	b50	137	86	135	139	62	62	116	42
22	39	79	*53	b55	136	83	126	132	62	48	97	58
23	36	79	52	b55	134	146	122	126	102	44	84	41
24	33	80	50	b50	132	201	116	126	72	41	77	37
25	33	89	47	a45	127	158	110	151	65	39	72	37
26	32	77	48	a50	126	137	104	139	57	37	65	35
27	31	73	45	a50	120	167	114	136	151	38	58	33
28	35	71	43	a55	113	150	245	128	159	57	54	33
29	43	65	43	a55	106	133	163	128	81	45	51	126
30	36	63	45	b50	-	129	144	248	82	39	48	257
31	33	-	50	b45	-	278	-	255	-	68	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,159	92	22	37.4	0.386	0.44
November	3,568	298	30	119	1.23	1.37
December	1,665	98	43	53.7	.554	.64
Calendar year 1947	25,567	471	18	70.0	.722	9.78
January	1,969	185	39	63.5	.655	.76
February	4,424	1,030	40	153	1.58	1.70
March	4,189	278	83	135	1.39	1.60
April	6,868	1,420	104	229	2.36	2.63
May	5,993	387	126	193	1.99	2.29
June	3,158	326	57	105	1.08	1.20
July	1,784	141	37	57.5	.593	.68
August	6,874	2,060	48	222	2.29	2.64
September	1,603	257	33	53.4	.551	.61
Water year 1947-48	43,254	2,060	22	118	1.22	16.56

Peak discharge (base, 1,200 sec.-ft.).- Feb. 14 (6 p.m.) 1,810 sec.-ft.; Apr. 1 (4 a.m.) 2,740 sec.-ft.; Aug. 1 (4:30 p.m.) 2,150 sec.-ft.; Aug. 3 (9 p.m.) 1,300 sec.-ft.; Aug. 4 (4 p.m.) 3,440 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, and records for Rockfish River near Greenfield and Hardware River below Briery Run, near Scottsville.

b Stage-discharge relation affected by ice.

Rivanna River at Palmyra, Va.

Location.- Water-stage recorder, lat. 37°51', long. 78°16', at highway bridge at Palmyra, Fluvanna County, half a mile upstream from Cunningham Creek and 15 miles upstream from mouth. Datum of gage is 210.39 feet above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943. Prior to Dec. 19 wire-weight gage at same site and datum.

Drainage area.- 675 square miles.

Records available.- May 1934 to September 1948.

Average discharge.- 14 years, 723 second-feet.

Extremes.- Maximum discharge during year, 19,800 second-feet Aug. 4 (gage height, 22.90 feet); minimum observed, 62 second-feet Oct. 3 (gage height, 2.82 feet).

1934-48: Maximum discharge, 78,000 second-feet Oct. 16, 1942 (gage height, 36.5 feet at site then in use, 37.4 feet at present site); minimum, 19 second-feet Oct. 9, 1941 (gage height, 1.53 feet, site then in use).

Remarks.- Records fair. Gage read twice daily through Dec. 18. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 802: 1936(M). W 852: 1937. W 892: 1934-35.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 3)

Oct. 1 to Mar. 31						Apr. 1 to Sept. 30					
2.8	64	3.8	357	5.4	1,740	4.4	700	7.0	2,970	17.0	9,560
2.9	80	4.2	560	6.0	2,110	4.7	940	8.0	3,750	19.0	11,600
3.0	99	4.4	700	10.0	4,940	5.0	1,270	9.0	4,400	20.0	13,400
3.2	148	4.6	930	13.0	7,340	5.5	1,750	14.0	7,400		
3.5	239	4.8	1,200								

Note.- Same as preceding table below 4.4 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	226	275	294	b270	504	13,300	700	1,370	403	1,100	314
2	69	236	294	452	b300	560	7,330	700	940	403	4,550	294
3	64	592	275	478	b300	700	2,810	775	738	336	1,470	294
4	72	2,440	257	403	b320	700	1,750	812	700	294	10,900	294
5	101	1,300	275	380	b350	800	1,370	2,270	592	294	10,600	275
6	135	750	380	357	b360	700	1,100	1,750	532	294	1,780	275
7	156	532	275	336	b360	1,510	1,370	2,330	1,270	314	1,040	314
8	222	625	213	314	b360	2,100	1,270	2,810	850	294	812	403
9	239	865	226	314	b350	1,400	1,270	1,660	592	257	700	336
10	99	750	275	314	b350	1,250	990	1,270	504	239	592	336
11	113	700	336	294	336	1,070	895	895	452	239	990	428
12	1,070	800	275	275	*357	865	850	812	428	236	1,270	380
13	592	625	294	2,030	592	700	1,840	3,450	403	239	1,470	314
14	239	592	314	2,480	3,140	662	1,840	3,370	452	1,780	775	294
15	90	532	625	1,200	6,990	592	1,570	1,370	428	700	662	275
16	148	532	504	*750	3,490	592	1,270	990	504	504	532	257
17	113	504	452	662	2,510	592	1,100	990	532	452	478	257
18	222	478	403	560	2,230	532	940	812	452	430	452	257
19	99	452	426	428	1,870	478	812	700	452	336	592	239
20	132	478	380	357	1,400	804	775	625	403	336	850	239
21	168	380	357	452	1,200	478	738	592	357	380	625	257
22	159	314	336	504	930	452	700	532	357	314	812	403
23	182	213	336	478	800	846	662	504	926	294	532	380
24	a190	239	314	275	700	1,810	625	478	a700	257	478	294
25	179	176	294	b219	700	1,300	592	846	a480	257	428	275
26	125	176	294	b250	700	1,000	592	700	a390	229	403	257
27	145	260	294	b290	662	1,400	592	625	a700	222	380	257
28	159	257	275	b310	625	1,400	990	532	a900	625	357	239
29	257	275	257	b310	560	1,000	940	504	a680	428	336	257
30	206	a275	b230	b300	-	800	775	662	a420	294	336	1,040
31	200	-	b240	b300	-	800	-	2,650	-	257	314	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,065	1,070	64	196	0.290	0.33
November	16,520	2,440	176	551	.816	.91
December	9,983	625	213	322	.477	.55
Calendar year 1947	175,467	4,470	64	481	.713	9.66
January	16,366	2,480	219	528	.782	.90
February	33,112	6,990	270	1,142	1.69	1.82
March	28,097	2,100	452	906	1.34	1.54
April	51,658	13,300	592	1,722	2.55	2.84
May	37,716	3,450	478	1,217	1.80	2.08
June	18,504	1,370	357	617	.914	1.02
July	11,910	1,780	222	384	.569	.66
August	46,616	10,900	314	1,504	2.23	2.57
September	9,734	1,040	239	324	.480	.54
Water year 1947-48	286,281	13,300	64	782	1.16	15.76

Peak discharge (base, 6,000 sec.-ft.).- Feb. 15 (5 a.m.) 9,100 sec.-ft.; Apr. 1 (2:30 p.m.) 16,800 sec.-ft.; Aug. 2 (6:30 a.m.) 6,800 sec.-ft.; Aug. 4 (10 p.m.) 19,800 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Mechum River near Ivy and James River at Cartersville.

b Stage-discharge relation affected by ice.

Willis River at Flanagan Mills, Va.

Location.- Water-stage recorder, lat. 37°40', long. 78°11', at highway bridge a quarter of a mile downstream from Flanagan Mills, Cumberland County, half a mile downstream from Trices Lake, and 4 miles downstream from Reynolds Creek. Datum of gage is 178.98 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 247 square miles.

Records available.- April 1926 to January 1935, September 1936 to September 1948.

Average discharge.- 20 years (1926-34, 1936-48), 243 second-feet.

Extremes.- Maximum discharge during year, 5,840 second-feet Aug. 6 (gage height, 18.70 feet); minimum, 32 second-feet Oct. 6 (gage height, 3.47 feet).

1926-34, 1936-48: Maximum discharge, 9,580 second-feet Apr. 27, 1937 (gage height, 23.86 feet, from floodmarks), from rating curve extended above 5,800 second-feet on basis of velocity-area studies, with backwater correction; minimum, 2 second-feet Sept. 30, Oct. 1, 4, 12, 1930.

Remarks.- Records good except those for period of ice effect, which are fair. Complete regulation of flow from Trices Lake, tributary to Willis River, slightly affects flow at gage.

Revisions (water years).- W 872: 1936-37. W 892: 1928-29, 1932-34(M), 1935. W 972: 1937, 1940.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	82	126	92	b140	250	1,880	272	188	119	55	61
2	43	70	113	128	b130	311	3,460	257	164	164	55	62
3	42	92	113	152	b160	670	3,300	295	136	136	74	57
4	39	176	108	130	188	708	1,690	280	124	89	880	58
5	38	235	105	113	235	537	632	264	115	76	2,580	57
6	34	170	104	106	295	319	397	264	111	71	5,500	57
7	37	111	100	100	303	644	499	265	130	73	3,120	63
8	40	214	98	94	319	940	1,120	353	170	64	986	70
9	39	499	97	92	*336	960	2,320	311	146	60	201	68
10	58	480	94	94	362	860	1,590	235	108	59	164	72
11	212	388	107	91	280	537	960	194	95	55	362	82
12	336	803	125	82	257	415	499	176	89	52	214	81
13	228	803	121	639	556	319	556	214	85	55	264	72
14	170	803	108	1,160	1,300	264	480	353	81	57	319	66
15	120	362	100	*1,210	2,200	242	746	379	92	127	182	58
16	92	336	272	1,270	3,210	235	689	264	152	303	123	57
17	87	344	362	448	2,150	336	594	201	113	214	106	55
18	101	250	272	295	1,270	362	388	235	113	112	96	53
19	92	188	182	214	708	287	311	176	99	85	99	51
20	85	194	152	188	518	242	280	146	90	77	101	50
21	79	188	136	280	370	228	264	136	78	72	100	53
22	68	176	122	442	319	214	242	129	78	70	99	54
23	63	194	118	406	303	358	221	122	81	113	105	54
24	60	336	112	257	311	1,100	208	117	182	120	94	53
25	58	397	104	194	344	1,290	201	114	328	74	87	54
26	55	328	100	b190	537	1,470	194	264	141	58	85	51
27	56	250	99	b190	537	1,250	182	556	120	59	76	49
28	61	182	96	b190	406	1,100	370	537	250	60	72	51
29	110	146	94	b180	303	1,120	433	311	152	79	69	64
30	126	146	87	b170	-	940	336	250	96	67	65	221
31	105	-	87	b160	-	424	-	242	-	63	63	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,780	336	34	89.7	0.363	0.42
November	8,943	803	70	298	1.21	1.35
December	4,014	362	87	129	.522	.60
Calendar year 1947	70,921	1,670	20	194	.785	10.67
January	9,357	1,270	82	302	1.22	1.41
February	18,347	3,210	130	633	2.56	2.76
March	18,932	1,470	214	611	2.47	2.85
April	25,042	3,460	182	835	3.38	3.77
May	7,942	556	114	256	1.04	1.20
June	3,907	328	78	130	.526	.59
July	2,883	303	52	93.0	.377	.43
August	16,396	5,500	55	529	2.14	2.47
September	1,954	221	49	65.1	.264	.29
Water year 1947-48	120,497	5,500	34	329	1.33	18.14

Peak discharge (base, 1,700 sec.-ft.).- Feb. 16 (11:30 a.m.) 3,380 sec.-ft.; Apr. 3 (3 a.m.) 3,720 sec.-ft.; Apr. 9 (7:30 a.m.) 2,580 sec.-ft.; Aug. 6 (10 a.m.) 5,840 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Fine Creek at Fine Creek Mills, Va.

Location.- Staff gage, lat. 37°36', long. 77°49', at highway bridge at Fine Creek Mills, three-quarters of a mile upstream from mouth and 7 miles northeast of Powhatan, Powhatan County.

Drainage area.- 23 square miles.

Records available.- July 1944 to September 1948.

Extremes.- Maximum discharge during year, 1,650 second-feet Aug. 4 (gage height, 7.0 feet, from high-water mark); minimum observed, 3.4 second-feet Oct. 3-7; minimum gage height observed, 1.70 feet Sept. 20, 24, 26, 27.

1944-48: Maximum discharge observed, that of Aug. 4, 1948; minimum observed, 1.5 second-feet Sept. 5, 1947 (gage height, 1.63 feet).

Remarks.- Records fair except those for periods of ice effect or no gage-height record, which are poor. Gage read twice daily.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 12)

Oct. 1 to Aug. 3

1.7	2.1	2.2	19	3.1	112
1.8	3.8	2.4	31	3.3	157
1.9	6.3	2.6	46	3.5	210
2.0	9.9	2.8	66		
2.1	14	2.9	79		

Aug. 4 to Sept. 30

1.7	4.4	2.1	29	2.9	145
1.8	9.2	2.3	45	3.2	236
1.9	15	2.5	66	3.7	406
2.0	22	2.7	98	4.3	610

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	8.7	12	12	b12	19	67	18	32	20	8.7	7.0
2	3.6	7.3	12	16	b16	53	53	21	18	11	40	6.0
3	3.4	26	12	15	18	51	32	18	16	7.6	29	6.0
4	3.4	58	12	12	19	34	27	16	14	6.6	576	5.4
5	3.4	22	12	12	32	26	24	20	13	6.3	440	5.4
6	3.4	13	12	11	27	23	25	15	12	5.8	89	6.0
7	3.4	9.5	12	11	23	86	51	26	46	8.7	28	6.5
8	4.5	33	12	11	23	88	43	18	17	6.3	21	7.0
9	4.5	26	11	11	b23	43	36	14	12	5.8	18	8.6
10	9.5	12	11	11	17	53	26	12	11	5.0	16	12
11	8.7	29	18	9.1	*18	35	31	12	9.9	5.0	48	10
12	6.1	90	14	9.9	24	29	30	11	8.7	4.7	22	7.6
13	5.5	32	12	116	57	24	38	14	8.3	5.0	24	6.5
14	5.0	20	12	*210	178	22	27	23	8.3	4.7	16	6.0
15	5.5	29	12	53	210	22	69	15	9.1	26	19	5.4
16	6.1	32	37	28	31	28	36	13	74	11	14	5.4
17	5.5	18	17	22	38	37	29	24	22	8.0	10	4.9
18	6.1	15	14	20	31	27	24	13	13	6.3	9.8	4.9
19	5.5	20	14	17	27	22	23	12	11	5.8	21	4.6
20	5.0	19	12	14	23	21	21	9.9	8.3	5.2	12	4.4
21	4.7	14	12	70	23	19	20	11	8.0	5.2	10	4.6
22	4.5	14	12	35	22	19	18	11	7.6	5.0	10	5.4
23	4.5	40	12	24	22	32	17	9.1	8.3	76	9.2	4.9
24	4.2	30	11	19	22	84	16	8.3	8.3	16	9.2	4.4
25	4.2	22	11	a14	38	84	21	9.5	7.6	14	8.1	4.6
26	5.0	17	12	b15	53	37	16	50	6.3	7.0	7.0	4.4
27	5.0	15	11	b15	32	74	17	53	6.3	6.3	7.0	4.4
28	18	14	11	b16	27	48	55	28	24	6.1	9.2	4.6
29	91	12	8.3	b16	26	35	29	17	9.5	8.3	6.5	5.4
30	17	12	11	b16	-	29	a22	19	8.7	6.1	8.6	35
31	11	-	10	b14	-	27	-	18	-	5.2	7.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	271.0	91	3.4	8.74	0.380	0.44
November	709.5	90	7.3	23.6	1.03	1.15
December	401.3	37	8.3	12.9	.561	.65
Calendar year 1947	5,830.6	224	1.5	16.0	.696	9.44
January	875.0	210	9.1	28.2	1.23	1.42
February	1,112	210	12	38.3	1.67	1.80
March	1,231	88	19	39.7	1.73	1.99
April	943	69	16	31.4	1.37	1.53
May	558.8	53	8.3	18.0	.783	.90
June	458.2	74	6.3	15.3	.665	.74
July	320.0	76	4.7	10.3	.448	.52
August	1,553.3	576	6.5	50.1	2.18	2.51
September	207.3	35	4.4	6.91	.300	.33
Water year 1947-48	8,640.4	576	3.4	23.6	1.03	13.98

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Willis River near Flanagan Mills.

b Stage-discharge relation affected by ice.

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. Datum of gage is 106.07 feet above mean sea level, datum of 1929.

Records available.- September 1936 to September 1948.

Average discharge.- 12 years, 844 second-feet.

Extremes.- Maximum discharge during year, 1,260 second-feet Apr. 2 (gage height, 8.90 feet); no flow at times when head gates were closed.
1936-48: Maximum gage height, 19.7 feet Sept. 20, 1944 (discharge not determined); no flow at times when head gates were closed.

Remarks.- Records good except those below 300 second-feet and those for periods of no gage-height record, which are poor. Canal diverts from James River 1,200 feet above Bosher Dam and discharges into river at several points below gaging station near Richmond.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.0	111	5.0	510
3.0	227	7.0	870
4.0	361	9.0	1,280

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	850	1,010	970	850	492	1,070	1,150	1,010	a1,000	a850	283	850
2	830	970	950	850	354	1,050	1,260	990	a1,000	a900	930	850
3	830	950	930	890	354	1,030	1,210	990	a950	a850	1,050	830
4	830	970	930	890	558	1,030	1,030	990	a900	a900	1,070	850
5	810	1,070	910	870	790	1,030	1,050	1,010	a850	a850	1,110	830
6	810	1,050	910	870	990	990	1,070	1,130	a900	a900	1,070	830
7	790	1,010	910	870	1,010	794	1,030	1,110	a900	a900	1,030	830
8	790	1,010	910	870	1,030	1,110	1,050	1,110	a950	a800	1,050	830
9	790	1,030	910	850	1,030	1,130	1,030	1,130	a900	a850	1,030	850
10	790	990	890	850	1,030	1,150	1,150	1,150	a950	a850	1,030	910
11	830	1,010	910	870	1,030	1,090	1,130	1,110	a900	a900	1,030	890
12	970	1,010	910	850	970	1,110	1,050	1,090	a900	a850	1,030	870
13	990	1,010	910	950	950	981	1,050	1,070	a1,000	a900	1,010	870
14	970	990	910	1,070	1,050	288	1,090	990	a900	a850	1,010	850
15	950	1,010	930	1,050	1,150	1,010	1,090	970	a850	a900	990	830
16	930	1,030	970	1,030	1,190	1,010	1,110	397	a900	a900	950	850
17	910	1,050	970	1,010	1,150	1,030	1,130	a900	a950	a900	930	850
18	930	1,030	930	990	1,130	1,030	1,130	a900	a900	a850	910	830
19	950	1,030	910	950	1,130	1,010	1,110	a850	a850	a900	910	830
20	990	1,050	910	930	1,130	1,010	1,090	a850	a950	a900	930	830
21	990	1,050	910	950	1,110	1,010	1,070	a800	a850	a900	950	830
22	950	1,010	890	970	1,110	990	1,090	a900	a850	930	950	830
23	930	1,010	890	950	1,110	990	1,110	a900	a900	950	950	830
24	910	1,010	890	930	1,110	1,050	1,130	a850	a900	849	930	830
25	890	1,010	890	662	1,110	1,070	1,130	a800	a850	218	910	830
26	870	1,050	870	592	1,130	1,150	1,150	a800	a850	850	890	810
27	870	1,010	870	558	1,110	1,050	1,150	a850	a900	850	890	830
28	890	990	870	575	1,070	1,050	1,130	a900	a850	830	870	810
29	910	1,010	870	592	1,070	1,070	1,070	a900	a850	850	549	810
30	910	990	850	592	-	1,130	1,010	a900	a900	870	798	850
31	910	-	850	626	-	1,090	-	a1,050	-	789	283	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	27,570	990	790	889		
November	30,420	1,070	950	1,014		
December	28,130	970	850	907		
Calendar year 1947	331,334	1,090	50	908		
January	26,357	1,070	558	850		
February	28,448	1,190	354	981		
March	31,603	1,150	288	1,019		
April	33,050	1,260	1,010	1,102		
May	29,397	1,150	397	948		
June	27,100	1,000	850	903		
July	26,386	950	218	851		
August	28,323	1,110	283	914		
September	25,220	910	810	841		
Water year 1947-48	342,004	1,260	218	934		

a No gage-height record; discharge computed on basis of recorded range in stage and records for James River near Richmond and at Cartersville.

Falling Creek near Drewrys Bluff, Va.

Location.- Water-stage recorder, lat. 37°27'40", long. 77°28'00", at highway bridge 2.4 miles northeast of town of Drewrys Bluff, Chesterfield County, 2.7 miles downstream from Pocoshock Creek, and 3.7 miles upstream from mouth.

Drainage area.- 54 square miles.

Records available.- September 1942 to September 1948.

Extremes.- Maximum discharge during year, 745 second-feet Feb. 14 (gage height, 4.72 feet); minimum, 3.0 second-feet Sept. 26, 27 (gage height, 1.22 feet).
1942-48: Maximum discharge, 7,270 second-feet July 18, 1945 (gage height, 10.1 feet); minimum, 1.0 second-foot July 30, 31, 1944; minimum gage height, 0.97 foot Aug. 29, 1943, July 8, 1944.

Remarks.- Records good except those for period of no gage-height record, which are fair.

Revisions (water years).- W 1032: 1943-44(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	21	38	29	a65	76	313	54	206	11	6.0	4.7
2	12	17	36	40	a70	135	275	54	106	8.5	17	4.5
3	11	48	34	49	a70	230	171	51	67	7.9	14	4.2
4	9.5	125	32	37	a65	153	123	43	65	7.6	160	3.8
5	9.5	83	32	34	a80	112	108	65	49	8.2	156	4.2
6	7.9	52	34	31	a90	94	97	50	42	7.2	42	3.8
7	7.9	38	30	29	a90	268	159	76	40	6.9	22	5.3
8	10	88	30	27	a100	302	240	87	42	6.0	18	6.6
9	11	112	30	28	a120	186	240	52	34	5.6	18	6.3
10	36	70	28	27	a90	221	151	40	28	6.3	14	5.6
11	35	131	48	22	87	191	125	34	24	6.6	13	6.9
12	25	454	43	22	91	143	134	32	22	6.0	17	5.3
13	21	193	31	266	184	119	117	35	20	6.0	27	5.1
14	18	93	29	446	564	98	104	62	20	21	18	4.9
15	18	80	30	226	465	93	192	54	19	32	14	4.7
16	20	98	134	125	226	117	141	40	20	16	11	4.2
17	20	75	91	103	167	268	102	76	20	12	10	4.0
18	19	54	63	87	134	153	81	61	18	11	10	3.6
19	16	57	52	66	114	119	74	38	16	8.5	14	3.5
20	14	61	44	65	106	106	68	28	16	9.9	13	3.5
21	12	48	39	193	94	98	62	22	14	12	12	3.5
22	10	42	38	182	100	90	56	20	14	8.5	12	3.5
23	9.9	110	37	123	98	90	53	14	14	10	11	3.5
24	9.5	143	35	a70	98	123	44	14	13	13	9.9	3.8
25	9.1	104	32	a65	119	115	65	14	13	11	9.5	3.3
26	9.5	76	32	a70	155	91	56	42	12	8.5	7.9	3.2
27	10	60	31	a70	138	171	50	103	14	6.9	6.9	3.3
28	11	52	30	a60	109	224	136	66	25	6.0	7.2	3.3
29	30	45	28	a60	90	134	111	50	16	5.8	6.0	4.0
30	49	40	26	a55	-	106	75	61	11	5.8	4.9	5.6
31	28	-	27	a65	-	94	-	239	-	5.6	5.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	522.8	49	7.9	16.9	0.313	0.36
November	2,670	454	17	89.0	1.65	1.84
December	1,244	134	26	40.1	.743	.86
Calendar year 1947	17,701.9	615	1.7	48.5	.898	12.19
January	2,772	446	22	89.4	1.66	1.91
February	3,979	564	65	137	2.54	2.74
March	4,520	302	76	146	2.70	3.11
April	3,723	313	44	124	2.30	2.57
May	1,677	239	14	54.1	1.00	1.15
June	1,020	206	11	34.0	.630	.70
July	297.3	32	5.6	9.59	.178	.21
August	706.6	160	4.9	22.8	.422	.49
September	131.7	6.9	3.2	4.39	.081	.09
Water year 1947-48	23,263.4	564	3.2	63.6	1.18	16.03

Peak discharge (base, 500 sec.-ft.).- Jan. 13 (9:30 p.m.) 575 sec.-ft.; Feb. 14 (9 p.m.) 745 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Swift Creek near Chester.

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 1½ miles downstream from Buffalo Creek. Datum of gage is 281.93 feet above mean sea level, datum of 1929.

Drainage area.- 306 square miles.

Records available.- March 1926 to September 1948.

Average discharge.- 22 years, 298 second-feet.

Extremes.- Maximum discharge during year, 5,400 second-feet Apr. 2 (gage height, 17.02 feet); minimum, 52 second-feet Sept. 18 (gage height, 3.42 feet); minimum daily, 84 second-feet Sept. 24, 25, 27, 28.

1926-48: Maximum discharge, 21,000 second-feet Aug. 15, 1940 (gage height, 23.60 feet), from rating curve extended above 12,000 second-feet by logarithmic plotting; minimum, 3.8 second-feet Sept. 25, 1941; minimum daily, 9 second-feet Sept. 20, 1932.

Remarks.- Records good except those for periods of ice effect, which are fair. Diurnal fluctuation at low flow caused by mills above station.

Revisions (water years).- W 972: 1927-37, 1938(M).

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 14						Jan. 15 to Sept. 30					
3.5	58	6.0	393	12.0	1,850	3.7	76	7.0	510	14.0	2,200
4.0	107	8.0	760	13.0	2,250	4.0	107	8.5	785	15.0	2,800
4.5	168	10.0	1,250	14.0	2,960	4.5	168	10.0	1,110	16.0	3,800
5.0	237	11.0	1,530			5.5	300	12.5	1,730	17.0	5,400

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	104	162	209	165	135	286	2,270	252	286	454	94	94
2	96	146	202	188	b180	492	3,800	279	233	370	136	93
3	95	291	195	188	b240	934	1,190	279	207	194	148	90
4	93	740	195	164	252	590	542	246	194	163	2,400	89
5	90	496	195	162	279	412	440	266	181	151	3,460	89
6	89	274	202	159	307	335	398	266	174	138	998	92
7	89	209	188	155	321	782	894	272	314	134	307	99
8	93	564	181	147	328	1,300	1,300	314	384	124	226	102
9	156	760	181	155	384	645	1,350	246	272	116	200	96
10	740	402	174	155	*356	496	608	220	194	115	174	124
11	720	595	202	136	314	454	468	207	168	115	168	155
12	720	1,960	202	137	328	370	526	194	162	112	188	114
13	532	1,120	188	864	773	328	574	286	152	112	240	98
14	305	514	174	2,640	2,670	300	482	384	240	240	155	96
15	216	427	195	*930	4,200	286	890	279	252	477	143	94
16	216	661	496	384	1,870	293	685	240	356	207	131	90
17	427	478	427	328	978	444	468	384	286	160	120	88
18	427	329	282	286	934	440	384	233	207	138	122	86
19	290	313	237	220	645	342	342	200	194	120	129	86
20	209	321	216	226	496	328	321	181	181	130	252	89
21	168	274	202	370	398	342	307	174	154	181	194	90
22	152	244	195	426	370	314	286	168	155	214	141	94
23	142	444	188	342	370	412	272	159	1,420	200	140	91
24	135	550	181	194	356	1,370	266	158	664	174	128	84
25	129	550	174	b160	370	1,110	259	214	272	128	119	84
26	126	393	174	b260	468	526	246	466	220	111	116	85
27	126	305	168	259	440	882	246	626	412	106	111	84
28	188	267	168	252	370	1,500	307	542	356	106	107	84
29	361	237	158	240	321	765	349	454	207	106	103	115
30	402	223	151	226	-	454	279	590	200	102	100	426
31	202	-	165	b210	-	384	-	426	-	103	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	7,838	740	89	253	0.827	0.95
November	14,249	1,960	146	475	1.55	1.73
December	6,465	496	151	209	.683	.79
Calendar year 1947	100,344	3,120	44	275	.899	12.20
January	10,728	2,640	136	346	1.13	1.30
February	19,453	4,200	135	671	2.19	2.36
March	17,916	1,500	286	578	1.89	2.18
April	20,749	3,800	246	692	2.26	2.52
May	9,205	626	158	297	.971	1.12
June	8,697	1,420	152	290	.948	1.06
July	5,301	477	102	171	.559	.64
August	11,142	3,460	92	359	1.17	1.35
September	3,201	426	84	107	.350	.39
Water year 1947-48	134,944	4,200	84	369	1.21	16.39

Peak discharge (base, 3,500 sec.-ft.).- Feb. 15 (1:30 p.m.) 5,020 sec.-ft.; Apr. 2 (6:30 a.m.) 5,400 sec.-ft.; Aug. 4 (9 p.m.) 4,200 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

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 upstream from Skinquarter Creek. Datum of gage is 174.51 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 729 square miles.

Records available.- August 1900 to December 1905, March 1926 to September 1948.

Average discharge.- 27 years, 734 second-feet.

Extremes.- Maximum discharge during year, 7,420 second-feet Feb. 18 (gage height, 23.1 feet); minimum, 139 second-feet Sept. 27, 28 (gage height, 5.56 feet).
1900-1905, 1926-48: Maximum discharge, 35,000 second-feet Aug. 18, 1940 (gage height, 35.3 feet, from floodmark in gage house), from rating curve extended above 20,000 second-feet on basis of records for stations at Farmville and near Petersburg; minimum, 11 second-feet Oct. 2, 1930 (gage height, 3.52 feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions (water years).- W 782: Drainage area. W 872: 1938. W 972: 1928, 1932, 1934-38.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 5 to June 24)

5.5	132	8.0	561	16.0	3,010
5.8	169	9.0	814	20.0	4,650
6.0	196	10.0	1,090	21.0	5,220
6.5	274	12.0	1,680	22.0	6,120
7.0	361	14.0	2,320	23.0	7,300

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	258	550	495	379	388	762	1,410	684	1,240	495	182	176
2	226	425	465	406	379	922	2,660	633	868	762	274	166
3	211	562	445	415	475	1,970	2,940	684	684	609	445	166
4	204	1,180	435	397	573	2,220	3,520	658	585	361	2,630	164
5	196	1,320	435	370	658	1,500	4,400	609	528	300	3,640	166
6	189	895	455	361	736	978	1,900	609	485	266	3,600	182
7	182	585	455	343	814	1,470	1,810	658	573	258	3,670	169
8	182	633	425	343	841	2,460	3,080	658	814	234	2,460	169
9	196	1,210	415	334	950	2,560	3,600	658	788	218	609	189
10	291	1,240	406	343	1,030	2,130	3,330	550	609	211	495	204
11	1,030	1,010	435	325	895	1,380	2,130	485	475	196	495	274
12	1,090	2,420	445	316	841	1,150	1,350	455	425	196	495	325
13	1,060	2,660	445	1,230	1,350	922	1,470	465	397	196	710	242
14	814	2,730	415	2,830	3,370	814	1,380	633	379	204	950	196
15	550	1,560	397	2,800	4,110	762	1,840	736	455	710	455	176
16	415	1,210	684	2,800	4,500	736	2,190	597	528	895	361	168
17	379	1,320	1,180	1,260	6,120	978	1,650	684	609	435	323	162
18	597	978	895	814	7,060	1,590	1,180	762	550	308	291	156
19	539	762	633	658	4,970	1,440	978	517	445	258	300	154
20	495	762	539	539	1,940	895	895	435	397	234	291	149
21	370	736	485	895	1,180	814	814	406	379	234	352	150
22	316	633	455	1,440	1,010	814	762	388	343	343	373	154
23	282	788	435	1,210	978	788	736	370	343	a340	291	156
24	266	1,260	425	814	950	1,740	684	370	1,350	a470	274	155
25	250	1,440	415	415	978	2,830	658	361	1,290	a460	258	149
26	242	1,150	397	a370	1,210	3,010	633	1,650	517	a360	242	142
27	242	841	397	a540	1,260	2,130	609	2,350	406	a220	226	139
28	354	684	379	633	1,060	2,390	814	2,260	633	204	218	142
29	2,030	585	370	633	868	2,560	895	1,740	597	204	201	144
30	1,650	539	352	597	-	2,560	814	1,210	388	196	196	274
31	1,030	-	343	561	-	1,240	-	1,680	-	182	189	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,136	2,030	182	521	0.715	0.82
November	32,668	2,730	425	1,089	1.49	1.66
December	14,952	1,180	343	482	.661	.76
Calendar year 1947	233,850	4,200	71	641	.879	11.92
January	25,371	2,830	316	818	1.12	1.29
February	51,494	7,060	379	1,776	2.44	2.63
March	48,515	3,010	736	1,565	2.15	2.48
April	51,132	4,400	609	1,704	2.34	2.61
May	24,955	2,350	361	805	1.10	1.27
June	18,080	1,350	343	603	.827	.92
July	10,559	895	182	341	.468	.54
August	25,507	3,670	182	823	1.13	1.30
September	5,357	325	139	179	.246	.27
Water year 1947-48	324,726	7,060	139	887	1.22	16.55

Peak discharge (base, 4,000 sec.-ft.).- Feb. 18 (4 a.m.) 7,420 sec.-ft.; Apr. 5 (2 p.m.) 4,650 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations at Farmville and near Petersburg.

Appomattox River near Petersburg, Va.

Location.- Water-stage recorder, lat. 37°14', long. 77°33', 1½ miles upstream from Wallace Creek, 2½ 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 1948. May 1927 to September 1931 at site 1 mile downstream.

Average discharge.- 20 years (1927-30, 1931-48), 1,234 second-feet.

Extremes.- Maximum discharge during year, 9,600 second-feet Feb. 16 (gage height, 10.75 feet); minimum, 218 second-feet Sept. 27, 28 (gage height, 2.59 feet).
1927-48: Maximum discharge, 28,000 second-feet Aug. 20, 1940 (gage height, 18.15 feet); minimum, 19 second-feet Sept. 21-27, 1932.

Remarks.- Records good except those for periods of ice effect, which are fair.

Revisions (water years).- W 757: 1932-33. W 802: 1936(M). W 972: 1932, 1934-35.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 28 to June 25)

2.5	191	3.5	685	8.0	5,500
2.6	221	4.0	1,100	10.0	8,250
2.9	339	5.0	2,100	11.0	10,000
3.2	490	7.0	4,300		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	457	1,130	934	643	768	1,380	3,200	1,330	2,870	582	284	309
2	395	722	857	722	b810	1,580	4,660	1,190	1,830	784	405	280
3	357	692	816	784	b880	3,200	5,020	1,240	1,190	984	636	272
4	330	2,430	800	738	b1,000	3,750	4,540	1,160	950	722	1,360	268
5	313	3,200	792	678	b1,100	3,200	4,540	1,160	848	502	3,970	256
6	300	2,600	808	643	b1,400	1,990	4,780	1,140	760	430	4,300	268
7	292	1,430	824	*629	b1,600	2,650	3,970	1,190	800	395	4,080	288
8	292	1,280	776	589	b1,800	4,540	5,380	1,380	1,060	380	3,970	280
9	318	2,100	738	576	b2,000	4,540	6,020	1,240	1,180	353	1,940	280
10	452	2,320	708	596	1,780	4,420	5,500	1,090	984	330	816	322
11	848	1,990	808	570	1,940	3,310	4,540	934	760	313	643	362
12	1,430	4,420	900	514	1,880	2,480	2,650	857	636	305	622	468
13	1,380	5,140	840	1,640	2,700	1,940	2,380	866	570	296	93.	468
14	1,240	4,540	768	5,260	5,760	1,630	2,380	950	526	322	1,240	367
15	934	3,530	722	5,380	8,570	1,480	2,870	1,240	942	538	968	305
16	700	2,260	1,480	4,420	9,220	1,580	3,420	1,160	636	1,380	576	280
17	589	2,260	1,990	3,270	8,890	2,870	3,090	1,090	700	942	474	268
18	589	1,940	1,990	1,630	7,500	3,090	2,160	1,280	768	582	415	260
19	792	1,480	1,380	1,240	7,220	3,090	1,680	1,080	664	440	446	249
20	738	1,530	1,100	1,000	7,220	2,100	1,480	840	544	385	526	238
21	629	1,430	959	1,780	3,850	1,680	1,380	745	490	371	602	235
22	514	1,240	874	2,870	1,830	1,580	1,330	708	474	425	570	238
23	452	1,680	840	2,700	1,780	1,530	1,240	678	446	643	526	246
24	420	2,540	808	1,830	1,730	2,100	1,170	657	638	816	435	249
25	400	2,980	760	1,100	1,830	3,970	1,120	708	1,950	866	405	242
26	380	2,430	730	882	2,100	4,300	1,080	1,280	1,240	563	376	235
27	371	1,780	715	984	2,320	4,420	1,070	4,420	722	410	357	224
28	385	1,330	700	1,190	2,040	4,540	1,480	4,480	664	344	339	218
29	1,330	1,140	671	b1,200	1,680	4,420	1,880	3,360	925	318	326	224
30	2,870	1,020	615	b1,200	-	4,080	1,630	1,940	776	313	353	264
31	1,730	-	615	b1.100	-	2,980	-	2,760	-	292	367	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	22,227	2,870	292	717	0.537	0.62
November	64,564	5,140	692	2,152	1.61	1.80
December	28,318	1,990	615	913	.684	.79
Calendar year 1947	424,552	7,650	127	1,163	.871	11.83
January	48,358	5,380	514	1,560	1.17	1.35
February	93,198	9,220	768	3,214	2.41	2.60
March	90,420	4,540	1,380	2,917	2.19	2.52
April	87,640	6,020	1,070	2,921	2.19	2.44
May	44,153	4,480	657	1,424	1.07	1.23
June	27,543	2,870	446	918	.688	.77
July	16,326	1,380	292	527	.395	.46
August	33,261	4,300	284	1,073	.804	.93
September	8,463	468	218	282	.211	.24
Water year 1947-48	564,471	9,220	218	1,542	1.16	15.75

Peak discharge (base, 5,000 sec.-ft.).- Nov. 13 (7:30 p.m.) 5,140 sec.-ft.; Jan. 15 (4 a.m.) 5,500 sec.-ft.; Feb. 16 (5 p.m.) 9,600 sec.-ft.; Apr. 3 (5 a.m.) 5,020 sec.-ft.; Apr. 9 (7 a.m.) 6,150 sec.-ft.

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Buffalo Creek near Hampden Sidney, Va.

Location.- Staff gage, lat. 37°15', long. 78°29', at bridge on State Highway 626, 0.8 mile upstream from Locket Creek, 2 miles northwest of Hampden Sidney, Prince Edward County, and 6 miles southwest of Farmville.

Drainage area.- 70 square miles.

Records available.- August 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 1,660 second-feet Feb. 14 (gage height, 6.60 feet); minimum observed, 22 second-feet Sept. 27, 28; minimum gage height observed, 1.90 feet Oct. 7.

1946-48: Maximum discharge observed, that of Feb. 14, 1948; minimum observed, 11 second-feet Sept. 5, 6, 1947 (gage height, 1.60 feet).

Remarks.- Records fair except those for period of ice effect, which are poor. Gage read once daily.

Rating table, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 12 to Jan. 15, Sept. 3-30)

1.7	15	3.7	127	5.4	432
1.9	25	4.0	160	5.6	520
2.3	45	4.5	230	5.8	650
3.0	80	5.0	320	6.0	820
3.5	110	5.2	368	6.3	1,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	52	50	45	b40	65	1,060	58	82	60	35	30
2	32	45	48	48	b45	65	263	62	75	60	50	28
3	30	137	48	45	b50	85	173	60	70	58	55	26
4	29	272	48	45	b55	82	106	55	58	50	110	26
5	27	85	45	42	b60	75	94	62	50	48	238	26
6	26	70	50	40	b65	70	85	60	50	45	114	29
7	25	58	48	40	b70	215	200	65	58	42	58	31
8	28	114	45	38	b75	281	193	68	186	45	48	28
9	27	103	45	38	b80	230	200	52	122	40	45	28
10	186	78	45	40	*70	103	103	52	91	38	42	26
11	186	68	52	40	85	91	103	52	65	38	40	50
12	254	320	50	*40	80	80	100	75	55	35	45	40
13	246	215	48	45	137	70	100	72	45	35	42	28
14	60	88	48	415	650	70	80	60	85	35	42	28
15	58	80	45	132	940	62	230	58	160	50	38	28
16	58	127	160	b70	281	82	103	58	85	48	35	27
17	68	91	78	b60	200	173	94	70	70	42	35	26
18	58	82	70	b55	186	137	80	68	60	40	34	26
19	50	85	55	b50	127	97	70	55	58	35	34	25
20	48	65	52	b50	103	82	72	55	50	42	78	24
21	40	55	50	b70	82	80	70	55	45	45	45	26
22	40	55	50	b80	85	70	70	52	70	58	42	26
23	38	114	50	b70	82	82	70	45	72	68	38	24
24	35	100	45	b50	80	173	60	42	70	62	35	23
25	34	72	a45	b40	80	154	58	173	65	45	34	24
26	33	72	45	b45	85	118	55	114	52	34	34	24
27	32	62	45	b50	80	103	60	110	154	35	34	22
28	34	55	45	b55	72	331	91	110	75	38	33	22
29	263	52	45	b60	70	118	75	254	58	35	32	33
30	88	52	45	b55	-	160	60	148	78	35	30	85
31	60	-	45	b50	-	230	-	106	-	35	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,227	263	25	71.8	1.03	1.19
November	2,924	320	45	97.5	1.39	1.55
December	1,640	160	45	52.9	.756	.87
Calendar year 1947	23,120	580	11	63.3	.904	12.30
January	2,003	415	38	64.6	.923	1.06
February	4,115	940	40	142	2.03	2.19
March	3,834	331	62	124	1.77	2.04
April	4,178	1,060	55	139	1.99	2.22
May	2,426	254	42	78.3	1.12	1.29
June	2,314	186	45	77.1	1.10	1.23
July	1,376	68	34	44.4	.634	.73
August	1,603	238	28	51.7	.739	.85
September	889	85	22	29.6	.423	.47
Water year 1947-48	29,529	1,060	22	80.7	1.15	15.69

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Appomattox River at Farmville.

b Stage-discharge relation affected by ice.

Deep Creek near Mannboro, Va.

Location.- Staff gage, lat. 37°17', long. 77°52', at bridge on State Highway 38, 0.7 mile upstream from Sweathouse Creek, 3.5 miles northwest of Mannboro, and 7.5 miles southeast of Amelia, Amelia County.

Drainage area.- 156 square miles.

Records available.- September 1946 to September 1948.

Extremes.- Maximum discharge during year, 4,560 second-feet Feb. 15 (gage height, 11.30 feet, from floodmarks); minimum observed, 17 second-feet Sept. 21, 26 (gage height, 1.30 feet).

1946-48: Maximum discharge observed, 7,140 second-feet Sept. 25, 1947 (gage height, 13.1 feet, from floodmarks); minimum observed, 10 second-feet Sept. 6, 1947 (gage height, 1.08 feet).

Remarks.- Records fair except those for period of ice effect, which are poor. Gage read once daily.

Rating tables, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 4 to Sept. 6, Sept. 13-30)

Oct. 1 to Apr. 7

1.8	36	4.5	305	8.0	1,300
2.0	47	5.0	393	9.0	1,910
2.4	76	5.5	494	9.5	2,300
3.0	128	6.0	615	10.2	3,080
3.5	178	6.5	745		
4.0	235	7.0	900		

Apr. 8 to Sept. 30

1.2	15	2.5	90
1.3	19	2.9	120
1.6	33	3.5	178
2.0	56		

Note.- Same as preceding table above 3.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	72	110	92	b100	137	494	129	321	38	38	30
2	47	64	106	106	b120	247	774	148	168	36	158	28
3	47	167	101	88	b130	565	590	129	112	32	168	26
4	41	836	110	80	b140	433	289	112	90	31	289	24
5	47	836	106	80	b150	235	189	120	90	28	289	24
6	38	321	110	76	b160	223	640	104	80	27	112	24
7	44	167	101	76	b170	433	966	148	112	27	62	23
8	47	305	101	50	b180	774	640	129	97	26	80	26
9	47	774	106	80	b200	516	393	104	80	24	86	29
10	68	274	88	76	b180	374	235	97	69	23	56	38
11	110	247	128	54	b160	289	247	90	66	24	47	50
12	47	868	119	54	247	260	289	90	62	23	44	38
13	80	868	101	*453	393	200	247	90	59	26	56	32
14	68	433	88	966	1,010	178	356	90	56	26	47	30
15	61	235	84	665	*3,040	167	393	90	53	44	44	22
16	61	356	167	211	962	178	374	83	50	44	41	22
17	68	289	289	189	516	615	235	80	44	41	41	21
18	72	189	157	167	321	615	189	66	47	33	41	21
19	72	189	137	96	260	274	168	62	53	30	47	19
20	64	247	128	137	305	223	148	62	47	30	129	18
21	54	189	101	b210	189	223	148	62	44	86	56	17
22	50	147	101	b230	200	189	148	62	44	112	47	20
23	47	305	114	b220	211	189	129	59	47	112	44	21
24	44	615	106	b160	211	356	138	56	62	178	41	21
25	44	494	101	b100	235	590	120	97	56	76	47	18
26	44	247	92	b150	235	289	129	178	47	47	38	17
27	44	189	80	b140	223	433	112	718	50	32	32	18
28	76	147	92	b140	189	774	223	516	47	30	30	20
29	211	147	84	b130	167	540	211	148	44	30	28	50
30	178	119	64	b120	-	260	189	168	38	28	41	66
31	96	-	84	b110	-	211	-	321	-	26	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,067	211	38	66.7	0.428	0.49
November	10,336	868	64	345	2.21	2.47
December	3,456	289	64	111	.712	.82
Calendar year 1947	56,796	3,240	10	156	1.00	13.53
January	5,506	966	50	178	1.14	1.31
February	10,604	3,040	100	366	2.35	2.53
March	10,990	774	137	355	2.28	2.63
April	9,403	966	112	313	2.01	2.24
May	4,408	718	56	142	.910	1.05
June	2,235	321	38	74.5	.478	.53
July	1,370	178	23	44.2	.283	.33
August	2,309	289	28	74.5	.478	.55
September	813	66	17	27.1	.174	.19
Water year 1947-48	63,497	3,040	17	173	1.11	15.14

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Swift Creek near Chester, Va.

Location.- Chain gage, lat. 37°18'55", long. 77°29'40", at Bradley Bridge, 1¼ miles downstream from Second Branch, 3 miles upstream from Frank Branch, and 4 miles southwest of Chester, Chesterfield County.

Drainage area.- 143 square miles.

Records available.- September to December 1943, June 1944 to September 1948.

Extremes.- Maximum discharge observed during year, 2,030 second-feet Feb. 14 (gage height, 12.47 feet); minimum observed, 5.5 second-feet Sept. 28; minimum gage height observed, 1.43 feet Sept. 21.

1943-48: Maximum discharge, 13,200 second-feet July 18, 1945 (gage height, 29.0 feet, from floodmarks); minimum observed, 0.2 second-foot Sept. 19, 1943 (gage height, 1.16 feet).

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Gage read once daily to Aug. 6 and twice daily after Aug. 24.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	56	97	64	a170	176	925	188	641	60	6.7	13
2	27	43	92	69	a175	324	719	152	324	34	78	a10
3	24	124	78	102	176	552	535	140	188	15	37	10
4	23	282	82	87	152	471	338	112	118	13	a400	9.1
5	22	310	82	74	201	282	552	176	64	13	a350	8.8
6	21	140	82	69	227	240	296	134	92	16	146	a10
7	20	82	48	60	296	739	586	176	64	17	a55	12
6	27	188	64	56	240	883	569	254	107	15	a45	13
9	25	338	69	60	268	471	519	164	48	13	a45	13
10	140	214	64	60	a240	552	410	107	60	10	a35	13
11	140	188	112	56	214	503	282	82	52	12	a35	22
12	74	1,010	107	40	152	352	240	60	48	11	a45	17
13	52	820	107	679	395	268	296	44	38	10	a70	a15
14	43	324	48	660	2,030	240	227	60	35	33	a45	11
15	40	240	60	296	2,000	214	440	64	32	188	a35	9.1
16	41	268	366	310	1,180	227	440	87	52	56	a30	7.3
17	40	254	268	268	440	641	324	152	48	38	a25	6.7
18	41	164	188	201	338	425	227	107	35	24	a30	6.7
19	35	164	140	129	268	296	164	64	32	17	a35	7.0
20	30	188	140	140	296	254	176	52	30	14	a32	a6
21	28	152	102	471	296	227	152	44	25	15	a30	5.8
22	25	140	87	519	227	201	134	38	24	15	a30	8.5
23	24	152	87	338	176	188	124	37	23	a18	a28	8.5
24	20	410	82	188	152	268	118	37	25	a25	a25	6.7
25	19	324	78	152	146	310	134	38	24	26	21	6.4
26	24	310	78	176	380	296	140	124	22	16	17	5.8
27	22	188	74	188	338	455	124	338	20	14	16	a6
28	22	140	74	146	282	641	296	352	56	13	16	5.5
29	227	124	64	152	227	440	366	227	33	13	13	7.3
30	176	107	56	134	-	282	227	118	24	13	a13	13
31	69	-	64	164	-	240	-	604	-	11	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,553	227	19	50.1	0.350	0.40
November	7,444	1,010	43	248	1.73	1.93
December	3,140	366	48	101	.706	.81
Calendar year 1947	50,388.3	1,740	1.3	138	.965	13.09
January	6,108	679	40	197	1.38	1.59
February	11,682	2,030	146	403	2.82	3.04
March	11,658	883	176	376	2.63	3.03
April	10,080	925	118	336	2.35	2.62
May	4,332	604	37	140	.979	1.13
June	2,384	641	20	79.5	.556	.62
July	788	188	10	25.4	.178	.21
August	1,801.7	400	6.7	58.1	.406	.47
September	293.2	22	5.5	9.77	.068	.08
Water year 1947-48	61,263.9	2,030	5.5	167	1.17	15.93

a No gage-height record; discharge computed on basis of weather records and records for Falling Creek near Drewrys Bluff.

Chickahominy River near Providence Forge, Va.

Location.- Water-stage recorder, lat. 37°26'10", long. 77°03'40", at highway bridge 1.1 miles southwest of Providence Forge, New Kent County, and 1.7 miles downstream from Schiminoe Creek. Datum of gage is 6.07 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 249 square miles.

Records available.- January 1942 to September 1948.

Extremes.- Maximum discharge during year, 1,320 second-feet May 26, Aug. 9; maximum gage height, 8.64 feet May 26; minimum discharge, 32 second-feet Sept. 21 (gage height, 2.33 feet).

1942-48: Maximum discharge, 5,750 second-feet July 21, 1945 (gage height, 10.6 feet); minimum, 9.6 second-feet Aug. 25, 26, Sept. 18, 1943, July 8, 1944; minimum gage height, 1.56 feet Aug. 25, 26, 1943.

Remarks.- Records good except those for period of no gage-height record, which are fair. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 26 to Aug. 9)

Oct. 1 to Feb. 14

2.4	37	6.0	408
2.8	68	7.0	562
3.2	104	7.5	666
4.0	180	8.0	845
5.0	285	8.5	1,120

Feb. 15 to Sept. 30

6.8	527	8.0	955
7.1	592	8.5	1,250
7.5	725		

Note.- Same as preceding table below 6.8 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	666	95	368	160	a250	436	811	307	1,250	136	50	40
2	620	97	355	165	a260	465	955	296	1,180	100	87	40
3	495	180	331	170	a270	545	955	296	1,060	68	236	37
4	331	307	296	170	a280	567	857	307	857	80	215	35
5	170	408	246	180	a300	545	725	311	725	100	307	34
6	89	845	220	185	a350	511	686	307	686	92	465	34
7	66	562	200	195	a390	567	857	296	686	73	725	40
8	66	527	195	195	a380	767	857	319	592	64	686	53
9	64	562	185	195	a370	857	905	307	567	62	1,120	62
10	79	666	180	185	a350	955	905	285	319	55	1,180	74
11	88	693	190	160	a450	955	857	258	258	49	857	90
12	97	724	190	145	a500	1,060	767	258	230	46	592	92
13	95	642	195	220	a600	1,060	767	307	230	43	450	86
14	84	666	195	381	a700	905	725	343	210	47	285	65
15	71	724	195	465	a850	767	686	307	170	154	185	48
16	62	693	258	a530	1,000	686	620	252	140	225	150	42
17	59	760	307	a650	955	767	567	220	136	236	122	37
18	62	800	331	a760	1,000	686	651	210	126	225	90	35
19	66	760	343	a870	1,060	620	811	246	113	170	76	34
20	62	666	331	a820	955	567	767	263	104	155	79	33
21	58	562	331	a770	767	511	686	225	92	118	85	33
22	53	495	343	a650	651	465	567	200	85	101	90	53
23	47	480	355	a600	545	450	480	175	81	98	94	63
24	43	480	331	a540	480	436	408	140	78	131	91	59
25	41	450	285	a450	436	422	355	113	79	155	77	48
26	40	436	236	a350	436	408	307	605	74	170	66	39
27	39	422	210	a280	465	422	280	1,250	73	131	58	36
28	40	394	195	a250	465	567	285	905	108	78	52	34
29	47	368	180	a230	465	767	307	767	145	64	48	35
30	73	368	170	a230	-	905	319	811	165	58	46	49
31	95	-	165	a240	-	767	-	1,180	-	54	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,968	666	39	128	0.514	0.59
November	15,832	845	95	528	2.12	2.36
December	7,912	368	165	255	1.02	1.18
Calendar year 1947	87,443	940	13	240	.964	13.05
January	11,391	870	145	367	1.47	1.70
February	15,980	1,060	250	551	2.21	2.38
March	20,408	1,060	408	658	2.64	3.04
April	19,725	955	280	658	2.64	2.94
May	12,086	1,250	113	390	1.57	1.81
June	10,619	1,250	73	354	1.42	1.58
July	3,338	236	43	108	.434	.50
August	8,707	1,180	43	281	1.13	1.30
September	1,460	92	33	48.7	.196	.22
Water year 1947-48	131,426	1,250	33	359	1.44	19.60

Peak discharge (base, 1,000 sec.-ft.).- Feb. 19 (11 a.m.) 1,060 sec.-ft.; Mar. 12 (7 p.m.) 1,120 sec.-ft.; May 26 (12 p.m.) 1,320 sec.-ft.; June 1 (6 a.m.) 1,250 sec.-ft.; Aug. 9 (7:30 p.m.) 1,320 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Mattaponi River near Beulahville and Dragon Run near Church View.

Lake Drummond in Dismal Swamp, Va.

Location.- Staff gage, lat. 36°36'00", long. 76°26'40", in outlet canal, in Norfolk County 200 feet upstream from dam and gates, half a mile downstream from Lake Drummond, 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 1948.

Extremes.- Maximum gage height during year, 5.66 feet June 2; minimum, 0.14 foot Nov. 2. 1926-48: Maximum gage height, 6.09 feet Oct. 7, 1929; minimum, about 0.0 foot sometime during fall or winter of 1941-42.

Remarks.- Gage read twice daily. Stages below about 1.0 foot may not represent lake level because of sand bar at outlet of lake and head of canal.

Revisions (water years).- W 1032: 1934-43.

Gage height, in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.23	0.30	3.18	5.05	5.13	5.03	5.09	5.28	5.57	5.10	5.00	4.98
2	2.15	.22	3.22	5.06	5.16	5.01	5.12	5.24	5.50	5.10	4.98	4.88
3	2.05	.95	3.26	5.06	5.11	5.02	5.18	5.27	5.34	5.10	4.98	4.75
4	1.99	1.27	3.29	5.02	5.06	5.05	5.15	5.24	5.36	5.10	4.99	4.80
5	1.97	1.28	3.36	5.04	5.00	5.05	5.13	5.30	5.38	5.08	5.32	4.83
6	1.92	1.35	3.48	4.99	5.02	5.07	5.13	5.28	5.36	5.06	5.31	4.82
7	1.88	1.36	3.52	4.99	5.10	5.15	5.13	5.29	5.33	5.02	5.27	4.79
8	1.89	1.37	3.56	4.99	5.10	5.17	5.17	5.29	5.32	5.00	5.27	4.76
9	1.81	1.48	3.59	5.03	5.10	5.19	5.18	5.18	5.25	5.00	5.29	4.75
10	1.72	1.48	3.65	4.98	5.15	5.26	5.17	5.14	5.18	5.00	5.38	4.79
11	1.71	1.49	3.77	5.01	5.18	5.24	5.13	5.13	5.11	5.00	5.38	4.88
12	1.72	1.70	3.81	5.03	5.18	5.28	5.15	5.10	5.09	4.98	5.40	4.87
13	1.67	1.73	3.85	5.05	5.15	5.21	5.15	5.14	5.03	4.92	5.31	4.86
14	1.63	1.75	3.89	5.11	5.35	5.23	5.10	5.20	5.02	4.82	5.23	4.84
15	1.58	1.77	3.99	5.22	5.25	5.24	5.21	5.20	5.00	4.97	5.19	4.84
16	1.54	1.88	4.13	5.20	5.34	5.23	5.22	5.20	4.97	5.00	5.11	4.81
17	1.46	2.01	4.23	5.27	5.38	5.24	5.20	5.20	5.00	5.00	5.14	4.78
18	1.48	2.06	4.30	5.21	5.42	5.22	5.19	5.24	4.99	5.00	5.18	4.74
19	1.43	2.12	4.30	5.20	5.52	5.17	5.21	5.24	4.99	5.05	5.14	4.74
20	1.40	2.14	4.39	5.20	5.52	5.18	5.23	5.24	4.93	5.10	5.18	4.71
21	1.34	2.20	4.66	5.26	5.46	5.17	5.20	5.21	4.92	5.11	5.19	4.69
22	1.25	2.31	4.69	5.24	5.46	5.20	5.23	5.21	4.90	5.10	5.15	4.66
23	1.12	2.52	4.65	5.22	5.40	5.16	5.21	5.19	4.95	5.10	5.17	4.64
24	.89	2.66	4.64	5.20	5.33	5.15	5.22	5.15	5.00	5.11	5.13	4.58
25	.91	2.81	4.68	5.16	5.27	5.01	5.22	5.12	4.96	5.12	5.12	4.50
26	.88	2.81	4.82	5.11	5.13	5.05	5.20	5.11	4.93	5.10	5.14	4.44
27	.75	2.84	4.88	5.06	5.09	5.06	5.18	5.15	4.91	5.00	5.10	4.44
28	.55	2.81	4.95	5.05	5.16	5.08	5.19	5.14	5.07	5.08	5.05	4.42
29	.50	2.50	4.99	5.02	5.11	5.07	5.20	5.10	5.05	5.11	5.02	4.44
30	.43	3.08	5.03	5.08	-	5.07	5.29	5.07	5.08	5.04	4.99	4.41
31	.41	-	5.03	5.07	-	5.04	-	5.23	-	5.00	5.02	-

Nottoway River near Burkeville, Va.

Location.- Wire-weight gage, lat. 37°05', long. 78°12', at bridge on State Highway 49, 2¾ miles upstream from Modest Creek, 6 miles north of Victoria, and 7½ miles south of Burkeville, Nottoway County. Datum of gage is 354.58 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 38 square miles.

Records available.- September 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 2,130 second-feet Feb. 14 (gage height, 15.56 feet); minimum observed, 1.1 second-feet Sept. 4 (gage height, 1.07 feet).
1946-48: Maximum discharge observed, 3,020 second-feet Sept. 25, 1947 (gage height, 18.15 feet); minimum observed, 0.3 second-foot Sept. 20, 1947 (gage height, 1.02 feet).

Remarks.- Records fair above 5 second-feet and poor below. Gage read once daily.

Rating tables, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 11)

Oct. 1 to Feb. 14

1.8	9.3	4.0	97	9.0	558
2.0	13	5.0	161	10.0	738
2.5	29	6.0	233	11.0	942
3.0	49	7.0	317		
3.5	70	8.0	418		

Feb. 15 to Sept. 30

1.0	0.6	1.5	6.2	2.5	32
1.1	1.3	1.7	9.8	3.0	52
1.2	2.2	1.9	14	3.5	72
1.3	3.3	2.1	20	4.0	97

Note.- Same as preceding table above 3.7 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	19	19	14	b25	32	430	22	40	3.9	2.1	1.3
2	12	16	21	21	*b24	34	233	23	24	3.3	15	1.2
3	11	133	19	17	b26	115	76	22	18	3.0	6.7	1.2
4	10	326	19	14	33	68	56	19	16	3.0	30	1.1
5	9.5	49	20	*16	47	52	46	23	14	2.6	20	1.8
6	10	29	22	15	57	36	42	18	12	2.2	7.4	1.9
7	10	20	18	14	61	281	558	46	19	2.0	5.0	2.3
8	10	80	19	11	57	115	109	22	13	1.9	4.4	12
9	13	47	19	16	127	64	76	20	11	1.8	4.3	10
10	14	25	16	15	41	80	52	15	9.4	1.8	3.3	20
11	25	25	27	9.3	57	60	38	14	8.7	1.7	3.1	9.8
12	41	858	21	9.3	70	50	64	17	7.2	1.7	4.0	5.0
13	33	70	18	24	175	44	52	19	7.0	1.6	9.4	3.0
14	21	41	16	168	*837	38	44	30	18	2.1	4.4	2.8
15	16	39	16	65	249	34	203	18	9.2	6.4	3.4	2.3
16	25	49	147	45	109	32	64	15	9.0	4.3	2.8	2.1
17	21	45	43	35	97	482	50	13	9.4	3.6	2.8	1.9
18	19	16	29	29	72	76	38	12	8.8	2.6	2.5	1.8
19	18	31	24	27	52	56	34	10	7.2	2.2	3.4	1.8
20	15	51	22	24	46	50	32	9.8	6.4	2.3	9.8	1.8
21	14	37	22	85	42	52	29	9.6	5.3	8.7	5.4	1.8
22	13	25	20	65	52	44	28	9.6	5.2	10	4.1	1.8
23	13	308	19	43	52	22	24	8.3	17	9.8	3.4	1.8
24	12	103	18	a35	56	68	24	8.7	8.8	6.4	3.0	1.8
25	12	80	16	45	64	80	24	12	6.0	3.1	2.6	1.8
26	11	45	16	27	60	52	22	290	4.7	2.6	2.4	1.7
27	11	35	15	27	52	48	20	38	4.0	2.4	2.1	1.7
28	12	33	16	29	38	97	48	26	7.9	2.1	1.8	2.0
29	91	27	15	27	36	60	38	23	4.7	2.1	1.8	8.1
30	31	29	16	27	-	50	26	23	2.6	2.0	1.5	80
31	21	-	15	27	-	44	-	80	-	1.7	1.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	988.5	91	9.5	31.9	0.839	0.97
November	2,691	858	16	89.7	2.36	2.63
December	743	147	15	24.0	.632	.73
Calendar year 1947	16,073.1	3,020	.3	44.0	1.16	15.75
January	1,025.6	168	9.3	33.1	.871	1.00
February	2,714	837	24	93.6	2.46	2.65
March	2,416	482	22	77.9	2.05	2.36
April	2,580	558	20	86.0	2.26	2.52
May	916.0	290	8.3	29.5	.776	.89
June	333.5	40	2.6	11.1	.292	.33
July	104.9	10	1.6	3.38	.089	.10
August	173.3	30	1.4	5.59	.147	.17
September	187.6	80	1.1	6.25	.164	.18
Water year 1947-48	14,873.4	858	1.1	40.6	1.07	14.53

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for North Meherrin River near Lunenburg, Nottoway River near McKenney, and Stony Creek near Dinwiddie.
b Stage-discharge relation affected by ice.

Nottoway River near McKenney, Va.

Location.- Wire-weight gage, lat. 36°56'45", long. 77°43'55", at bridge on U. S. Highway 1, 1.4 miles upstream from Birch Creek, 3 miles south of McKenney, Dinwiddie County, and 10 miles northeast of Alberta.

Drainage area.- 362 square miles.

Records available.- September 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 5,180 second-feet Feb. 15 (gage height, 16.54 feet); minimum observed, 53 second-feet Sept. 21, 26 (gage height, 1.46 feet)
1946-48: Maximum discharge observed, that of Feb. 15, 1948; minimum observed, 15 second-feet Sept. 19, 1947 (gage height, 0.89 foot); minimum daily, 36 second-feet Sept. 5, 1947.

Remarks.- Records poor. Gage read once daily. Diurnal fluctuation caused by gristmill 4 miles upstream.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 12, Feb. 4-14)

Oct. 1 to Feb. 15

1.6	64	4.0	393	12.0	2,340
2.0	103	6.0	770	14.0	3,540
2.5	162	8.0	1,170	16.2	4,970
3.0	230	10.0	1,620		
3.5	307	11.0	1,920		

Feb. 16 to Sept. 30

1.4	48	2.0	111	4.0	405
1.5	57	2.5	174	5.0	577
1.7	77	3.0	245	6.0	770

Note.- Same as preceding table above 5.2 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	120	291	202	b250	371	1,290	322	1,880	99	82	82
2	103	108	260	188	b300	439	1,730	338	595	88	123	88
3	88	245	260	188	b340	559	1,480	322	388	72	230	88
4	88	1,090	245	202	375	790	690	338	322	67	371	88
5	83	1,290	245	188	447	559	541	371	275	67	439	82
6	83	429	245	188	*519	456	577	306	230	99	275	72
7	73	260	245	175	501	990	1,350	322	306	94	161	67
8	78	501	230	175	501	1,190	2,400	322	690	67	129	82
9	88	910	216	*175	519	1,050	1,250	260	371	72	117	82
10	149	429	216	175	519	1,130	830	230	260	62	117	168
11	162	556	245	168	519	930	577	216	216	62	99	202
12	202	1,730	245	156	575	651	632	202	188	72	94	168
13	188	2,620	230	730	1,110	541	577	245	188	57	99	105
14	149	670	216	1,620	3,040	490	507	245	168	72	94	77
15	a140	537	245	1,420	4,900	456	750	245	245	168	88	72
16	125	810	501	519	4,770	439	790	216	202	142	82	77
17	125	651	575	537	1,030	870	613	202	174	111	82	88
18	120	447	429	393	750	850	456	188	148	105	82	72
19	120	429	307	291	613	613	422	188	142	94	88	57
20	108	447	260	357	541	524	388	161	129	216	174	72
21	98	375	230	690	490	507	388	148	117	670	154	53
22	88	323	230	770	541	473	354	148	117	456	117	82
23	83	890	230	556	524	507	338	142	174	710	99	88
24	83	1,210	216	393	507	651	322	135	202	473	94	82
25	78	850	216	357	541	750	322	168	135	260	99	67
26	78	575	202	b330	577	651	322	275	117	168	88	53
27	78	429	202	b325	524	524	306	559	94	135	82	72
28	88	375	202	307	490	1,150	473	439	111	117	67	88
29	230	340	202	291	422	850	473	290	105	111	72	105
30	275	291	188	b270	-	541	388	275	94	105	275	174
31	162	-	202	b260	-	473	-	1,680	-	99	154	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,727	275	73	120	0.331	0.38
November	19,937	2,620	108	665	1.84	2.05
December	8,026	575	188	259	.715	.82
Calendar year 1947	116,488	3,540	36	319	.881	11.97
January	12,596	1,620	156	406	1.12	1.29
February	26,735	4,900	250	922	2.55	2.75
March	20,975	1,190	371	677	1.87	2.16
April	21,536	2,400	306	718	1.98	2.21
May	9,498	1,680	135	306	.845	.97
June	8,383	1,880	94	279	.771	.86
July	5,190	670	57	167	.461	.53
August	4,327	439	67	140	.387	.45
September	2,753	202	53	91.8	.254	.28
Water year 1947-48	143,683	4,900	53	393	1.09	14.75

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Nottoway River near Burkeville and near Stony Creek, and Stony Creek near Dinwiddie.

b Stage-discharge relation affected by ice.

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 1948.

Average discharge.- 18 years, 555 second-feet.

Extremes.- Maximum discharge during year, 5,780 second-feet Feb. 17 (gage height, 15.90 feet); minimum, 54 second-feet Sept. 27 (gage height, 2.06 feet).

1930-48: Maximum discharge, 25,200 second-feet Aug. 17, 1940 (gage height, 23.66 feet), from rating curve extended above 13,000 second-feet by logarithmic plotting on basis of records for stations on Appomattox River; minimum, 5 second-feet Sept. 2, 5, 1932 (gage height, 0.62 foot).

Remarks.- Records good.

Revisions (water years).- W 802: 1935(M). W 972: 1931(M), 1932, 1934-35, 1939.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.1	58	4.0	351	12.0	2,880
2.3	81	4.5	466	13.0	3,360
2.5	106	5.5	740	14.0	4,000
3.0	177	7.5	1,320	15.0	4,820
3.5	256	9.5	1,940	16.0	5,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	200	231	406	273	394	628	1,060	517	3,210	140	140	192
2	170	188	372	300	454	698	2,480	466	2,250	138	140	140
3	147	184	362	330	600	1,620	2,400	491	882	138	310	124
4	141	882	351	300	614	1,590	1,500	429	530	138	310	105
5	138	1,440	340	282	656	1,080	911	530	441	138	712	103
6	138	1,200	351	273	796	824	796	600	383	140	614	98
7	138	491	351	264	824	1,170	1,570	466	340	151	330	100
8	138	417	330	256	824	2,110	2,920	517	824	138	215	100
9	138	1,140	320	248	1,030	2,000	2,970	429	911	131	178	109
10	295	1,030	310	264	998	2,480	1,530	351	558	126	180	133
11	349	656	320	256	853	2,180	998	310	372	123	159	200
12	273	2,520	372	239	940	1,470	969	291	300	123	140	215
13	282	2,760	351	654	1,680	1,060	940	330	264	120	130	180
14	256	2,400	320	2,560	3,220	882	824	429	248	120	127	140
15	223	911	310	2,400	5,120	796	2,040	429	248	236	124	128
16	200	1,060	698	1,320	5,330	740	1,830	351	291	310	124	93
17	192	1,140	969	740	5,440	882	1,170	300	264	200	117	87
18	200	796	712	684	2,180	1,500	853	340	231	162	109	79
19	200	600	504	558	1,110	1,290	712	291	207	141	110	75
20	190	614	417	466	940	824	656	248	192	138	135	74
21	174	600	383	1,230	824	768	600	223	177	359	215	73
22	159	491	362	1,530	853	712	544	215	170	882	192	75
23	142	796	340	1,140	940	670	491	207	165	969	156	73
24	141	1,710	330	796	882	853	466	200	207	1,260	138	74
25	140	1,680	320	530	969	1,030	441	192	231	544	137	73
26	140	1,060	310	530	998	1,030	454	239	189	300	133	70
27	138	740	310	558	940	768	466	466	159	207	121	62
28	140	572	300	530	824	1,060	740	740	148	170	117	70
29	155	491	291	544	740	1,560	911	504	154	148	110	81
30	292	429	273	504	-	998	684	454	144	140	107	114
31	330	-	273	504	-	712	-	1,520	-	140	274	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,959	349	138	192	0.328	0.38
November	29,229	2,760	184	974	1.66	1.85
December	11,958	969	273	386	.659	.76
Calendar year 1947	177,652	3,420	35	487	.831	11.28
January	21,063	2,560	239	679	1.16	1.34
February	41,973	5,440	394	1,447	2.47	2.66
March	35,985	2,480	628	1,161	1.98	2.28
April	34,926	2,970	441	1,164	1.99	2.22
May	13,075	1,520	192	422	.720	.83
June	14,690	3,210	144	490	.836	.93
July	8,170	1,260	120	264	.451	.52
August	6,104	712	107	197	.336	.39
September	3,240	215	62	108	.184	.21
Water year 1947-48	226,372	5,440	62	619	1.06	14.37

Peak discharge (base, 3,500 sec.-ft.).- Feb. 17 (8 to 10 a.m.) 5,780 sec.-ft.

Nottoway River near Sebrell, Va.

Location.- Wire-weight gage, lat. 36°46'10", long. 77°10'00", 1.1 miles downstream from Three Creek, 2.5 miles southwest of Sebrell, Southampton County, and 5.3 miles upstream from Assamoosick Swamp. Datum of gage is 5.96 feet above mean sea level.

Drainage area.- 1,451 square miles.

Records available.- September 1941 to September 1948.

Extremes.- Maximum discharge during year, 9,020 second-feet Feb. 19 (gage height, 18.24 feet); minimum observed, 94 second-feet Sept. 25 (gage height, 3.60 feet).

1941-48: Maximum discharge, 25,000 second-feet July 22, 1945 (gage height, 24.5 feet); minimum observed, 12 second-feet Oct. 23, 1941 (gage height, 3.30 feet).

Flood of August 1940 reached a stage of 29.7 feet, from floodmarks (discharge, 48,000 second-feet, from rating curve extended above 25,000 second-feet).

Remarks.- Records good. Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 7

4.2	191	6.0	604
4.4	226	7.0	876
5.0	356	9.0	1,530

Nov. 8 to Sept. 30

3.7	107	7.0	840	14.0	3,640
4.0	150	8.0	1,140	16.0	5,580
4.5	234	10.0	1,800	17.0	6,800
5.0	330	12.0	2,560	18.5	9,650
5.5	444	13.0	3,020		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,030	476	1,430	728	1,600	2,440	2,020	2,440	2,280	252	207	216
2	428	404	1,200	728	1,460	2,160	2,050	2,090	2,790	234	270	310
3	312	356	1,080	756	1,490	2,160	2,480	1,800	3,560	234	930	207
4	246	380	1,020	812	1,560	2,520	2,930	1,560	4,760	216	1,110	166
5	226	736	930	728	1,660	2,930	3,420	1,360	4,660	207	1,910	150
6	208	1,290	900	702	1,840	3,170	3,560	1,400	3,230	190	2,200	142
7	191	1,420	900	676	2,020	3,290	3,120	1,560	1,980	182	1,960	135
8	200	960	870	676	2,320	3,170	2,880	1,430	1,430	198	1,300	135
9	217	728	840	650	2,480	3,350	3,170	1,360	1,600	182	756	166
10	380	1,300	784	624	2,520	4,070	3,980	1,240	1,910	166	624	166
11	476	1,530	784	598	2,610	4,960	5,060	900	1,660	158	396	182
12	708	1,490	812	572	2,560	4,960	5,260	812	1,110	158	330	270
13	630	2,020	870	650	2,700	5,690	4,460	784	784	135	290	290
14	578	2,520	870	1,460	3,350	5,580	3,420	930	676	150	252	290
15	500	2,970	840	2,400	4,760	4,860	2,840	1,240	624	234	225	207
16	452	3,490	960	2,930	6,040	3,720	2,790	1,360	546	444	216	182
17	428	3,560	1,430	3,420	7,260	2,970	3,120	1,200	572	520	207	166
18	452	3,070	1,910	4,260	8,810	2,560	3,640	990	520	352	182	150
19	500	2,480	1,980	3,720	9,020	2,560	3,640	870	468	290	182	135
20	552	1,910	1,940	2,740	8,000	2,700	3,020	728	396	290	190	135
21	500	1,600	1,910	2,360	6,040	2,610	2,280	624	352	252	252	128
22	452	1,490	1,870	2,610	4,560	2,240	1,870	444	330	352	374	121
23	380	1,430	1,110	3,070	3,350	1,940	1,700	468	310	960	468	128
24	312	1,660	990	3,490	3,020	1,870	1,560	420	310	1,270	468	121
25	268	2,090	900	3,490	2,880	1,910	1,330	396	310	1,630	330	107
26	246	2,700	840	2,930	2,840	2,090	1,200	374	352	1,240	252	107
27	236	3,020	812	2,240	2,840	2,200	1,140	598	310	702	207	142
28	217	3,020	940	1,940	2,840	2,020	1,430	1,170	290	444	190	107
29	217	2,480	840	1,700	2,700	1,980	1,910	1,560	252	310	166	114
30	236	1,800	812	1,600	-	2,280	2,360	1,530	252	252	225	142
31	312	-	784	1,490	-	2,360	-	1,600	-	216	182	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,090	1,030	191	390	0.269	0.31
November	54,380	3,560	356	1,813	1.25	1.40
December	34,058	1,980	784	1,099	.757	.87
Calendar year 1947	384,211	4,170	86	1,053	.726	9.85
January	56,750	4,260	572	1,831	1.26	1.45
February	105,130	9,020	1,460	3,625	2.50	2.70
March	93,320	5,690	1,870	3,010	2.07	2.39
April	83,640	5,260	1,140	2,788	1.92	2.14
May	35,238	2,440	374	1,137	.784	.90
June	38,624	4,760	252	1,287	.887	.99
July	12,420	1,630	135	401	.276	.32
August	16,871	2,200	166	544	.375	.43
September	5,017	310	107	167	.115	.13
Water year 1947-48	547,538	9,020	107	1,496	1.03	14.03

Stony Creek near Dinwiddie, Va.

Location.- Wire-weight gage, lat. 37°04'00", long. 77°36'10", at bridge on U. S. Highway 1, 1.2 miles southwest of Dinwiddie, Dinwiddie County, and 1.7 miles downstream from Chamberlains Bed Creek.

Drainage area.- 111 square miles.

Records available.- September 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 1,950 second-feet Feb. 15 (gage height, 10.05 feet); minimum observed, 5.3 second-feet Sept. 28 (gage height, 1.23 feet).
1946-48: Maximum discharge observed, that of Feb. 15, 1948; minimum observed, 2.8 second-feet Aug. 20, 1947 (gage height, 1.06 feet).

Remarks.- Records fair. Gage read once daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 15

1.3	11	2.3	107	6.5	728
1.5	23	2.6	155	7.0	842
1.7	39	3.0	222	8.0	1,100
1.9	58	4.0	371	9.0	1,470
2.1	79	6.0	645	10.0	1,950

Feb. 16 to Sept. 30

1.2	4.2	1.7	33
1.3	7.8	1.8	42
1.4	12	1.9	53
1.5	18	2.1	78
1.6	25	2.3	107

Note.- Same as preceding table above 2.2 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	24	64	52	a90	115	343	123	915	17	11	12
2	19	21	63	61	88	115	728	107	371	14	20	11
3	17	25	62	59	84	441	525	106	123	11	34	9.1
4	16	53	60	54	91	315	222	89	89	11	34	8.2
5	15	92	61	52	123	196	163	106	79	10	81	7.1
6	14	89	64	50	131	147	147	107	66	10	41	7.8
7	13	55	60	47	155	254	632	104	65	10	38	7.4
8	15	62	69	44	155	553	866	107	131	31	27	7.1
9	15	163	54	42	238	371	659	86	102	11	22	10
10	52	91	49	43	a200	708	315	63	66	8.6	18	10
11	50	75	58	38	180	539	214	54	52	7.4	16	21
12	44	708	62	39	171	329	222	49	45	7.1	14	18
13	38	441	78	315	441	214	180	64	40	6.7	15	16
14	31	238	71	728	890	171	155	81	38	6.4	13	13
15	26	123	57	539	1,890	155	300	66	32	10	12	10
16	25	205	222	222	842	147	238	51	30	17	11	10
17	29	155	147	147	371	270	180	45	30	22	10	8.6
18	26	115	123	139	254	270	131	43	25	17	9.5	7.4
19	25	102	100	94	196	180	115	39	24	14	9.1	7.1
20	23	123	79	94	171	155	107	37	22	11	65	6.7
21	20	101	74	413	163	139	104	33	22	9.1	34	6.7
22	19	92	64	371	163	147	163	31	21	27	35	6.7
23	18	525	62	238	180	131	115	26	20	52	77	10
24	18	427	60	222	171	196	102	24	21	89	27	9.1
25	16	300	57	180	222	222	84	24	22	61	17	9.1
26	16	188	56	96	222	147	92	33	22	57	13	8.2
27	16	131	55	102	205	131	131	72	19	29	12	7.1
28	16	104	53	100	163	254	238	74	38	19	11	5.3
29	39	91	51	96	139	188	238	63	22	17	9.1	7.1
30	29	70	43	91	-	139	163	61	19	14	22	22
31	29	-	47	83	-	123	-	1,040	-	13	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	753	52	13	24.3	0.219	0.25
November	4,989	708	21	166	1.50	1.67
December	2,215	222	43	71.5	.644	.74
Calendar year 1947	30,100.3	771	2.8	82.5	.743	10.08
January	4,851	728	38	156	1.41	1.63
February	8,389	1,890	84	289	2.60	2.80
March	7,462	708	115	241	2.17	2.50
April	7,872	866	84	262	2.36	2.63
May	2,998	1,040	24	96.7	.871	1.00
June	2,571	915	19	85.7	.772	.86
July	639.3	89	6.4	20.6	.186	.21
August	770.7	81	9.1	24.9	.224	.26
September	298.8	22	5.3	9.96	.090	.10
Water year 1947-48	43,808.8	1,890	5.3	120	1.08	14.65

a No gage-height record; discharge computed on basis of records for Nottoway River near Burkeville and near McKenney.

Blackwater River near Dendron, Va.

Location.- Water-stage recorder, lat. 37°01'30", long. 76°52'30", at Walls Bridge, 1¼ miles downstream from Cypress Swamp and 3½ miles southeast of Dendron, Surry County. Datum of gage is 30.99 feet above mean sea level (Corps of Engineers bench mark).

Drainage area.- 285 square miles.

Records available.- January 1942 to September 1948.

Extremes.- Maximum discharge during year, 2,130 second-feet Feb. 18 (gage height, 6.20 feet); minimum, 3.8 second-feet July 14 (gage height, 1.13 feet).
1942-48: Maximum discharge, 4,710 second-feet July 21, 1945 (gage height, 8.90 feet); no flow at times.

Remarks.- Records fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 7 to Jan. 9)

Oct. 1 to June 4

1.6	12	3.0	111	4.5	755
2.0	24	3.3	189	5.0	1,140
2.4	39	3.6	281	6.2	2,130
2.6	53	3.9	399		
2.8	75	4.2	558		

June 5 to Sept. 30

1.1	3.2	2.5	51	3.4	242
1.3	7.3	2.6	59	3.6	308
1.5	12	2.7	71	3.8	393
1.9	24	2.8	87	4.2	620
2.1	30	2.9	107	5.0	1,150
2.3	39	3.2	184		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	23	770	204	a360	659	348	352	755	29	29	93
2	20	22	589	204	a400	620	409	373	980	30	38	59
3	23	95	479	192	a450	620	452	373	1,000	20	97	36
4	23	271	404	189	a450	595	447	352	1,220	14	204	26
5	20	382	344	192	a460	601	428	356	1,150	10	489	20
6	16	512	299	201	479	608	428	310	908	8.8	596	16
7	13	329	258	195	512	692	684	295	668	7.3	418	14
6	37	271	233	189	564	830	935	271	536	6.2	370	14
9	70	224	212	201	608	980	1,220	251	424	6.9	357	21
10	135	183	195	212	a610	1,300	1,300	239	418	6.7	324	33
11	192	181	201	181	a610	1,260	1,140	236	336	5.6	280	44
12	186	230	195	167	a650	1,420	950	242	254	4.6	212	37
13	186	261	206	212	a800	1,460	920	264	233	4.2	131	32
14	178	306	221	336	1,300	1,380	860	281	258	4.2	69	32
15	151	378	209	390	1,750	1,260	860	313	248	8.4	43	31
16	123	452	264	452	2,090	1,060	792	299	221	23	30	27
17	111	500	274	535	2,090	875	785	258	179	40	25	26
16	116	564	303	546	2,090	720	755	221	179	30	26	23
19	111	589	344	564	1,960	601	720	183	124	22	23	19
20	99	546	352	564	1,620	523	713	167	74	18	28	16
21	80	474	344	583	1,260	474	659	172	64	25	30	13
22	65	428	356	785	1,020	447	552	118	60	82	34	12
23	55	463	369	a900	830	423	458	88	59	112	73	9.8
24	44	517	348	a1,000	755	404	404	73	53	152	147	8.4
25	37	620	313	a900	713	373	378	63	40	230	233	7.3
26	32	830	299	a900	720	344	329	99	29	251	227	6.9
27	27	890	271	a800	713	340	292	95	23	198	176	6.7
28	25	920	255	a700	727	336	321	101	27	157	149	6.5
29	24	898	239	a650	727	306	321	105	29	126	168	6.5
30	23	808	227	a600	-	303	336	161	28	82	173	9.5
31	24	-	215	a500	-	306	-	385	-	46	141	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,264	192	13	73.0	0.256	0.30
November	13,167	920	22	439	1.54	1.72
December	9,588	770	195	309	1.08	1.24
Calendar year 1947	68,729.7	920	.9	188	.660	8.98
January	14,244	1,000	167	459	1.61	1.86
February	27,318	2,090	360	942	3.31	3.57
March	22,120	1,460	303	714	2.51	2.89
April	19,196	1,300	292	640	2.25	2.51
May	7,096	385	63	229	.804	.93
June	10,577	1,220	23	353	1.24	1.38
July	1,759.9	251	4.2	56.8	.199	.23
August	5,340	596	23	172	.604	.70
September	705.6	93	6.5	23.5	.082	.09
Water year 1947-48	133,375.5	2,090	4.2	364	1.28	17.42

Peak discharge (base, 1,000 sec.-ft.).- Jan. 24 (time unknown) about 1,200 sec.-ft.; Feb. 17 (1 to 4 a.m.) 2,130 sec.-ft.; Mar. 13 (2 a.m.) 1,500 sec.-ft.; Apr. 10 (2 a.m.) 1,340 sec.-ft.; June 4 (2 p.m.) 1,260 sec.-ft.

a No gage-height record; discharge computed on basis of records for Blackwater River at Zuni and near Franklin and Seacock Creek at Unity.

Blackwater River at Zuni, Va.

Location.- Staff gage, lat. 36°52'05", long. 76°50'15", at bridge on U. S. Highway 460 at Zuni, Isle of Wight County, 1.6 miles downstream from Pope Swamp and 3.4 miles upstream from Antioch Swamp. Datum of gage is 8.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 448 square miles.

Records available.- January 1943 to September 1948.

Extremes.- Maximum discharge observed during year, 2,440 second-feet Feb. 17 (gage height, 11.09 feet); minimum observed, 6.1 second-feet July 14 (gage height, 1.48 feet).

1943-48: Maximum discharge, 5,200 second-feet July 25, 1945 (gage height, 15.05 feet); no flow Sept. 10-18, 1944.

Flood in August 1940 reached a stage of 23.2 feet.

Remarks.- Records fair except those below 20 second-feet, which are poor. Gage read once daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 14

1.4	5.3	3.4	60	6.8	358
1.5	6.3	4.0	89	7.0	416
1.6	7.5	4.5	117	7.5	624
1.8	10	5.0	149	8.0	878
2.0	14	5.6	197	9.0	1,340
2.4	24	6.2	264	10.0	1,820
2.8	36	6.6	318	11.1	2,440

July 15 to Sept. 30

5.8	219
6.0	244
6.4	325
6.8	445
7.6	740
8.5	1,120

Note.- Same as preceding table below 5.8 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	36	1,070	336	490	1,030	416	577	336	56	105	135
2	32	33	1,030	318	532	978	532	532	624	64	135	135
3	22	60	878	318	577	978	624	490	928	69	197	123
4	18	230	774	318	624	928	672	451	1,160	48	280	94
5	16	241	722	303	624	928	672	451	1,210	36	780	64
6	17	252	672	289	672	672	624	451	1,260	27	985	44
7	16	276	532	276	774	826	672	451	1,210	18	1,120	30
8	27	358	416	276	826	1,070	978	490	1,120	14	1,030	24
9	60	451	358	264	928	1,210	1,260	451	978	11	860	20
10	105	451	336	264	928	1,340	1,440	416	722	8.9	620	18
11	163	385	318	264	978	1,520	1,520	358	577	7.5	480	18
12	156	385	318	252	978	1,620	1,520	318	451	6.8	410	24
13	163	385	303	252	1,070	1,620	1,390	289	358	6.3	350	33
14	179	358	276	451	1,340	1,620	1,260	358	318	6.1	280	34
15	179	385	289	577	1,970	1,570	1,300	490	264	34	208	32
16	171	416	336	722	2,320	1,480	1,340	490	278	20	142	28
17	163	490	416	722	2,440	1,390	1,340	416	303	16	84	27
18	163	577	532	928	2,380	1,260	1,210	385	289	14	163	26
19	156	624	532	1,070	2,320	1,120	1,120	336	241	18	149	21
20	142	722	532	1,070	2,200	978	1,030	303	197	28	111	20
21	129	722	490	1,210	2,020	878	978	276	171	27	111	16
22	117	774	490	1,480	1,770	774	928	230	129	50	105	15
23	105	774	490	1,620	1,620	672	928	197	156	64	111	12
24	99	774	490	1,620	1,440	624	774	179	129	142	111	11
25	84	878	490	1,440	1,260	577	672	142	117	197	128	9.5
26	74	878	451	1,440	1,160	577	577	117	105	219	135	8.6
27	64	878	451	1,210	1,120	490	532	149	74	197	171	7.8
28	60	978	416	1,120	1,070	490	532	163	111	208	197	6.8
29	52	1,070	385	1,030	1,070	451	577	179	74	208	197	6.5
30	48	1,070	385	978	-	416	624	156	79	179	156	6.5
31	42	-	358	878	-	385	-	171	-	142	135	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,864	179	16	92.4	0.206	0.24
November	15,911	1,070	33	530	1.18	1.32
December	15,536	1,070	278	501	1.12	1.29
Calendar year 1947	105,148.2	1,070	2.4	288	.643	8.73
January	23,296	1,620	252	751	1.68	1.94
February	37,501	2,440	490	1,293	2.89	3.12
March	30,472	1,620	385	983	2.19	2.52
April	28,042	1,520	416	935	2.09	2.33
May	10,462	577	117	337	.752	.87
June	13,967	1,260	74	466	1.04	1.16
July	2,141.6	219	6.1	69.1	.154	.18
August	10,047	1,120	84	324	.723	.83
September	1,049.7	135	6.5	35.0	.078	.09
Water year 1947-48	191,289.3	2,440	6.1	523	1.17	15.89

Blackwater River near Franklin, Va.

Location.- Water-stage recorder, lat. 36°45'50", long. 76°53'50", half a mile south of town of Burdette, half a mile upstream from Black Creek, 3½ miles downstream from Corrowaugh Swamp, and 6 miles north of Franklin, Southampton County.

Drainage area.- 613 square miles.

Records available.- August 1944 to September 1948.

Extremes.- Maximum discharge during year, 3,180 second-feet Feb. 18 (gage height, 10.9 feet, from floodmark); minimum 14 second-feet Sept. 29 (gage height, 1.12 feet).
1944-48: Maximum discharge observed, 5,360 second-feet July 25, 1945 (gage height, 13.4 feet); minimum, 0.4 second-foot Sept. 10, 11, 1944 (gage height, 0.36 foot).

Remarks.- Records fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 3)

1.1	13	3.0	144	7.0	800
1.2	17	4.0	235	8.0	1,200
1.3	22	5.0	344	9.0	1,760
1.7	45	5.5	416	10.0	2,460
2.1	71	6.0	514	11.0	3,260
2.5	101	6.5	640		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	55	1,150	548	a800	1,300	626	870	a400	148	148	140
2	54	53	1,120	525	a840	1,220	752	818	a800	109	153	140
3	43	237	1,060	525	a880	1,220	835	752	1,100	93	363	130
4	35	536	1,000	514	905	1,220	870	688	1,220	78	645	113
5	31	626	922	482	922	1,180	888	640	1,280	56	1,640	91
6	24	584	835	462	1,020	1,120	852	612	1,300	43	2,020	68
7	24	560	768	425	1,100	1,150	888	626	1,300	36	1,880	54
8	47	536	688	400	1,180	1,380	1,080	656	1,250	29	1,640	45
9	93	572	612	384	1,280	1,520	1,380	640	1,180	22	1,320	40
10	441	612	560	377	1,430	1,820	1,700	598	1,060	19	1,000	40
11	752	640	525	363	1,380	2,090	1,820	525	888	17	720	41
12	612	752	492	350	1,380	2,230	1,880	452	704	16	548	38
13	472	818	472	392	1,520	2,230	1,820	434	560	16	452	40
14	400	800	452	736	2,020	2,160	1,700	688	452	20	384	44
15	344	752	434	980	2,780	2,090	1,760	835	370	238	320	41
16	304	752	548	1,060	a3,000	2,020	1,820	784	344	276	235	35
17	287	784	736	1,080	a3,100	1,820	1,760	704	384	144	148	31
18	282	800	818	1,180	a3,100	1,700	1,640	612	400	84	194	30
19	270	835	852	1,280	3,020	1,490	1,490	525	370	68	235	28
20	245	888	835	1,300	2,860	1,320	1,350	452	309	126	216	26
21	212	905	784	1,520	2,620	1,180	1,200	384	245	148	207	24
22	180	905	736	1,880	2,460	1,060	1,100	326	198	384	198	22
23	148	940	704	2,160	2,380	940	1,040	270	276	326	260	20
24	135	980	672	2,230	2,160	870	980	220	235	338	344	19
25	117	1,040	640	2,160	1,950	818	922	184	189	392	344	18
26	105	1,060	640	a2,000	1,760	784	870	a150	162	370	309	17
27	95	1,060	656	a1,700	1,580	752	800	a180	126	314	260	17
28	87	1,060	656	a1,500	1,430	720	752	a200	265	270	220	16
29	83	1,100	640	a1,400	1,380	672	852	a220	230	250	216	15
30	77	1,150	612	a1,300	-	640	870	a200	153	230	194	20
31	64	-	572	a1,100	-	612	-	a250	-	184	162	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,135	752	24	198	0.323	0.37
November	22,392	1,150	53	746	1.22	1.36
December	22,191	1,150	434	716	1.17	1.35
Calendar year 1947	148,847.5	1,280	4.4	408	.666	9.02
January	32,313	2,230	350	1,042	1.70	1.96
February	52,237	3,100	800	1,801	2.94	3.17
March	41,328	2,230	612	1,333	2.17	2.50
April	36,297	1,880	626	1,210	1.97	2.20
May	15,495	870	150	500	.816	.94
June	17,750	1,300	126	592	.966	1.08
July	4,844	392	16	156	.254	.29
August	16,975	2,020	148	548	.894	1.03
September	1,403	140	15	46.8	.076	.08
Water year 1947-48	269,360	3,100	15	736	1.20	16.33

Peak discharge (base, 1,500 sec.-ft.).- Jan. 24 (6 a.m.) 2,230 sec.-ft.; Feb. 18 (time unknown) 3,180 sec.-ft.; Mar. 13 (4 a.m.) 2,230 sec.-ft.; Apr. 12 (10 a.m.) 1,880 sec.-ft.; Apr. 16 (4 p.m.) 1,820 sec.-ft.; Aug. 6 (6 p.m.) 2,020 sec.-ft.

a No gage-height record; discharge computed on basis of records for Blackwater River at Zuni and near Dendron and Seacock Creek at Unity.

Seacock Creek at Unity, Va.

Location.- Chain gage, lat. 36°49'15", long. 76°53'00", at highway bridge 0.7 mile northeast of Unity, Southampton County, 1 mile upstream from mouth, and 4.2 miles downstream from Round Hill Swamp. Datum of gage is 9.22 feet above mean sea level unadjusted.

Drainage area.- 102 square miles.

Records available.- January 1943 to September 1948.

Extremes.- Maximum discharge observed during year, 778 second-feet Feb. 16 (gage height, 8.18 feet); no flow for several days during year.
1943-48: Maximum discharge observed, 1,180 second-feet Sept. 19, 1945; maximum gage height observed, 9.44 feet July 23, 1945 (backwater from Blackwater River); no flow at times.

Remarks.- Records poor. Gage read once daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.1	0	1.8	5.2	4.5	98
1.2	.4	2.0	8.2	5.0	125
1.3	.9	2.2	12	5.5	158
1.4	1.5	2.4	16	6.0	212
1.5	2.2	2.8	28	6.5	300
1.6	3.1	3.2	44	7.0	420
1.7	4.0	4.0	76	8.2	778

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	3.8	108	68	151	187	98	187	64	22	0.2	2.0
2	8.0	3.6	98	68	144	176	137	166	93	13	.8	.7
3	4.7	46	98	93	151	187	212	137	322	10	137	2.3
4	3.2	144	93	93	166	187	176	88	280	7.9	532	1.6
5	2.2	151	84	84	187	199	151	84	137	4.1	652	2.4
6	2.0	151	80	80	212	212	119	84	93	2.2	592	2.8
7	.8	151	76	76	242	226	137	88	68	1.8	368	3.6
8	3.1	151	76	72	260	242	242	88	60	.9	280	3.3
9	13	144	68	64	260	280	420	98	88	.6	151	2.6
10	93	144	64	60	260	446	420	88	119	.4	88	4.6
11	137	137	64	50	242	446	344	60	72	.2	44	5.3
12	137	144	68	46	280	446	280	46	48	.1	25	4.8
13	125	151	68	44	368	368	242	50	25	0	22	3.9
14	103	158	72	226	622	322	212	84	18	0	14	3.6
15	88	158	76	344	744	280	300	137	12	72	9.8	2.3
16	44	166	125	322	778	260	300	125	26	48	8.2	1.7
17	40	166	166	280	d620	158	280	113	38	22	6.5	.7
18	36	166	212	260	d470	151	226	103	80	13	11	.4
19	32	151	199	242	d420	151	187	60	72	10	24	.3
20	32	137	176	242	d370	151	158	38	60	8.6	48	.2
21	28	131	151	322	d320	166	125	28	16	4.8	40	.1
22	24	125	137	532	d300	119	108	22	13	30	32	0
23	19	137	119	420	d280	113	103	18	16	34	187	.2
24	12	166	108	368	d260	108	88	12	26	108	242	.5
25	9.6	176	93	300	d230	119	80	9.6	28	84	176	0
26	7.9	166	88	242	d210	144	68	6.9	24	60	125	0
27	6.3	144	84	199	d210	158	60	22	16	36	50	0
28	5.0	131	80	187	212	144	108	25	46	8.6	32	.2
29	4.7	125	76	176	199	93	158	25	40	6.2	18	.3
30	4.5	108	76	158	-	88	199	32	25	2.4	8.6	11
31	4.4	-	72	151	-	84	-	42	-	.7	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,040.4	137	0.8	33.6	0.329	0.38
November	4,032.4	176	3.6	134	1.31	1.46
December	3,155	212	64	102	1.00	1.15
Calendar year 1947	23,150.5	332	0	63.4	.622	8.42
January	5,869	532	44	189	1.85	2.13
February	9,168	778	144	316	3.10	3.34
March	6,411	446	84	207	2.03	2.34
April	5,738	420	60	191	1.87	2.09
May	2,166.5	187	6.9	69.9	.685	.79
June	2,025	322	12	67.5	.662	.74
July	611.5	108	0	19.7	.193	.22
August	3,928.2	652	.2	127	1.25	1.44
September	61.4	11	0	2.05	.020	.02
Water year 1947-48	44,206.4	778	0	121	1.19	16.10

d Doubtful gage-height record; discharge computed on basis of records for Blackwater River near Dendron and at Zuni.

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. Datum of gage is 136.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 553 square miles.

Records available.- December 1928 to September 1948.

Average discharge.- 19 years (1929-48), 508 second-feet.

Extremes.- Maximum discharge during year, 7,660 second-feet Feb. 16 (gage height, 22.37 feet); minimum, 55 second-feet Sept. 25, 27, 28 (gage height, 1.74 feet).
1928-48: Maximum discharge, 38,000 second-feet Aug. 17, 1940 (gage height, 42.0 feet, from floodmark), from rating curve extended above 13,000 second-feet on basis of velocity-area studies and records for Nottoway River near Stony Creek; minimum, 5 second-feet Sept. 23, 24, 1932 (gage height, 0.72 foot); minimum daily, 5 second-feet Sept. 24, 1932.

Remarks.- Records good.

Revisions (water years).- W 972: 1932(M), 1935.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.7	52	3.5	311	14.0	3,430
2.0	78	4.0	415	18.0	4,810
2.2	99	5.0	656	20.0	5,780
2.4	124	7.0	1,200	22.0	7,300
3.0	217	10.0	2,110		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	168	208	331	244	153	483	1,500	472	3,700	174	112	111
2	150	178	311	244	321	542	3,700	426	871	165	176	105
3	131	382	291	253	437	1,890	1,850	437	506	146	351	90
4	123	1,310	291	244	426	1,110	952	415	393	153	330	90
5	125	763	282	244	506	790	763	566	351	123	1,090	86
6	111	351	282	228	736	604	643	483	311	128	542	85
7	123	272	282	205	763	1,060	2,160	437	351	121	244	77
8	103	588	272	197	790	2,560	4,040	483	1,030	127	199	75
9	112	1,430	262	197	1,280	1,200	1,550	426	709	123	404	83
10	1,400	566	253	207	1,030	1,920	952	351	437	124	301	83
11	2,220	800	272	189	709	1,610	763	321	321	118	179	98
12	542	3,840	301	176	817	1,010	790	301	272	97	141	124
13	404	3,740	282	777	2,270	790	817	331	244	106	140	115
14	291	844	262	3,290	3,870	656	709	351	291	110	130	101
15	217	656	253	1,400	5,380	604	2,050	404	554	272	138	89
16	190	1,430	559	630	6,800	554	1,550	331	592	331	109	85
17	181	1,010	898	494	2,290	1,500	925	291	311	192	118	76
18	202	604	472	437	1,170	1,550	709	301	244	154	116	73
19	244	483	372	362	898	790	604	311	221	118	232	64
20	203	483	331	331	736	656	554	253	207	115	473	61
21	165	472	301	790	656	604	518	231	178	766	154	60
22	148	382	291	1,220	643	592	483	222	181	362	121	60
23	134	786	282	763	709	554	460	214	859	535	130	67
24	125	1,790	272	518	709	566	437	203	1,170	580	132	64
25	124	1,060	262	341	763	1,280	426	214	351	214	121	58
26	130	736	253	362	817	763	404	262	282	156	107	64
27	111	530	253	415	763	656	404	601	217	146	91	56
28	125	426	244	372	617	1,960	1,090	483	244	125	98	68
29	578	382	244	362	554	1,030	844	331	244	109	96	98
30	763	351	231	372	-	682	579	415	194	104	90	235
31	301	-	235	301	-	592	-	2,920	-	112	159	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,944	2,220	103	321	0.580	0.67
November	26,853	3,840	178	895	1.62	1.81
December	9,727	898	231	314	.568	.65
Calendar year 1947	162,299	4,350	47	445	.805	10.92
January	16,165	3,290	176	521	.942	1.09
February	37,613	6,800	153	1,297	2.35	2.53
March	31,158	2,560	483	1,005	1.82	2.10
April	33,226	4,040	404	1,108	2.00	2.23
May	13,787	2,920	203	445	.805	.93
June	15,836	3,700	178	528	.955	1.07
July	6,206	766	97	200	.362	.42
August	6,834	1,090	90	220	.398	.46
September	2,601	235	56	86.7	.157	.18
Water year 1947-48	209,950	6,800	56	574	1.04	14.14

Peak discharge (base, 4,500 sec.-ft.).- Feb. 16 (6:30 a.m.) 7,660 sec.-ft.

North Meherrin River near Lunenburg, Va.

Location.- Wire-weight gage, lat. 36°59', long. 78°21', at bridge on State Highway 40, half a mile downstream from Tusekiah Creek and 5 miles northwest of Lunenburg, Lunenburg County.

Drainage area.- 60 square miles.

Records available.- August 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 2,890 second-feet Feb. 14 (gage height, 16.60 feet); minimum observed, 3.2 second-feet Sept. 5 (gage height, 1.13 feet).

1946-48: Maximum discharge observed, that of Feb. 14, 1948; minimum observed, 2.4 second-feet Aug. 31, 1947; minimum gage height observed, 1.13 feet Aug. 31, 1947, Sept. 5, 1948.

Remarks.- Records poor. Gage read once daily.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-29)

Oct. 1 to Dec. 16

1.6	14	2.0	32	3.0	112
1.7	17	2.2	46	3.5	172
1.8	22	2.6	76	4.0	247

Note.- Same as following table above 4.0 feet.

Dec. 17 to Sept. 30

1.1	2.7	1.6	16	2.6	86	7.0	770
1.2	4.3	1.7	20	3.0	122	11.0	1,560
1.3	6.8	1.8	25	3.5	175	16.0	2,740
1.4	9.6	2.0	37	4.0	247		
1.5	13	2.2	51	5.0	410		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	18	27	24	b33	36	1,020	34	64	11	5.6	3.5
2	7.3	16	26	26	b45	188	279	64	37	10	23	d3.5
3	7.3	88	25	22	b40	108	108	38	33	9.6	13	d3.5
4	6.8	98	25	22	55	77	77	30	25	9.3	25	3.3
5	5.4	50	26	*22	77	55	68	44	23	12	48	3.2
6	6.1	32	27	21	100	48	59	30	19	9.3	16	4.3
7	6.4	31	23	20	104	694	922	104	26	8.2	12	4.1
8	7.5	60	25	26	95	132	152	36	20	7.4	12	4.1
9	7.0	56	21	22	113	72	100	28	18	7.1	11	11
10	122	34	20	20	100	132	72	29	16	7.4	9.3	11
11	263	568	34	24	77	77	72	22	16	7.4	9.0	13
12	46	231	26	40	152	59	95	18	15	6.8	9.3	26
13	23	76	22	393	216	48	86	33	14	6.8	9.9	4.8
14	16	50	21	132	*2,660	48	68	33	44	6.8	7.6	4.6
15	12	128	21	51	231	43	175	27	19	16	7.4	4.6
16	17	88	107	82	122	44	95	22	16	11	6.6	4
17	14	60	48	44	132	279	72	20	19	9.9	6.0	4
18	22	43	38	39	104	104	55	20	14	8.8	6.3	d3.5
19	15	80	33	51	77	77	51	18	15	7.4	6.6	3.5
20	11	53	31	38	64	68	51	16	14	7.9	10	3.5
21	10	38	30	132	43	72	51	17	12	15	7.9	4.1
22	9.0	38	29	77	59	59	40	16	12	13	7.1	3.8
23	8.8	311	29	44	59	72	39	15	51	26	6.6	4
24	8.5	117	24	b35	59	427	36	15	25	15	5.8	3.7
25	8.0	80	25	b36	77	86	35	24	17	11	5.3	3.5
26	8.0	56	26	b40	77	64	36	808	14	8.8	3.7	3.3
27	8.2	43	24	38	59	1,210	33	77	14	8.5	4.8	3.3
28	10	38	24	34	51	132	77	43	18	7.4	4.1	11
29	84	31	22	35	44	77	48	36	13	7.4	11	14
30	33	31	38	29	-	68	39	34	12	7.4	3.7	108
31	22	-	22	28	-	59	-	44	-	6.3	3.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	832.3	263	5.4	26.8	0.447	0.52
November	2,643	568	16	88.1	1.47	1.64
December	919	107	20	29.6	.493	.57
Calendar year 1947	16,441.2	1,950	2.4	45.0	.750	10.23
January	1,647	393	20	53.1	.885	1.02
February	5,125	2,660	33	177	2.95	3.18
March	4,715	1,210	36	152	2.53	2.92
April	4,111	1,020	33	137	2.28	2.54
May	1,795	808	15	57.9	.965	1.11
June	655	64	12	21.8	.363	.40
July	305.9	26	6.3	9.87	.164	.19
August	317.1	48	3.5	10.2	.170	.20
September	281.7	108	3.2	9.39	.156	.17
Water year 1947-48	23,347.0	2,660	3.2	63.8	1.06	14.46

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge computed on basis of records for Meherrin River near Lawrenceville and Nottoway River near Burkeville.

Fontaine Creek near Emporia, Va.

Location.- Chain gage, lat. 36°38'10", long. 77°35'10", at highway bridge, 3.7 miles southwest of Emporia, Greenville County, and 8 miles upstream from Beaverpond Creek.

Drainage area.- 96 square miles.

Records available.- July 1944 to September 1948.

Extremes.- Maximum discharge observed during year, 1,660 second-feet Feb. 15 (gage height, 7.32 feet); minimum daily, 5 second-feet Sept. 21.
1944-48: Maximum discharge observed, 3,500 second-feet July 19, 1945 (gage height, 10.58 feet); minimum observed, 0.6 second-foot Sept. 6, 1944 (gage height, 1.58 feet).

Remarks.- Records poor. Gage read twice daily. Occasional regulation at low flow by mill above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 16

2.1	7	2.7	37	3.7	214
2.2	9	2.8	47	4.0	303
2.3	12	2.9	59	4.5	478
2.4	16	3.1	87	5.0	670
2.5	21	3.3	123	6.0	1,080
2.6	28	3.5	165	7.4	1,710

Apr. 17 to Sept. 30

2.0	5	2.7	28	3.4	126
2.2	7	2.8	36	3.6	178
2.4	13	2.9	46	4.0	303
2.5	17	3.0	58		
2.6	22	3.2	88		

Note.- Same as preceding table above 3.9 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	22	69	53	a70	119	a250	126	1,170	33	11	a25
2	9	26	67	58	104	131	154	101	1,040	52	12	16
3	8	49	64	59	104	143	121	82	790	33	23	11
4	10	271	62	53	101	177	92	64	478	21	95	7
5	10	108	62	49	143	154	87	92	287	18	164	7
6	11	63	60	46	177	139	76	a130	148	18	114	7
7	12	57	59	43	202	214	256	93	104	17	66	8
8	14	64	57	41	177	460	592	77	224	16	58	9
9	68	64	55	38	165	442	478	62	287	16	88	8
10	102	66	54	38	177	371	320	50	239	16	88	7
11	55	87	59	41	189	287	119	42	178	12	54	7
12	38	670	59	36	228	241	115	44	124	10	36	7
13	30	750	57	46	554	177	108	51	85	11	20	9
14	27	287	60	388	910	131	165	93	57	15	12	9
15	28	123	55	388	1,660	133	478	108	35	37	13	7
16	47	214	154	165	710	133	554	80	30	99	15	13
17	43	177	214	129	303	127	406	54	34	30	17	13
18	32	125	165	121	214	123	82	58	34	17	17	7
19	30	96	99	110	177	121	83	56	29	18	13	6
20	27	106	81	a150	154	112	82	42	27	15	27	6
21	20	106	66	214	139	102	78	35	26	27	21	5
22	19	165	51	214	154	97	72	27	23	23	120	6
23	20	241	43	189	165	97	64	26	21	43	80	6
24	21	354	51	139	177	114	61	28	53	23	140	6
25	16	241	54	119	177	131	57	30	38	18	224	6
26	18	165	59	96	177	108	54	33	24	16	161	6
27	18	114	62	92	154	102	53	208	19	15	104	7
28	16	90	66	90	125	97	371	287	a25	13	66	7
29	21	80	57	92	119	92	271	320	26	12	54	9
30	20	72	52	94	-	81	158	371	24	15	38	14
31	21	-	54	99	-	80	-	478	-	12	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	821	102	8	26.5	0.276	0.32
November	5,053	750	22	168	1.75	1.95
December	2,227	214	43	71.8	.748	.86
Calendar year 1947	23,155	750	7	63.4	.660	8.97
January	3,490	388	36	113	1.18	1.36
February	7,906	1,660	70	273	2.84	3.06
March	5,036	460	80	162	1.69	1.95
April	5,857	592	53	195	2.03	2.26
May	3,348	478	26	108	1.12	1.29
June	5,679	1,170	19	189	1.97	2.20
July	721	99	10	23.3	.243	.28
August	1,979	224	11	63.8	.665	.77
September	261	25	5	8.70	.091	.10
Water year 1947-48	42,378	1,660	5	116	1.21	16.40

a No gage-height record; discharge computed on basis of records for Meherrin River near Lawrenceville.

Roanoke River at Lafayette, Va.

Location.- Staff gage, lat. 37°14' long. 80°13', at Lafayette, Montgomery County, a third of a mile downstream from confluence of North and South Forks of Roanoke River and 1½ miles upstream from Mill Branch.

Drainage area.- 257 square miles.

Records available.- September 1943 to September 1948.

Extremes.- Maximum discharge observed during year, 11,600 second-feet Aug. 4 (gage height, 10.88 feet); minimum observed, 64 second-feet Oct. 6-8 (gage height, 1.06 feet).
1943-48: Maximum discharge observed, that of Aug. 4, 1948; minimum observed, 26 second-feet on many days in August and on Sept. 1, 1944 (gage height, 0.85 foot).

Remarks.- Records fair except those for periods of doubtful gage-height record, which are poor. Gage read twice daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	272	140	103	123	246	930	234	460	156	d220	109
2	83	242	134	116	130	246	710	272	410	148	282	103
3	78	3,590	130	116	137	251	560	251	360	130	d500	103
4	73	1,440	130	112	160	246	435	246	295	126	6,670	103
5	68	740	144	109	179	238	410	336	251	d120	4,400	103
6	64	385	144	103	277	217	385	336	221	272	1,070	106
7	64	360	130	100	336	590	4,540	740	313	148	710	221
8	75	336	144	97	336	895	3,070	460	221	123	410	208
9	650	290	126	97	308	510	1,530	385	191	120	313	156
10	1,070	251	116	97	264	460	895	304	179	116	295	126
11	560	295	156	97	268	360	770	264	167	116	286	112
12	360	277	144	97	300	336	680	242	144	116	286	106
13	336	242	130	164	3,330	286	590	860	140	123	259	97
14	264	234	130	238	6,640	264	460	410	140	137	217	97
15	225	385	126	238	3,070	242	460	313	740	238	191	97
16	238	360	148	234	930	460	410	295	510	238	171	97
17	435	336	140	217	860	510	385	268	259	217	167	94
18	1,280	336	137	200	650	410	336	234	304	171	160	92
19	560	286	130	187	620	360	336	200	560	148	156	92
20	385	259	123	179	590	336	304	187	336	144	148	92
21	304	238	123	160	435	313	300	175	300	134	137	92
22	264	229	123	152	410	710	282	160	770	d130	137	92
23	200	242	120	148	336	2,700	268	152	535	d120	134	89
24	196	234	116	140	304	1,140	259	152	304	d110	130	86
25	160	225	116	137	295	930	259	191	286	d110	130	86
26	167	204	116	134	295	620	255	251	225	d130	126	86
27	160	200	116	130	286	1,360	242	204	191	d180	123	89
28	1,620	196	109	130	290	1,280	229	187	221	360	123	92
29	680	175	106	126	251	740	229	183	187	290	120	167
30	410	152	103	123	-	650	234	183	175	196	112	208
31	313	-	103	123	-	485	-	460	-	196	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	11,434	1,620	64	369	1.44	1.66
November	13,011	3,590	152	434	1.69	1.89
December	3,953	156	103	128	.498	.57
Calendar year 1947	100,990	5,240	52	277	1.08	14.63
January	4,404	238	97	142	.553	.64
February	22,410	6,640	123	773	3.01	3.25
March	18,391	2,700	217	593	2.31	2.66
April	20,753	4,540	229	692	2.69	3.00
May	9,135	860	152	295	1.15	1.33
June	9,395	770	140	313	1.22	1.36
July	5,063	360	110	163	.634	.73
August	18,292	6,670	109	590	2.30	2.65
September	3,401	221	86	113	.440	.49
Water year 1947-48	139,642	6,670	64	382	1.49	20.23

d Doubtful gage-height record; discharge computed on basis of weather records and records for Roanoke River at Roanoke and at Niagara and Blackwater River near Union Hall.

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. Datum of gage is 906.84 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 388 square miles.

Records available.- July 1896 to September 1948.

Average discharge.- 50 years (1896-1905, 1907-48), 393 second-feet.

Extremes.- Maximum discharge during year, 11,900 second-feet Aug. 5 (gage height, 11.96 feet); minimum, 92 second-feet Feb. 1 (gage height, 0.78 foot), result of low temperature; minimum daily, 116 second-feet Oct. 6, 7.

1896-48: Maximum discharge, 28,000 second-feet Aug. 14, 1940 (gage height, 18.25 feet), from rating curve extended above 15,000 second-feet by logarithmic plotting on basis of slope-area determination by Geological Survey, unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; practically no flow Dec. 23, 1909, when flow was retarded by freezing (gage height, 0.0 foot); minimum daily, 27 second-feet Feb. 20, 1934.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are fair. Dirunal fluctuation at low flow by power plant just above station.

Revisions (water years).- W 972: 1928, 1930, 1933, 1935, 1936-39(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a150	481	252	189	150	379	1,040	314	561	229	328	200
2	a130	439	244	210	203	374	1,080	403	476	207	398	176
3	135	4,440	240	207	183	379	822	403	439	193	573	163
4	130	2,600	229	189	200	351	664	364	398	183	6,450	147
5	124	1,340	229	183	240	314	585	615	360	179	5,160	147
6	116	925	233	179	428	297	883	543	314	252	1,620	193
7	116	710	218	176	525	622	4,970	801	418	210	962	293
8	a200	d600	210	166	476	1,220	3,670	766	346	179	690	252
9	a800	d560	203	169	498	808	2,020	615	297	172	549	225
10	2,600	d520	203	172	444	652	1,340	503	272	166	454	200
11	1,340	492	222	169	394	561	1,040	403	248	163	428	193
12	888	486	222	162	298	486	858	351	229	176	374	172
13	787	428	210	276	2,820	423	759	1,000	222	172	337	166
14	597	389	210	444	5,960	394	671	652	218	207	297	150
15	a500	486	210	323	3,020	364	664	503	222	337	280	150
16	a450	597	229	314	1,620	449	609	423	664	328	268	150
17	1,150	555	233	314	1,300	684	585	379	460	256	264	144
18	1,840	498	214	280	1,190	549	537	328	360	218	252	144
19	1,260	476	210	222	962	486	498	293	872	196	236	138
20	829	434	218	225	801	460	460	268	567	200	236	138
21	609	379	214	248	658	454	428	248	413	193	222	147
22	492	355	210	244	597	408	403	248	477	189	264	150
23	413	351	207	236	525	894	384	229	902	172	225	144
24	360	351	203	196	470	2,020	364	229	492	160	302	144
25	328	355	200	147	444	1,460	341	244	394	157	236	138
26	310	337	200	222	460	962	337	323	314	154	210	135
27	289	323	189	218	449	1,380	369	289	284	160	193	135
28	1,020	310	186	200	439	1,620	341	244	297	671	186	141
29	1,150	284	193	189	413	1,110	341	256	260	398	183	256
30	717	272	179	189	-	822	341	293	248	293	176	310
31	567	-	179	186	-	697	-	537	-	256	183	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	20,397	2,600	116	658	1.70	1.96
November	20,773	4,440	272	692	1.78	1.99
December	6,599	252	179	213	.549	.63
Calendar year 1947	150,715	4,440	102	413	1.06	14.45
January	6,845	444	147	221	.570	.66
February	26,267	5,960	150	906	2.34	2.52
March	22,079	2,020	297	712	1.84	2.12
April	27,404	4,970	337	913	2.35	2.62
May	13,067	1,000	229	422	1.09	1.26
June	12,024	902	218	401	1.03	1.15
July	7,026	671	154	227	.585	.67
August	22,536	6,450	176	727	1.87	2.16
September	5,241	310	135	175	.451	.50
Water year 1947-48	190,258	6,450	116	520	1.34	18.24

Peak discharge (base, 4,000 sec.-ft.- Nov. 3 (2 p.m.) 6,700 sec.-ft.; Feb. 14 (3:30 p.m.) 7,500 sec,-ft.; Apr. 7 (7:30 a.m.) 7,090 sec.-ft.; Aug. 5 (12:30 a.m.) 11,900 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for stations at Lafayette and at Niagara.

d Doubtful gage-height record; discharge computed on basis of records for stations at Lafayette and at Niagara.

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. Datum of gage is 820.15 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 511 square miles.

Records available.- July 1926 to September 1948.

Average discharge.- 22 years, 517 second-feet.

Extremes.- Maximum discharge during year, 16,600 second-feet Aug. 4 (gage height, 14.00 feet); minimum, 47 second-feet Oct. 7, 8 (gage height, 0.92 foot); minimum daily, 167 second-feet Oct. 7.

1926-48: Maximum discharge, 35,000 second-feet Aug. 14, 1940 (gage height, 17.5 feet, from floodmark), from rating curve extended above 12,000 second-feet by logarithmic plotting on basis of velocity-area study by Geological Survey, unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 13 second-feet June 4, 1937 (gage height, 0.42 foot); minimum daily, 22 second-feet Oct. 18, 1941.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are fair. Flow regulated at dam and power plant 200 feet above station.

Revisions (water years).- W 892: 1928(M), 1930(M), 1933(M), 1935-36(M), 1938(M). W 972: 1927-30 (maximum only 1929), 1933-38, 1940.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.7	158	4.0	920	8.0	4,120
2.0	221	4.5	1,160	9.0	5,220
2.5	360	5.0	1,470	11.0	7,800
3.0	530	6.0	2,230	11.5	8,640
3.5	720	7.0	3,120	12.5	11,400

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	230	626	372	285	237	592	1,870	538	738	357	510	d270
2	204	568	424	306	350	598	1,750	667	644	309	556	d230
3	214	6,680	374	314	314	601	1,300	614	586	284	1,150	d210
4	194	3,820	362	264	309	592	1,040	601	552	254	10,200	d210
5	194	1,950	376	294	a330	519	922	1,000	520	244	7,350	d190
6	190	1,260	375	269	a500	504	1,080	843	494	412	2,150	d210
7	167	980	354	258	a760	879	5,820	1,220	566	339	d1,000	642
8	220	861	368	257	a700	1,720	4,670	1,130	484	280	d800	462
9	1,480	742	348	257	a720	1,200	2,940	869	438	268	d660	425
10	3,420	665	334	249	a640	976	1,910	729	394	258	d570	442
11	1,750	686	373	228	a580	854	1,500	622	379	220	d520	290
12	1,180	716	362	256	586	770	1,270	624	308	278	d580	d250
13	1,060	643	334	460	3,860	655	1,150	1,870	302	269	d500	d250
14	855	572	316	599	7,800	638	1,050	1,160	311	278	d400	d230
15	702	714	328	466	4,020	582	1,010	878	408	460	d380	d220
16	670	820	390	452	2,310	662	914	716	1,210	402	d350	d230
17	1,680	766	345	458	1,870	968	876	639	677	338	d360	d210
18	2,580	711	342	382	1,680	819	758	570	511	269	d330	d200
19	1,790	682	323	352	1,380	748	752	d490	1,030	306	d350	d190
20	1,170	642	328	312	1,140	737	708	d460	710	260	d360	d190
21	870	560	311	391	961	711	618	d430	579	255	d320	d210
22	723	520	324	356	871	676	652	d420	638	273	d330	d200
23	633	542	309	346	784	1,280	579	d400	1,140	238	d310	d210
24	530	532	314	308	718	2,760	578	d380	622	238	d320	d200
25	501	554	282	221	675	2,070	539	d400	548	176	d330	d190
26	444	512	312	336	692	1,400	614	530	438	260	d280	d180
27	414	485	298	360	669	2,150	710	525	396	242	d260	d190
28	1,110	473	262	296	656	2,400	658	448	426	732	247	d200
29	1,440	452	306	298	657	1,640	593	409	388	511	d210	510
30	895	426	268	302	-	1,220	582	523	381	351	d250	536
31	732	-	269	274	-	1,100	-	748	-	334	d270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	28,242	3,420	167	911	1.78	2.05
November	30,160	6,680	426	1,005	1.97	2.20
December	10,383	424	262	335	.656	.76
Calendar year 1947	217,890	6,680	116	597	1.17	15.87
January	10,206	599	221	329	.644	.74
February	36,769	7,800	237	1,268	2.48	2.68
March	33,021	2,760	504	1,065	2.08	2.40
April	39,413	5,820	539	1,314	2.57	2.87
May	21,453	1,870	380	692	1.35	1.56
June	16,818	1,210	302	561	1.10	1.23
July	9,695	732	176	313	.613	.71
August	32,203	10,200	210	1,039	2.03	2.34
September	8,177	642	180	273	.534	.60
Water year 1947-48	276,540	10,200	167	756	1.48	20.14

Peak discharge (base, 7,000 sec.-ft.).- Nov. 3 (1:30 p.m.) 11,400 sec.-ft.; Feb. 14 (3:30 p.m.) 9,920 sec.-ft.; Apr. 7 (9:30 a.m.) 8,100 sec.-ft.; Aug. 4 (12 m.) 16,600 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations at Roanoke and near Toahes.

d Doubtful gage-height record; discharge computed on basis of weather records and records for stations at Roanoke and near Toshes.

Roanoke River near Toshes, Va.

Location.- Water-stage recorder, lat. 37°02'03", long. 79°31'18", 1¾ miles downstream from Witchers Creek, 3 miles upstream from Pigg River, and 5 miles northwest of Toshes, Pittsylvania County. Datum of gage is 588.99 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 1,020 square miles.

Records available.- September 1925 to September 1948.

Average discharge.- 23 years, 994 second-feet.

Extremes.- Maximum discharge during year, 21,800 second-feet Aug. 5 (gage height, 16.81 feet); minimum, 214 second-feet Feb. 1 (gage height, 1.27 feet), result of low temperature.

1925-48: Maximum discharge, 70,000 second-feet Aug. 15, 1940 (gage height, 27.36 feet, from floodmark), from rating curve extended above 31,000 second-feet by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 93 second-feet Sept. 19, 20, 1932 (gage height, 0.96 foot).

Remarks.- Records good except those for period of ice effect and periods of fragmentary or no gage-height record, which are fair. Diurnal fluctuation at low flow by power plant at Niagara.

Revisions (water years).- W 1032: 1933(M), 1938-39(M), 1940, 1944(M)

Rating table, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

1.5	320	5.0	3,210
1.8	500	7.0	5,620
2.2	795	9.0	8,400
3.0	1,420	11.0	11,400
4.0	2,260	13.0	14,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	447	1,020	780	542	521	1,020	5,880	1,020	1,740	720	556	549
2	404	908	750	630	b560	1,100	3,430	1,060	1,300	652	982	487
3	369	9,630	758	600	b800	1,220	2,530	1,180	1,140	592	1,060	434
4	369	8,890	735	585	b840	1,100	2,120	1,060	1,060	556	10,600	428
5	358	3,430	720	532	*b900	1,020	1,860	1,580	945	507	14,500	374
6	347	a2,530	735	556	945	945	1,700	1,540	870	638	4,000	422
7	352	a2,120	705	535	1,220	1,860	5,360	2,040	1,260	735	f2,260	982
8	358	a1,780	705	521	1,300	3,110	6,280	2,080	1,220	578	1,700	855
9	942	a1,460	682	514	1,260	2,350	4,600	1,580	908	514	1,380	668
10	5,880	1,340	668	514	1,220	1,860	3,010	1,300	802	487	1,180	840
11	4,240	f1,380	705	487	1,100	1,580	a2,440	1,140	735	487	1,020	675
12	2,260	f1,620	720	480	1,100	1,420	a2,260	1,060	705	467	1,180	487
13	f1,900	1,340	660	1,670	3,310	1,260	a1,990	2,850	638	521	945	493
14	f1,620	f1,100	638	1,740	f11,400	1,140	a1,940	2,530	630	652	810	467
15	f1,340	f1,380	645	1,100	8,850	1,060	a2,170	1,700	630	765	780	441
16	f1,140	1,700	810	*870	4,120	1,100	a1,820	1,380	2,490	945	698	460
17	f2,050	1,500	772	908	3,110	1,460	a1,660	1,260	1,620	765	720	422
18	3,320	1,340	698	832	2,710	1,420	1,500	1,100	1,510	638	660	410
19	3,210	1,260	660	660	a2,350	1,260	1,380	982	3,110	493	690	386
20	2,120	1,180	645	668	a2,040	1,260	1,340	908	1,700	570	720	369
21	1,620	1,060	645	765	a1,780	1,260	1,260	855	1,180	535	630	422
22	1,300	982	622	772	a1,580	1,220	1,180	818	982	480	660	386
23	1,100	1,060	615	712	1,460	2,810	1,140	780	1,500	474	630	410
24	945	1,100	608	645	1,300	4,360	1,100	780	1,540	434	638	400
25	870	1,060	608	474	1,220	3,880	1,060	1,140	1,140	392	660	396
26	832	982	570	578	1,260	2,620	1,020	1,020	908	358	570	352
27	765	945	592	758	1,220	3,110	1,220	1,420	795	441	528	369
28	772	908	592	698	1,180	4,000	1,260	1,020	874	908	500	404
29	2,220	870	542	608	1,100	2,810	1,140	870	832	1,100	428	521
30	1,580	825	556	608	-	2,220	1,100	870	788	802	474	260
31	1,220	-	535	563	-	3,440	-	1,100	-	578	528	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	46,250	5,880	347	1,492	1.46	1.68
November	56,700	9,630	825	1,890	1.85	2.06
December	20,676	810	535	667	.654	.75
Calendar year 1947	384,358	9,630	268	1,053	1.03	14.02
January	22,135	1,740	474	714	.700	.81
February	61,756	11,400	521	2,130	2.09	2.25
March	60,275	4,360	945	1,944	1.91	2.20
April	66,750	6,280	1,020	2,225	2.18	2.43
May	40,023	2,850	780	1,291	1.27	1.46
June	35,552	3,110	630	1,185	1.16	1.29
July	18,784	1,100	358	606	.594	.68
August	52,687	14,500	428	1,700	1.67	1.92
September	15,569	1,260	352	519	.509	.57
Water year 1947-48	497,157	14,500	347	1,358	1.33	18.10

Peak discharge (base, 7,500 sec.-ft.).- Nov. 13 (10:30 p.m.) 16,100 sec.-ft.; Feb. 14 (time unknown) 14,200 sec.-ft.; Mar. 31 (11 p.m.) 9,600 sec.-ft.; Apr. 7 (11 p.m.) 7,680 sec.-ft.; Aug. 5 (12 to 1 a.m.) 21,800 sec.-ft.

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recession curves.
b Stage-discharge relation affected by ice.
f Fragmentary gage-height record; discharge computed on basis of partly estimated gage heights.

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, half a mile downstream from Sycamore Creek, and 3½ miles upstream from Otter River. Datum of gage is 503.10 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,802 square miles.

Records available.- August 1930 to September 1948.

Average discharge.- 18 years, 1,876 second-feet.

Extremes.- Maximum discharge during year, 32,100 second-feet Aug. 5 (gage height, 24.53 feet); minimum, 590 second-feet Oct. 6 (gage height, 2.99 feet).

1930-48: Maximum discharge, 105,000 second-feet Aug. 15, 1940 (gage height, 40.08 feet, from floodmark), from rating curve extended above 41,000 second-feet by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 94 second-feet Jan. 31, 1934 (gage height, 1.66 feet).

Remarks.- Records good. Diurnal fluctuation at low flow by power plant at Niagara, 69 miles above station.

Revisions (water years).- W 892: 1938(M). W 972: 1931-33.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.0	595	7.5	3,780	16.0	13,800
4.0	1,230	10.0	6,230	19.0	19,300
6.0	2,560	14.0	10,800	23.0	28,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	840	1,750	1,490	1,100	938	1,940	21,100	2,010	2,420	2,080	1,130	1,200
2	782	1,560	1,460	1,230	1,000	2,010	8,430	2,010	2,350	1,750	1,490	1,070
3	751	11,300	1,420	1,300	1,490	2,420	5,000	2,140	2,010	1,460	2,080	1,000
4	715	20,600	1,390	1,200	1,520	2,140	3,870	2,010	1,880	1,330	8,510	938
5	703	6,450	1,390	1,130	1,560	2,010	3,340	2,560	1,820	1,260	27,000	840
6	667	3,870	1,390	1,130	1,750	1,820	3,020	2,860	1,680	1,360	7,550	905
7	667	2,940	1,360	1,100	2,080	2,940	6,400	4,230	2,280	1,560	3,780	1,200
8	685	2,940	1,330	1,040	2,280	5,800	8,760	3,960	2,700	1,330	2,860	1,750
9	1,070	2,700	1,330	1,040	2,350	4,230	7,110	2,860	1,940	1,200	2,350	1,420
10	6,980	2,280	1,300	1,040	2,280	3,180	4,900	2,420	1,680	1,130	2,080	1,650
11	8,100	2,350	1,330	1,000	2,010	2,700	4,050	2,140	1,560	1,100	1,880	1,620
12	4,230	3,340	1,360	970	2,280	2,420	3,690	2,010	1,460	1,100	1,820	1,130
13	3,260	2,560	1,300	3,180	4,780	2,210	3,420	3,800	1,390	1,200	2,210	1,040
14	2,700	2,210	1,230	5,000	18,500	2,010	3,180	5,400	1,360	1,200	1,650	1,040
15	2,210	2,350	1,200	2,420	18,800	1,940	3,780	3,100	1,360	1,820	1,520	938
16	1,940	3,180	1,520	1,820	7,440	1,940	3,420	2,560	3,440	2,010	1,360	938
17	1,980	2,630	1,590	1,750	5,300	2,280	2,940	2,350	3,020	1,750	1,420	905
18	4,140	2,350	1,420	1,650	4,900	2,420	2,700	2,140	2,010	1,420	1,330	872
19	5,200	2,140	1,330	1,390	4,050	2,140	2,420	1,880	7,220	1,260	1,330	840
20	3,690	2,080	1,260	1,300	3,420	2,140	2,350	1,750	3,180	1,360	1,620	788
21	2,560	1,940	1,230	1,490	3,020	2,140	2,280	1,680	2,140	1,420	1,750	872
22	2,140	1,820	1,230	1,620	2,700	2,140	2,140	1,650	1,880	1,230	2,940	834
23	1,880	2,010	1,200	1,490	2,560	4,460	2,080	1,560	2,080	1,160	1,490	840
24	1,680	2,080	1,200	1,360	2,350	7,110	2,010	1,520	2,940	1,100	1,390	827
25	1,560	2,080	1,160	1,000	2,210	7,000	1,940	1,920	2,350	938	1,300	814
26	1,420	1,940	1,130	1,130	2,280	4,410	1,940	2,350	1,820	905	1,230	739
27	1,360	1,750	1,160	1,590	2,210	4,800	2,080	2,350	1,650	970	1,130	775
28	1,330	1,680	1,130	1,460	2,140	7,330	2,630	2,010	1,820	1,230	1,070	808
29	2,220	1,620	1,070	1,330	2,080	4,900	2,280	1,750	2,940	1,940	938	1,040
30	2,780	1,560	1,100	1,330	-	3,780	2,080	1,750	2,010	1,620	1,000	2,080
31	2,010	-	1,070	1,260	-	3,870	-	1,940	-	1,300	1,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	72,250	8,100	667	2,331	1.29	1.49
November	100,060	20,600	1,560	3,335	1.85	2.06
December	40,080	1,590	1,070	1,293	.718	.83
Calendar year 1947	685,764	20,600	525	1,879	1.04	14.14
January	46,850	5,000	970	1,511	.839	.97
February	110,278	18,800	938	3,803	2.11	2.28
March	102,630	7,330	1,820	3,311	1.84	2.12
April	125,340	21,100	1,940	4,178	2.32	2.59
May	74,670	5,400	1,520	2,409	1.34	1.54
June	68,390	7,220	1,360	2,280	1.27	1.42
July	42,493	2,080	905	1,371	.761	.88
August	90,628	27,000	938	2,923	1.62	1.87
September	31,713	2,080	739	1,057	.587	.65
Water year 1947-48	905,382	27,000	667	2,474	1.37	18.70

Peak discharge (base, 18,000 sec.-ft.).- Nov. 4 (3:30 a.m.) 27,700 sec.-ft.; Feb. 15 (1:30 a.m.) 27,000 sec.-ft.; Apr. 1 (9:30 a.m.) 25,600 sec.-ft.; Aug. 5 (9 a.m.) 32,100 sec.-ft.

Roanoke River at Brookneal, Va.

Location.- Water-stage recorder, lat. 37°02'28", long. 78°57'02", at Brookneal, Campbell County, 1,600 feet upstream from highway bridge and 3 miles upstream from Falling River. Datum of gage is 351.96 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,420 square miles.

Records available.- April 1923 to September 1948.

Average discharge.- 25 years, 2,430 second-feet.

Extremes.- Maximum discharge during year, 36,100 second-feet Apr. 1 (gage height, 28.15 feet); minimum, 792 second-feet Oct. 7 (gage height, 6.39 feet).
1923-48: Maximum discharge, 130,000 second-feet Aug. 15, 1940 (gage height, 46.5 feet, at present site from gage-height relation curve), from rating curve extended above 44,000 second-feet by logarithmic plotting on basis of slope-area determination by Geological Survey, unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 191 second-feet Sept. 2, 1932.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions (water years).- W 622: Drainage area. W 892: 1928(M). W 972: 1928-34.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,080	2,120	1,950	1,410	1,210	a2,820	25,600	2,700	2,640	2,760	1,410	1,840
2	1,020	1,900	1,840	1,570	1,020	a3,040	17,900	2,640	3,280	2,470	1,520	1,460
3	961	6,000	1,780	1,730	1,620	3,850	7,530	2,820	2,580	1,950	2,580	1,310
4	916	7,530	1,780	1,620	2,070	3,620	a5,460	2,700	2,360	1,830	5,460	1,210
5	916	9,260	1,730	1,520	2,300	3,160	a4,770	3,390	2,300	1,620	27,300	1,160
6	872	5,340	1,730	1,460	2,470	2,930	4,420	4,200	2,070	1,520	15,100	1,100
7	856	3,960	1,730	1,460	2,870	3,740	5,920	6,040	3,280	1,780	5,340	1,210
8	864	3,960	1,680	1,410	3,390	7,640	10,300	6,610	3,740	1,730	3,850	2,010
9	1,010	4,080	1,680	1,360	3,620	a6,380	9,020	3,390	2,700	1,460	3,160	1,900
10	4,420	3,040	1,620	1,360	3,500	5,100	6,400	3,620	2,180	1,410	2,640	2,010
11	9,720	3,390	1,680	1,360	3,160	a4,000	5,690	3,040	1,950	1,360	2,360	2,240
12	6,150	5,580	1,730	1,310	3,040	a3,500	5,230	2,760	1,780	1,310	2,240	1,730
13	4,080	4,080	1,730	3,960	4,770	a3,100	5,000	3,850	1,680	1,360	2,640	1,360
14	3,620	3,040	1,620	9,020	17,400	a2,800	4,420	8,340	1,620	1,520	2,070	1,310
15	2,930	3,160	1,620	4,770	30,000	a2,600	5,120	5,000	1,620	1,780	1,840	1,360
16	2,530	4,310	1,950	3,160	11,700	2,930	5,000	3,740	2,470	2,470	1,730	1,210
17	2,300	3,960	2,300	2,700	7,640	3,620	4,190	3,390	4,420	2,180	1,680	1,210
18	4,200	3,160	2,070	2,640	7,180	3,850	3,740	2,930	2,820	1,840	1,680	1,140
19	5,690	2,930	1,840	2,410	a5,920	3,390	3,390	2,640	7,880	1,570	1,570	1,110
20	5,000	2,760	1,730	2,010	a5,580	a3,000	3,280	2,360	5,000	1,460	1,730	1,080
21	3,390	2,530	1,680	2,300	a4,770	a2,900	3,160	2,240	3,040	1,620	2,300	1,020
22	2,760	2,360	1,620	2,470	4,310	a2,900	2,930	2,120	2,470	1,520	4,420	1,080
23	2,360	2,700	1,620	2,410	4,080	4,880	2,820	2,070	2,930	1,410	2,640	1,010
24	2,070	2,930	1,570	2,180	3,740	9,370	2,700	1,950	5,460	1,360	1,780	1,020
25	1,900	2,930	1,570	1,520	a3,500	9,260	2,640	2,120	3,620	1,210	1,680	988
26	1,730	2,640	1,520	a1,310	a3,390	6,380	2,580	3,620	2,640	1,070	1,570	979
27	1,680	2,410	1,520	1,950	3,280	6,380	2,640	3,280	2,360	1,060	1,460	907
28	1,680	2,240	1,520	2,070	3,160	9,720	3,850	2,930	2,180	1,210	1,390	961
29	1,780	2,120	1,460	1,950	3,040	7,070	3,500	2,410	3,280	2,120	1,310	1,730
30	3,620	2,010	1,410	1,950	-	a5,340	2,930	2,300	2,930	2,120	1,160	2,580
31	2,580	-	1,410	1,840	-	a4,890	-	2,530	-	1,680	1,570	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	84,685	9,720	856	2,732	1.13	1.30
November	108,430	9,260	1,900	3,614	1.49	1.66
December	52,690	2,300	1,410	1,700	.702	.81
Calendar year 1947	861,703	16,900	680	2,361	.976	13.24
January	70,190	9,020	1,310	2,264	.936	1.08
February	153,730	30,000	1,020	5,301	2.19	2.36
March	144,160	9,720	2,600	4,650	1.92	2.21
April	172,130	25,600	2,580	5,738	2.37	2.64
May	103,730	8,340	1,950	3,346	1.38	1.59
June	89,280	7,880	1,620	2,976	1.23	1.37
July	51,660	2,760	1,060	1,666	.688	.79
August	109,150	27,300	1,160	3,521	1.45	1.67
September	41,235	2,580	907	1,374	.568	.63
Water year 1947-48	1,181,070	30,000	856	3,227	1.33	18.11

Peak discharge (base, 21,000 sec.-ft.).- Nov. 4 (2:30 p.m.) 26,200 sec.-ft.; Feb. 15 (8 a.m.) 33,200 sec.-ft.; Apr. 1 (6:30 p.m.) 36,100 sec.-ft.; Aug. 5 (6 p.m.) 33,800 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations at Altavista and near Clover.

Roanoke River near Clover, Va.

Location.- Water-stage recorder, lat. 36°50'17", long. 78°40'02", at highway bridge 3½ miles downstream from Roanoke Creek and 6 miles east of Clover, Halifax County. Datum of gage is 302.91 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 3,230 square miles.

Records available.- August 1929 to September 1948.

Average discharge.- 19 years, 3,243 second-feet.

Extremes.- Maximum discharge during year, 35,800 second-feet Feb. 16 (gage height, 20.20 feet); minimum, 1,090 second-feet Sept. 28 (gage height, 2.03 feet).

1929-48: Maximum discharge, 160,000 second-feet Aug. 16, 1940 (gage height, 37.15 feet, from floodmark), from rating curve extended above 70,000 second-feet by logarithmic plotting on basis of slope-area determination by Geological Survey, unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 204 second-feet Sept. 3, 1932 (gage height, 0.50 foot).

Remarks.- Records good.

Revisions (water years).- W 727: 1930(M). W 972: 1930, 1931(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.1	1,130	6.0	5,230	14.0	16,500
2.5	1,460	8.0	7,630	17.0	23,700
3.0	1,920	10.0	10,200	20.0	34,900
4.0	2,980	12.0	13,000		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,370	2,600	2,480	1,870	1,920	3,530	13,500	3,420	3,640	3,090	1,780	1,970
2	1,290	2,220	2,380	1,970	1,370	3,640	28,400	3,310	3,750	3,200	1,870	1,780
3	1,250	3,420	2,270	2,120	1,730	5,470	27,500	3,420	3,530	2,480	2,270	1,550
4	1,250	15,200	2,220	2,120	2,380	5,230	10,200	3,420	3,090	2,070	3,750	1,370
5	1,250	12,800	2,220	1,970	2,700	4,300	6,550	3,310	2,870	1,920	13,900	1,290
6	1,210	10,700	2,220	1,920	2,980	3,640	5,710	4,750	2,760	1,820	22,300	1,290
7	1,210	5,230	2,220	1,920	3,200	4,750	7,510	4,630	3,310	1,730	16,500	1,290
8	1,210	4,990	2,170	1,870	3,860	8,640	11,700	8,510	4,410	1,970	4,990	1,460
9	1,210	5,950	2,120	1,820	4,520	9,290	12,100	5,830	3,970	1,780	3,750	2,220
10	2,120	4,620	2,070	1,780	4,300	6,670	9,550	4,300	2,980	1,600	3,090	1,970
11	9,550	4,520	2,120	1,780	3,860	5,350	7,150	3,640	2,480	1,550	2,650	2,480
12	9,810	9,550	2,170	1,730	3,750	4,520	6,430	3,310	2,270	1,500	2,430	2,220
13	5,590	7,630	2,220	2,870	4,990	4,080	6,070	3,420	2,070	1,500	2,430	1,680
14	4,300	5,230	2,120	12,400	15,100	3,640	5,590	8,120	2,070	1,600	2,760	1,460
15	3,530	4,300	2,070	8,900	26,900	3,420	6,670	7,030	2,020	1,820	2,120	1,500
16	2,980	5,590	3,090	4,750	34,400	3,750	6,670	4,630	2,070	2,380	1,920	1,420
17	2,760	5,710	3,310	3,420	20,600	6,550	5,590	4,080	4,300	2,600	1,780	1,330
18	3,200	4,410	2,980	3,090	11,100	5,950	4,750	3,750	3,860	2,220	1,820	1,290
19	5,470	3,750	2,540	2,760	8,900	4,630	4,300	3,640	5,240	1,920	1,730	1,250
20	6,430	3,640	2,320	2,380	7,150	3,860	3,970	2,980	7,870	1,680	1,780	1,210
21	4,300	3,310	2,170	2,760	5,950	3,860	3,860	2,760	3,970	1,680	2,070	1,210
22	3,200	3,090	2,120	3,200	5,230	3,750	3,640	2,600	2,980	1,870	2,870	1,210
23	2,760	3,780	2,070	3,090	4,990	3,750	3,420	2,480	3,750	1,820	5,230	1,250
24	2,380	4,300	2,070	2,700	4,630	9,290	3,310	2,380	5,230	1,680	2,270	1,210
25	2,170	4,300	2,020	2,020	4,300	11,300	3,200	2,540	5,230	1,550	1,870	1,210
26	2,020	3,860	1,970	1,780	4,300	8,900	3,200	5,230	3,420	1,370	1,730	1,170
27	1,870	3,310	1,970	2,020	4,300	7,630	3,090	6,430	2,650	1,290	1,680	1,170
28	1,870	2,980	1,920	2,430	4,080	11,300	4,300	4,870	2,700	1,500	1,550	1,130
29	2,380	2,760	1,920	2,430	3,750	10,800	4,870	3,970	2,480	1,640	1,460	1,250
30	2,980	2,600	1,820	2,320	-	7,270	3,860	3,420	3,750	2.480	1,420	3,530
31	3,640	-	1,820	2,270	-	5,830	-	3,750	-	2,120	1,330	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	96,560	9,810	1,210	3,115	0.964	1.11
November	165,350	21,800	2,220	5,512	1.71	1.91
December	69,180	3,310	1,820	2,232	.691	.80
Calendar year 1947	1,134,395	21,800	915	3,108	.962	13.05
January	90,460	12,400	1,730	2,918	.903	1.04
February	207,240	34,400	1,370	7,146	2.21	2.38
March	184,590	11,300	3,420	5,955	1.84	2.12
April	226,660	28,400	3,090	7,555	2.34	2.61
May	129,930	8,510	2,380	4,191	1.30	1.50
June	104,720	7,870	2,020	3,491	1.08	1.20
July	59,430	3,200	1,290	1,917	.593	.68
August	119,100	22,300	1,330	3,842	1.19	1.37
September	46,370	3,530	1,130	1,546	.479	.53
Water year 1947-48	1,499,590	34,400	1,130	4,097	1.27	17.25

Peak discharge (base, 23,000 sec.-ft.).- Nov. 5 (2:30 p.m.) 23,200 sec.-ft.; Feb. 16 (9 to 11 a.m.) 35,800 sec.-ft.; Apr. 2 (12 p.m.) 34,900 sec.-ft.; Aug. 6 (10:30 p.m.) 25,000 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, 600 feet upstream from Dan River. Datum of gage is 258.23 feet above mean sea level, datum of 1929.

Drainage area.- 7,320 square miles (including that of Dan River).

Records available.- December 1934 to September 1948 (include flow of Dan River).

Average discharge.- 13 years (1935-48), 8,254 second-feet.

Extremes.- Maximum discharge during year, 74,500 second-feet Feb. 16 (gage height, 13.53 feet); minimum, 2,040 second-feet Oct. 7 (gage height, 1.65 feet).

1934-48: Maximum discharge, 280,000 second-feet Aug. 17, 1940 (gage height, 26.66 feet); minimum, 1,100 second-feet Sept. 11, 1944 (gage height, 1.02 feet).

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are fair. Diurnal fluctuation at low flow by cotton mills at Danville and power plant on Banister River.

Cooperation.- Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions (water years).- W 852: 1936-37. W 922: 1940.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.7	2,130	4.0	8,530	8.0	28,000
1.9	2,500	5.0	12,600	10.0	42,000
2.2	3,160	6.0	17,200	12.0	59,000
3.0	5,280	7.0	22,200	14.0	80,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,510	5,580	5,740	4,280	5,430	7,500	23,700	7,340	15,300	d6,000	3,880	3,390
2	3,280	4,840	5,890	4,550	4,280	8,010	50,000	7,170	13,000	d5,500	4,410	3,880
3	3,040	11,100	5,430	4,840	4,550	12,200	65,000	6,520	11,200	d5,000	4,690	3,160
4	2,860	26,800	5,280	4,980	5,890	12,600	29,200	6,840	7,840	d4,500	6,840	2,860
5	2,910	33,100	5,280	4,550	7,340	10,800	14,400	6,840	6,840	d4,100	16,700	2,670
6	2,930	21,200	5,130	4,550	8,890	8,530	12,600	6,840	6,520	d3,900	27,400	2,580
7	2,310	10,000	5,280	4,410	11,200	12,500	15,800	7,500	6,200	d3,700	24,400	2,580
8	2,580	10,000	4,980	4,280	15,300	20,700	23,200	8,890	7,840	d3,600	8,710	3,040
9	2,910	12,600	4,840	4,140	16,200	23,800	24,400	10,800	10,000	3,760	6,200	3,630
10	11,800	10,400	4,840	4,140	14,800	18,700	19,700	8,180	7,840	d3,500	5,430	4,280
11	28,600	12,700	4,980	4,010	12,200	14,400	14,400	7,500	6,200	d3,200	4,690	4,690
12	39,600	28,600	5,130	3,880	11,700	11,200	13,000	6,680	5,430	3,160	4,550	4,550
13	24,700	23,800	5,280	6,720	20,200	9,620	12,600	6,520	5,130	3,280	5,430	3,760
14	9,620	16,200	5,130	23,200	45,200	8,710	11,700	7,840	5,130	3,510	5,130	3,280
16	7,840	14,000	4,690	25,600	64,000	7,670	a17,000	13,500	5,890	6,520	4,280	2,930
16	6,680	18,700	8,890	14,000	72,300	7,840	a18,000	10,000	6,200	9,620	3,880	3,040
17	6,040	19,200	9,250	8,710	54,500	14,800	15,300	7,670	6,360	9,620	4,140	2,670
18	7,840	13,500	8,530	7,340	25,600	19,200	10,800	7,500	7,840	5,740	3,630	2,670
19	10,800	10,000	6,680	6,680	17,700	13,000	9,620	6,680	7,340	4,690	4,410	2,730
20	11,700	10,800	5,890	6,040	14,400	10,000	8,890	6,040	9,070	4,980	4,410	2,260
21	9,070	12,600	5,580	6,840	11,700	8,710	8,180	5,430	9,070	4,280	4,840	2,480
22	7,000	9,620	5,130	8,180	10,800	9,620	8,010	5,130	6,520	4,410	4,690	2,420
23	5,740	9,620	5,130	8,530	10,000	9,250	7,500	5,130	8,180	4,280	7,340	2,500
24	5,130	10,800	4,980	7,500	10,000	14,000	7,170	5,130	9,250	4,010	4,840	2,390
25	4,690	10,800	4,690	6,200	9,250	20,700	7,000	4,980	10,400	3,630	3,760	2,460
26	4,410	9,620	4,690	4,410	9,250	17,700	6,840	6,200	9,620	3,040	3,390	2,540
27	3,880	8,360	4,690	4,690	9,250	14,400	6,680	13,000	6,200	3,040	3,280	2,290
28	4,410	7,340	4,550	5,890	8,890	24,400	8,180	14,400	6,360	2,930	3,280	2,480
29	5,740	6,680	4,550	6,040	8,010	26,200	9,620	10,000	6,360	3,280	2,910	2,710
30	5,430	6,200	4,410	6,040	-	16,200	8,180	9,070	7,170	3,880	2,750	7,340
31	7,170	-	4,280	5,740	-	12,200	-	13,500	-	4,550	2,930	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	254,220	39,600	2,310	8,201	1.12	1.29
November	404,760	33,100	4,840	13,490	1.84	2.05
December	169,820	9,250	4,280	5,478	.748	.86
Calendar year 1947	2,792,270	54,500	1,900	7,650	1.05	14.18
January	220,960	25,600	3,880	7,128	.974	1.12
February	518,830	72,300	4,280	17,890	2.44	2.63
March	425,160	26,200	7,500	13,710	1.87	2.16
April	486,670	65,000	6,680	16,220	2.22	2.48
May	248,820	14,400	4,980	8,026	1.10	1.27
June	236,300	15,300	5,130	7,877	1.08	1.20
July	139,210	9,620	2,930	4,491	.614	.71
August	197,220	27,400	2,750	6,362	.869	1.00
September	94,260	7,340	2,260	3,142	.429	.48
Water year 1947-48	3,396,230	72,300	2,260	9,279	1.27	17.25

Peak discharge (base, 50,000 sec.-ft.).- Feb. 16 (6 to 9 p.m.) 74,500 sec.-ft.; Apr. 3 (12 to 1 p.m. 67,000 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations at Buggs Island and at Roanoke Rapids.

d Doubtful gage-height record; discharge computed on basis of records for stations at Buggs Island and at Roanoke Rapids.

Roanoke River at Buggs Island, Va.

Location.- Water-stage recorder, lat. 36°36'29", long. 78°17'33", 1.9 miles upstream from Allens Creek, 4.8 miles upstream from bridge on U. S. Highway 1, and 6.7 miles southeast of Boydton, Mecklenburg County.

Drainage area.- 7,780 square miles.

Records available.- November 1921 to August 1923 (gage heights only), April 1947 to September 1948.

Extremes.- Maximum discharge during year, 72,800 second-feet Feb. 15 (gage height, 14.64 feet); minimum, 2,100 second-feet Oct. 8 (gage height, 0.92 foot).

1947-48: Maximum discharge, that of Feb. 15, 1948; minimum, 1,690 second-feet Sept. 9, 1947 (gage height, 0.74 foot).

Flood of August 1940 reached a stage of 33.9 feet, from levels by Corps of Engineers.

Remarks.- Records good except those for periods of doubtful gage-height record, which are poor. Diurnal fluctuation at low flow by cotton mills at Danville and power plant on Banister River.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.0	2,320	6.0	24,700
1.5	3,970	8.0	33,600
2.0	5,850	10.0	42,400
3.0	10,000	12.0	53,000
4.0	14,600	14.3	70,400

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,940	6,450	6,450	4,580	5,200	8,050	20,700	8,050	17,600	d7,000	3,970	2,940
2	3,350	5,260	6,250	4,770	4,800	8,250	43,800	7,650	13,200	d6,000	4,440	4,150
3	3,110	10,600	6,050	5,030	4,510	12,700	56,500	7,250	11,800	d5,500	4,690	3,620
4	3,010	24,200	5,850	5,260	6,050	13,600	39,600	7,650	d8,000	d5,000	6,050	3,210
5	2,880	32,000	5,850	5,260	7,650	11,800	15,600	7,650	d7,000	d4,500	13,100	d2,800
6	3,080	25,700	5,650	4,800	11,100	9,550	12,700	7,850	d6,500	d4,000	25,700	d2,700
7	2,530	11,800	5,650	4,770	11,400	13,100	17,600	9,320	d7,000	d4,000	26,700	d2,600
8	2,530	11,400	5,650	4,730	15,600	21,700	24,700	11,400	11,100	3,830	12,100	d2,800
9	2,780	13,600	5,070	4,510	17,600	25,200	25,700	13,200	13,200	3,940	6,850	3,590
10	9,590	11,400	5,450	4,550	16,100	23,200	20,700	d9,000	d9,000	3,690	5,650	4,330
11	24,700	12,500	5,260	4,440	13,600	17,100	15,100	d8,000	d7,000	3,280	4,990	4,580
12	35,200	32,000	5,650	4,400	12,700	13,200	12,700	d7,000	d6,000	3,280	4,620	4,880
13	29,800	27,200	5,650	6,450	21,700	11,100	12,700	d7,500	d5,500	3,280	5,620	4,190
14	11,400	18,600	5,650	22,700	45,000	10,000	11,800	9,780	d5,500	3,380	5,620	3,350
15	8,450	14,600	5,260	28,500	69,600	8,880	18,100	18,100	d6,000	5,850	4,650	3,040
16	7,250	19,700	8,450	17,100	66,400	8,050	19,200	11,400	d6,500	8,650	3,940	3,010
17	6,650	20,700	10,400	10,700	61,600	12,500	16,600	8,650	d7,000	10,400	4,080	2,780
18	7,450	15,600	9,550	8,250	29,800	19,700	11,800	d7,500	d8,000	6,650	3,900	2,680
19	10,000	11,400	7,850	7,450	19,700	15,100	9,780	d6,500	d7,500	4,990	3,620	2,750
20	11,800	10,900	6,650	7,050	15,100	10,700	9,320	d6,000	d10,000	4,770	4,550	2,500
21	10,200	13,600	6,250	7,450	12,700	9,550	8,450	d6,000	d10,000	4,510	4,770	2,350
22	7,650	10,900	5,850	9,320	11,400	10,200	8,250	d5,500	d7,000	4,150	4,730	2,560
23	6,450	10,400	5,450	9,320	10,900	10,000	7,850	d5,500	d9,000	4,580	6,250	2,470
24	5,650	11,800	5,450	8,450	10,700	12,200	7,650	d5,500	d10,000	4,110	6,250	2,530
25	5,070	11,800	5,260	7,050	10,000	20,700	7,250	d6,000	d10,000	3,830	4,190	2,470
26	4,770	10,700	5,030	5,260	9,780	19,200	7,050	8,650	d9,000	3,040	3,590	2,560
27	4,550	9,320	4,990	5,070	9,780	14,100	7,050	19,700	d7,000	2,880	3,310	2,500
28	4,550	8,050	4,990	5,850	9,550	21,700	10,600	17,600	d6,500	2,840	3,350	2,440
29	6,850	7,450	4,960	6,450	8,880	27,600	11,400	11,800	d6,500	3,180	3,110	2,650
30	6,050	6,850	4,770	6,650	-	17,600	9,100	10,900	d7,500	3,310	2,780	4,950
31	7,250	-	4,620	6,450	-	12,700	-	19,700	-	4,580	3,080	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	258,540	35,200	2,530	8,340	1.07	1.23
November	436,480	32,000	5,260	14,550	1.87	2.09
December	185,910	10,400	4,620	5,997	.771	.89
Calendar year	-	-	-	-	-	-
January	242,620	28,500	4,400	7,826	1.01	1.16
February	548,900	69,600	4,510	18,930	2.43	2.62
March	449,030	27,600	8,050	14,480	1.86	2.14
April	499,350	56,500	7,050	16,640	2.14	2.39
May	296,300	19,700	5,500	9,558	1.23	1.42
June	255,900	17,600	5,500	8,530	1.10	1.23
July	143,000	10,400	2,840	4,613	.593	.68
August	200,250	26,700	2,780	6,460	.830	.96
September	93,980	4,950	2,350	3,133	.403	.45
Water year 1947-48	3,610,260	69,600	2,350	9,864	1.27	17.26

Peak discharge (base, 50,000 sec.-ft.).- Feb. 15 (7 to 8 a.m.) 72,800 sec.-ft.; Apr. 3 (8 to 10 p.m.) 60,000 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of records for stations at Clarksville and at Roanoke Rapids.

Roanoke River at Roanoke Rapids, N. C.

Location.- Water-stage recorder, lat. 36°28'15", long. 77°38'05", 1½ miles upstream from Chocyott Creek, 1½ miles downstream from State Highway 47 at Roanoke Rapids, Halifax County. Datum of gage is 43.83 feet above mean sea level, datum of 1929, supplementary adjustment of 1936. Auxiliary water-stage recorder at bridge on U. S. Highway 301 at Weldon, 3.4 miles downstream at 27.77 feet lower datum.

Drainage area.- 8,410 square miles.

Records available.- February 1930 to September 1948. December 1911 to December 1932 at site 9 miles upstream, published as Roanoke River at Old Gaston.

Average discharge.- 36 years (1912-48), 8,371 second-feet.

Extremes.- Maximum discharge during year, 72,100 second-feet Feb. 17 (gage height, 19.25 feet, from floodmarks); minimum discharge, 2,100 second-feet Sept. 26 (gage height, 2.85 feet); minimum daily, 2,240 second-feet Sept. 22.

1911-48: Maximum discharge, 261,000 second-feet Aug. 18, 1940 (gage height, 39.0 feet, from floodmarks); minimum, 458 second-feet Sept. 21, 1932 (gage height, 1.25 feet); minimum daily, 472 second-feet Sept. 21, 1932.

Flood of November 1877 at Old Gaston reached a stage about 2 feet lower than flood of August 1940 which was 21.5 feet.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are poor. Diurnal fluctuation at low flow caused by power plant above station. Discharge during floods computed by using submergence as determined by auxiliary gage as a factor.

Revisions (water years).- W 712: 1929. W 822: 1936. W 1032: 1912, 1923(M), 1928(M), 1930(M), 1933(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,670	7,260	6,590	4,560	5,360	a9,000	13,300	8,780	20,600	7,840	4,450	2,840
2	4,010	6,080	6,200	4,670	4,010	a9,000	d35,000	7,540	14,900	6,720	4,120	2,760
3	3,490	5,950	6,200	4,780	4,900	a11,000	d50,600	7,540	12,100	6,330	4,900	3,900
4	3,200	17,100	5,830	5,010	5,240	a14,000	57,900	6,850	10,200	5,830	5,010	3,290
5	3,010	28,600	5,710	5,240	7,260	a13,000	24,800	7,540	7,260	4,900	8,360	2,920
6	2,920	28,300	5,710	5,010	10,900	11,300	14,500	7,540	6,590	4,230	18,800	2,680
7	3,100	17,100	5,590	4,780	11,700	10,200	14,700	8,140	6,200	3,900	d24,600	2,610
8	2,680	10,900	5,590	4,670	14,100	20,200	23,800	9,120	7,980	3,800	19,800	2,540
9	2,760	14,100	5,470	4,560	17,700	23,800	25,600	13,400	12,100	3,690	9,880	2,760
10	3,010	13,300	5,010	4,450	17,700	25,600	22,000	11,300	11,300	3,800	6,850	3,700
11	15,200	12,100	5,010	4,450	15,700	21,000	18,100	8,140	7,840	3,490	d5,950	4,340
12	29,700	27,600	5,360	4,340	13,700	15,700	14,500	7,540	6,330	3,200	d4,780	4,560
13	34,800	30,500	5,590	5,120	18,100	12,500	13,300	6,850	5,590	3,100	4,670	4,670
14	19,200	22,000	5,590	15,300	a30,000	10,500	12,900	7,120	5,120	3,200	5,240	4,010
15	10,200	16,100	5,590	26,100	a40,000	9,460	16,400	14,400	5,240	3,800	5,240	3,290
16	8,460	18,100	5,830	21,600	a70,000	8,460	20,200	13,900	6,200	6,700	4,560	3,010
17	7,120	20,200	10,200	13,700	a70,000	8,780	18,500	9,120	6,200	9,820	3,900	2,920
18	6,980	18,100	9,820	9,460	a50,000	16,500	14,900	7,540	6,980	9,120	4,120	2,760
19	8,460	13,700	8,780	7,840	a30,000	18,100	11,700	7,540	8,140	5,950	3,900	2,610
20	10,900	10,900	7,120	7,260	a20,000	12,900	10,200	6,590	6,850	5,010	4,010	2,680
21	12,100	12,500	6,330	7,840	a16,000	10,500	9,460	5,950	11,700	5,120	4,670	2,380
22	9,120	12,500	5,950	9,120	a14,000	9,820	8,780	5,590	8,460	4,780	4,670	2,240
23	7,120	10,500	5,590	9,820	a13,000	10,500	8,460	5,240	6,460	4,340	4,780	2,380
24	5,950	12,100	5,470	9,120	a12,000	10,200	8,140	5,120	9,820	4,560	6,800	2,310
25	5,360	12,100	5,360	7,840	a11,000	16,500	7,540	5,120	9,460	4,120	5,430	2,380
26	4,900	12,100	5,240	6,330	a10,000	19,700	7,260	5,470	10,500	3,800	4,120	2,310
27	4,670	10,200	5,010	4,560	a10,000	16,100	6,980	11,300	8,460	3,100	3,590	2,380
28	4,450	8,780	5,010	4,900	10,500	16,100	8,460	19,300	6,080	2,840	3,200	2,460
29	5,220	7,840	4,900	6,460	9,820	24,600	12,900	13,700	6,460	2,840	3,200	2,540
30	6,980	7,120	4,900	6,980	-	22,000	10,900	10,200	6,330	3,200	3,010	2,840
31	6,010	-	4,670	6,460	-	15,300	-	14,500	-	3,290	2,680	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	255,750	34,800	2,680	8,250	0.981	1.13
November	443,730	30,500	5,950	14,790	1.76	1.96
December	185,220	10,200	4,670	5,975	.710	.82
Calendar year 1947	2,921,940	52,300	1,890	8,005	.952	12.91
January	242,330	26,100	4,340	7,817	.929	1.07
February	562,690	70,000	4,010	19,400	2.31	2.49
March	452,320	25,600	8,460	14,590	1.73	2.00
April	521,780	57,900	6,980	17,390	2.07	2.31
May	277,980	19,300	5,120	8,967	1.07	1.23
June	257,450	20,600	5,120	8,582	1.02	1.14
July	146,420	9,820	2,840	4,723	.562	.65
August	199,290	24,600	2,680	6,429	.764	.88
September	89,070	4,670	2,240	2,969	.353	.39
Water year 1947-48	3,634,030	70,000	2,240	9,929	1.18	16.07

Peak discharge (base, 50,000 sec.-ft.).- Feb. 17 (about 6 p.m.) 72,100 sec.-ft.; Apr. 4 (1 p.m.) 61,600 sec.-ft.

a No gage-height record; discharge computed on basis of high-water marks and other records in basin.

d Doubtful gage-height record; discharge computed on basis of doubtful gage heights.

Roanoke River near Scotland Neck, N. C.

Location.- Water-stage recorder, lat. 36°12'30", long. 77°23'10", at bridge on U. S. Highway 258, 1 mile downstream from tributary on right, 3 miles downstream from Bridgers Creek, and 5¾ miles north of Scotland Neck, Halifax County. Auxiliary water-stage recorder at Atlantic Coast Line Railroad bridge, 8¼ miles downstream. Datum of each gage is 5.77 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 8,700 square miles.

Records available.- August 1940 to September 1948. July 1896 to May 1903 at site of auxiliary gage, at different datum, published as Roanoke River at Neal.

Extremes.- Maximum discharge during year, 61,900 second-feet Feb. 18; maximum gage height, 33.90 feet Feb. 18; minimum discharge, 2,200 second-feet Sept. 22.

1940-48: Maximum discharge, 260,000 second-feet Aug. 19, 1940; maximum gage height, 41.98 feet Aug. 19, 1940; minimum discharge, 1,200 second-feet Oct. 16, 1941.

Maximum stage observed during period June 1930 to July 1940, 35.1 feet Jan. 24, 1936 (from unpublished U. S. Weather Bureau records adjusted to present datum). The following data on major floods (adjusted to present datum) were furnished by State Highway and Public Works Commission: 1877, about 37.8 feet; March 1912, 36.8 feet; 1919, 34.9 feet; 1924, 32.9 feet.

Remarks.- Records good except those for period of ice effect, which are fair. Discharge computed by using fall as determined by auxiliary gage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16,600	6,700	7,340	4,990	6,370	9,490	16,500	10,300	19,800	7,370	4,070	2,840
2	10,400	6,940	6,840	4,910	b5,000	8,810	20,400	8,840	19,000	7,960	4,680	2,930
3	7,170	5,950	6,490	4,910	b4,000	9,920	27,000	8,080	15,700	6,910	4,530	3,330
4	5,360	10,100	6,220	5,120	b5,000	13,400	32,000	7,490	13,100	6,550	5,140	3,700
5	4,060	16,100	5,960	5,420	b6,500	14,200	39,300	7,630	9,560	5,620	7,020	3,170
6	3,380	24,600	5,930	5,360	9,980	12,700	32,200	7,890	7,750	4,890	13,600	2,960
7	3,130	24,500	5,770	5,070	12,100	11,100	24,100	7,970	6,850	4,270	20,200	2,840
8	2,950	18,900	5,750	4,990	13,500	15,100	22,800	9,050	7,220	4,110	21,700	2,660
9	2,720	16,100	5,810	4,830	16,600	20,000	24,100	11,400	10,800	3,900	17,000	2,690
10	3,520	15,800	5,440	4,680	17,900	22,900	24,800	12,600	12,200	4,020	10,700	3,110
11	7,870	14,100	5,420	4,610	17,200	24,200	23,600	10,000	9,920	3,910	7,430	4,260
12	20,900	17,600	5,420	4,590	15,700	21,600	20,400	8,330	7,660	3,630	5,650	4,530
13	25,400	25,000	5,630	4,770	16,200	17,400	17,500	7,490	5,840	3,320	4,800	4,920
14	26,700	25,600	5,710	9,910	22,200	14,200	15,600	7,460	4,870	3,320	4,970	4,390
15	20,800	23,700	5,710	20,900	29,200	11,900	15,200	10,000	5,420	3,810	5,360	3,540
16	14,600	20,600	5,950	23,300	41,400	10,400	18,600	15,900	6,190	4,860	5,070	3,130
17	11,000	21,200	8,330	20,300	55,900	9,190	19,300	12,000	6,480	8,200	4,310	2,960
18	9,100	21,400	10,800	15,200	60,800	12,600	17,900	9,200	6,480	10,400	4,050	2,960
19	8,430	18,800	9,930	11,300	53,600	17,800	15,200	8,250	8,720	7,910	4,200	2,750
20	10,100	15,200	8,510	9,230	37,500	15,600	12,100	7,650	7,720	6,050	4,200	2,660
21	11,900	13,500	7,240	8,970	26,700	12,700	10,600	6,630	10,100	5,600	4,500	2,720
22	11,000	14,200	6,610	9,730	21,900	10,700	9,490	6,080	10,200	5,630	4,750	2,320
23	8,810	12,300	6,080	10,500	18,100	10,800	8,940	5,670	7,830	4,970	5,160	2,410
24	7,170	12,200	5,750	10,500	15,700	10,900	8,520	5,420	8,660	4,960	5,680	2,410
25	5,910	12,900	5,730	9,400	13,900	12,700	8,320	5,390	9,780	4,680	6,730	2,410
26	5,270	12,700	5,570	7,820	12,700	18,100	7,750	5,230	10,700	4,170	4,820	2,410
27	4,840	11,700	5,420	5,930	11,600	18,100	7,580	7,160	9,930	3,720	3,930	2,440
28	4,680	10,100	5,310	5,120	10,900	16,400	8,250	17,200	8,080	3,130	3,490	2,560
29	4,510	8,710	5,310	5,670	10,300	19,500	11,300	16,800	6,770	2,990	3,350	2,620
30	6,400	7,870	5,230	7,210	-	22,400	12,200	13,200	6,710	3,020	3,230	2,930
31	6,630	-	5,070	7,190	-	20,200	-	13,100	-	3,360	2,990	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	291,310	26,700	2,720	9,397	1.08	1.25
November	465,070	25,600	5,950	15,500	1.78	1.99
December	196,280	10,800	5,070	6,332	.728	.84
Calendar year 1947	3,008,600	36,700	1,920	8,243	.947	12.86
January	262,430	23,300	4,590	8,465	.973	1.12
February	588,450	60,800	4,000	20,290	2.33	2.52
March	465,010	24,200	8,810	15,000	1.72	1.99
April	531,550	39,300	7,580	17,720	2.04	2.27
May	289,410	17,200	5,230	9,336	1.07	1.24
June	280,040	19,800	4,870	9,335	1.07	1.20
July	157,240	10,400	2,990	5,072	.583	.67
August	207,310	21,700	2,990	6,687	.769	.89
September	91,560	4,920	2,320	3,052	.351	.39
Water year 1947-48	3,825,660	60,800	2,320	10,450	1.20	16.37

Peak discharge (base, 28,000 sec.-ft.).- Feb. 18 (2 p.m.) 61,900 sec.-ft.; Apr. 5 (3 p.m.) 40,200 sec.-ft.

b Stage-discharge relation affected by ice.

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 3 miles north of Union Hall, Franklin County. Datum of gage is 693.13 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 208 square miles.

Records available.- March 1925 to September 1948.

Average discharge.- 23 years, 225 second-feet.

Extremes.- Maximum discharge during year, 3,770 second-feet June 18 (gage height, 7.92 feet); minimum, 94 second-feet Oct. 7, 8 (gage height, 1.85 feet).

1925-48: Maximum discharge, 19,700 second-feet Aug. 14, 1940 (gage height, 19.52 feet), from rating curve extended above 6,500 second-feet by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 13 second-feet Sept. 20, 1932 (gage height, 1.42 feet).

Remarks.- Records good except those for periods of no gage-height record, which are poor.

Revisions (water years).- W 892: 1930(M), 1933(M), 1938-39(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	a240	207	158	a180	207	1,150	215	383	175	168	143
2	104	a230	203	175	a170	238	685	222	299	161	203	134
3	101	a2,300	200	168	a210	264	505	222	255	152	369	128
4	101	a1,300	196	161	369	234	432	219	234	149	2,200	125
5	96	a700	196	161	378	215	388	294	215	149	1,400	123
6	96	g393	200	158	441	211	364	234	196	200	476	143
7	94	g336	196	155	451	520	595	378	451	175	331	259
8	109	a310	192	149	412	710	515	299	304	146	272	230
9	289	a300	189	149	402	393	446	230	207	140	234	172
10	1,210	g294	189	149	359	336	402	211	178	140	211	230
11	710	a280	200	143	322	304	383	196	165	140	200	178
12	427	a260	200	146	286	276	398	215	161	149	207	146
13	388	a240	189	481	660	255	378	724	155	161	178	134
14	312	281	182	432	1,940	238	383	412	155	255	161	128
15	255	374	189	a270	980	234	495	276	158	272	155	123
16	a230	432	226	a260	575	234	364	255	359	299	152	120
17	a540	336	215	a250	476	255	322	286	247	207	155	120
18	a980	304	192	a200	417	226	299	238	744	175	155	117
19	a700	290	185	a200	364	219	281	211	1,130	165	149	114
20	364	268	178	a210	331	234	272	200	355	172	222	112
21	290	251	175	a210	299	251	268	192	255	161	158	114
22	247	243	172	a200	290	247	259	185	222	149	152	117
23	226	276	168	a170	272	895	243	178	247	143	143	117
24	207	276	168	a130	255	980	243	222	299	137	149	120
25	196	264	165	a190	251	575	238	540	219	131	149	117
26	a180	247	168	a190	247	417	230	449	189	128	137	114
27	g175	230	175	a170	243	760	222	471	175	a270	131	114
28	a520	222	158	a160	234	620	234	308	203	a170	134	114
29	a580	219	155	a160	222	441	230	268	192	a130	134	213
30	a400	215	155	a160	-	388	226	243	196	a110	131	451
31	a300	-	152	a130	-	1,010	-	259	-	143	143	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,533	1,210	94	340	1.63	1.88
November	11,911	2,300	215	397	1.91	2.13
December	5,735	226	152	185	.889	1.02
Calendar year 1947	83,401	2,300	74	228	1.10	14.91
January	6,045	481	130	195	.937	1.08
February	12,036	1,940	170	415	2.00	2.16
March	12,387	1,010	207	400	1.92	2.21
April	11,450	1,150	222	382	1.84	2.05
May	8,852	724	178	286	1.37	1.58
June	8,548	1,130	155	285	1.37	1.53
July	5,254	299	110	169	.812	.94
August	9,159	2,200	131	295	1.42	1.64
September	4,570	451	112	152	.731	.82
Water year 1947-48	106,480	2,300	94	291	1.40	19.04

Peak discharge (base, 2,000 sec.-ft.).- Nov. 3 (time and discharge unknown); Feb. 14 (5 p.m.) 2,670 sec.-ft.; Mar. 31 (7:30 p.m.) 3,050 sec.-ft.; June 18 (4:30 p.m.) 3,770 sec.-ft.; Aug. 4 (5 p.m.) 3,290 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Roanoke River at Roanoke, Pigg River near Toshes, and Goose Creek near Ruddleston.

g Computed from graph based on gage readings.

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. Datum of gage is 602.55 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 394 square miles.

Records available.- August 1930 to September 1948.

Average discharge.- 18 years, 400 second-feet.

Extremes.- Maximum discharge during year, 8,670 second-feet Apr. 1 (gage height, 16.72 feet); minimum, 152 second-feet Oct. 7 (gage height, 3.41 feet).

1930-48: Maximum discharge, 34,300 second-feet Aug. 15, 1940 (gage height, 32.5 feet, from floodmark), from rating curve extended above 11,000 second-feet by logarithmic plotting on basis of slope-area determination at gage height 25.8 feet, and records for other stations in Roanoke River Basin; minimum, 22 second-feet Aug. 31, 1932 (gage height, 2.32 feet).

Remarks.- Records good except those for period of ice effect, which are poor. Diurnal fluctuation at low flow by mill above station.

Revisions (water years).- W 972: 1931-40 (maximum only, 1931-32, 1934-35, 1937).

Rating tables, water year 1947-48, except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 13				Jan. 14 to Sept. 30			
3.5	170	6.0	970	3.5	194	7.0	1,480
4.0	290	7.0	1,450	4.0	324	9.0	2,510
4.5	427	9.0	2,520	4.5	484	11.0	3,760
5.0	582	11.0	3,760	5.0	665	14.0	6,000
5.5	759	12.0	4,460	6.0	1,050		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	197	280	312	264	b330	375	5,760	384	502	759	232	221
2	190	272	306	317	b420	466	1,520	399	432	449	309	214
3	185	3,950	304	301	b410	610	893	399	372	354	327	212
4	181	1,870	306	272	b390	519	702	369	366	321	815	203
5	174	686	298	280	*b450	449	610	484	342	303	1,210	201
6	170	486	287	274	b540	414	572	432	318	449	432	221
7	170	399	274	272	665	971	1,090	684	1,050	321	330	309
8	188	566	272	264	572	1,440	816	591	610	289	369	303
9	413	471	274	264	684	759	684	432	449	281	300	318
10	2,990	399	264	259	554	591	591	369	369	273	273	360
11	1,150	521	290	246	466	536	572	354	345	268	268	342
12	582	778	301	244	519	502	572	366	333	281	529	252
13	471	502	274	1,060	1,340	432	554	1,230	309	289	348	232
14	385	413	264	1,210	3,340	414	536	797	315	289	271	224
15	344	680	269	554	1,860	399	874	484	315	952	250	226
16	314	816	385	*449	971	414	646	432	478	554	252	221
17	593	517	358	414	797	466	554	384	399	399	247	219
18	634	442	309	384	740	399	502	384	2,220	330	250	209
19	1,450	413	301	333	628	399	484	342	2,030	324	247	203
20	533	385	287	369	554	414	466	339	536	572	904	203
21	399	358	285	399	502	432	449	324	399	414	484	209
22	344	344	285	414	484	432	432	318	360	324	354	209
23	304	413	282	381	466	971	414	303	366	284	289	216
24	285	456	277	b320	449	1,390	414	348	554	260	263	212
25	269	442	274	b320	449	932	399	610	502	255	255	207
26	264	385	280	b450	466	646	384	721	360	258	239	203
27	259	371	274	b400	449	1,270	399	466	399	255	232	205
28	269	344	272	b400	432	1,390	449	414	797	281	219	209
29	517	330	272	b400	399	759	414	372	952	330	214	318
30	427	317	264	b360	-	628	414	572	572	286	229	572
31	330	-	264	b340	-	2,180	-	449	-	268	284	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,981	2,990	170	483	1.23	1.42
November	18,606	3,950	272	620	1.57	1.75
December	8,964	385	264	289	.734	.85
Calendar year 1947	131,252	3,950	112	360	.914	12.39
January	12,214	1,210	244	394	1.00	1.15
February	20,326	3,340	330	701	1.78	1.92
March	21,999	2,180	375	710	1.80	2.08
April	23,166	5,760	384	772	1.96	2.19
May	14,552	1,230	303	469	1.19	1.37
June	17,351	2,220	309	578	1.47	1.64
July	11,272	952	255	364	.924	1.07
August	11,225	1,210	214	362	.919	1.06
September	7,453	572	201	248	.629	.70
Water year 1947-48	182,109	5,760	170	498	1.26	17.20

Peak discharge (base, 4,000 sec.-ft.).- Nov. 3 (4:30 a.m.) 5,760 sec.-ft.; Feb. 14 (6 p.m.) 4,810 sec.-ft.; Apr. 1 (6 a.m.) 8,670 sec.-ft.; June 18 (11 p.m.) 7,700 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

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. Datum of gage is 592.91 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 187 square miles.

Records available.- September 1930 to September 1948. March 1925 to September 1927 (gage heights only) at site a quarter of a mile downstream.

Average discharge.- 18 years (1930-48), 176 second-feet.

Extremes.- Maximum discharge during year, 9,000 second-feet Aug. 4 (gage height, 18.05 feet); minimum, 31 second-feet Jan. 24 (gage height, 1.22 feet), result of low temperature.

1930-48: Maximum discharge, 17,200 second-feet Oct. 19, 1937 (gage height, 25.75 feet, from floodmarks), from rating curve extended above 6,400 second-feet by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 3 second-feet Aug. 31, 1932, Jan. 30, 1934.

Remarks.- Records good except those for periods of ice effect, which are poor.

Revisions (water years).- W 892: 1933, 1935(M), 1938(M), 1939. W 972: 1931-32(M), 1934(M), 1935-38, 1940, 1941(M). W 1082: 1940(P).

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 2-7, Aug. 5 to Sept. 30)

Oct. 1 to Aug. 4

1.3	42	2.0	254	5.0	1,190
1.4	60	2.5	429	7.0	2,070
1.5	82	3.0	576	9.0	3,050
1.7	142	4.0	848	12.0	4,700

Aug. 5 to Sept. 30

1.4	62	3.0	500
1.5	82	4.0	812
1.7	130	5.0	1,180
2.0	210	7.0	2,070

Note.- Same as preceding table above 7.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	82	126	104	80	142	2,070	208	277	149	129	140
2	60	80	126	126	b130	178	734	227	167	139	243	110
3	60	3,080	123	110	b140	178	475	216	153	129	189	105
4	58	1,100	120	104	153	164	367	208	153	123	4,650	105
5	56	548	123	104	164	146	269	426	149	156	1,840	103
6	56	364	123	102	*174	142	231	307	142	139	470	108
7	56	269	113	99	189	588	628	810	262	120	312	146
8	62	371	113	96	189	444	460	387	178	116	235	133
9	340	235	113	99	193	281	589	288	149	113	186	188
10	680	193	113	99	178	235	380	239	142	113	146	275
11	460	343	126	90	164	208	329	212	136	129	128	143
12	224	374	120	*104	197	189	310	212	136	129	118	125
13	171	250	113	706	1,240	171	284	668	132	123	108	118
14	132	205	110	377	2,400	164	292	460	132	164	96	112
15	110	296	123	201	1,070	156	329	303	142	164	91	110
16	104	277	178	b180	654	193	269	250	789	139	82	108
17	104	216	136	b160	602	254	250	235	231	129	82	105
18	120	189	126	b140	548	201	227	208	216	123	80	103
19	178	178	123	123	419	186	216	189	231	102	80	103
20	120	167	116	160	329	186	212	178	156	99	96	103
21	102	153	113	156	258	178	208	171	142	96	76	103
22	93	149	110	156	235	178	197	167	167	110	1,750	103
23	88	193	110	136	208	809	197	160	401	93	170	100
24	82	182	110	73	193	878	189	156	201	82	140	98
25	80	182	104	b120	189	548	186	156	156	82	128	98
26	78	164	107	b140	197	340	193	167	142	82	120	98
27	78	149	110	b140	182	706	284	167	394	107	115	96
28	85	142	104	b130	171	641	346	160	212	235	108	96
29	129	136	104	b120	156	367	254	156	258	129	105	153
30	96	129	107	b120	-	460	224	156	235	102	202	196
31	88	-	104	b120	-	1,180	-	178	-	120	230	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,210	680	56	136	0.727	0.84
November	10,396	3,080	80	347	1.86	2.08
December	3,647	178	104	118	.631	.73
Calendar year 1947	62,798	3,080	53	172	.920	12.48
January	4,695	706	90	151	.807	.93
February	11,002	2,400	80	379	2.03	2.19
March	10,691	1,180	142	345	1.84	2.12
April	11,199	2,070	186	373	1.99	2.22
May	8,025	810	156	259	1.39	1.60
June	6,381	789	132	213	1.14	1.27
July	3,836	235	82	124	.663	.76
August	12,505	4,650	76	403	2.16	2.49
September	3,684	275	96	123	.658	.73
Water year 1947-48	90,271	4,650	56	247	1.32	17.96

Peak discharge (base, 3,000 sec.-ft.).- Nov. 3 (4 p.m.) 5,300 sec.-ft.; Feb. 14 (5 p.m.) 3,250 sec.-ft.; Apr. 1 (1 a.m.) 4,080 sec.-ft.; Aug. 4 (5:30 p.m.) 9,000 sec.-ft.; Aug. 22 (2:30 a.m.) 7,910 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Otter River near Bedford, Va.

Location.- Water-stage recorder, lat. 37°22', long. 79°25', at bridge on U. S. Highway 460, 1 mile downstream from Roaring Run, 6½ miles northeast of Bedford, Bedford County, and 8 miles upstream from Little Otter River.

Drainage area.- 116 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 14,900 second-feet Aug. 4 (gage height, 15.62 feet, from recorded range in stage), from rating curve extended above 4,000 second-feet on basis of velocity-area studies and records for station near Evington; minimum, 24 second-feet Oct. 7, 8; minimum gage height, 1.39 feet Oct. 6-8.

1944-48: Maximum discharge, that of Aug. 4, 1948; minimum, 5.6 second-feet Sept. 8, 1944 (gage height, 0.89 foot).

Flood in 1937 or 1939 reached a stage of 21.8 feet, from floodmarks at present site. Flood in August 1940 reached a discharge of 9,710 second-feet by slope-area method.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jnne	July	Aug.	Sept.
1	29	58	98	73	b60	128	2,690	132	180	91	107	77
2	28	57	95	94	*b70	150	760	168	144	77	119	57
3	29	605	92	74	b80	146	540	144	138	73	a110	52
4	27	366	88	72	88	138	424	134	134	68	a2,500	48
5	26	213	91	72	114	126	366	526	121	66	693	47
6	26	161	87	69	114	124	319	258	119	67	323	48
7	24	142	82	66	114	338	406	a900	182	62	222	104
8	28	199	81	63	115	282	712	a450	134	56	178	120
9	126	148	77	66	123	213	460	a300	114	57	150	72
10	294	128	80	63	117	190	362	235	107	55	130	68
11	228	234	94	58	102	175	330	210	102	56	121	64
12	161	235	84	*64	144	166	308	213	95	58	128	53
13	142	178	81	478	1,150	150	282	590	94	61	108	49
14	114	157	78	265	1,430	142	265	366	94	61	98	45
15	98	221	82	175	645	136	265	290	95	84	92	44
16	94	195	128	b140	428	184	238	258	161	68	87	41
17	92	163	100	123	366	201	225	255	112	116	85	41
18	115	146	92	114	326	163	210	207	108	64	84	40
19	123	144	88	b90	276	159	201	185	128	55	78	40
20	92	130	85	b100	235	161	188	168	92	62	81	40
21	78	119	84	110	204	159	178	163	85	66	81	40
22	72	117	81	106	195	152	166	152	85	64	77	38
23	69	126	78	96	175	531	157	142	124	52	72	40
24	63	148	74	74	163	798	150	138	144	45	69	39
25	61	155	72	b90	168	437	142	132	95	40	67	37
26	60	134	73	95	168	338	136	136	126	40	60	36
27	58	124	71	92	150	1,000	140	128	119	122	56	34
28	76	117	69	89	148	630	198	123	98	162	54	34
29	77	110	66	84	134	432	161	132	87	73	49	75
30	64	104	64	82	-	350	144	178	87	62	50	146
31	60	-	66	68	-	1,610	-	175	-	64	127	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,634	294	24	85.0	0.733	0.85
November	5,134	605	57	171	1.47	1.64
December	2,581	128	64	83.3	.718	.83
Calendar year 1947	44,353	1,370	16	122	1.05	14.20
January	3,305	478	58	107	.922	1.06
February	7,602	1,430	60	262	2.26	2.44
March	9,909	1,610	124	320	2.76	3.18
April	11,123	2,690	136	371	3.20	3.57
May	7,588	900	123	245	2.11	2.43
June	3,504	182	85	117	1.01	1.13
July	2,147	162	40	69.3	.597	.69
August	6,256	2,500	49	202	1.74	2.01
September	1,669	146	34	55.6	.479	.53
Water year 1947-48	63,452	2,690	24	173	1.49	20.36

Peak discharge (base, 1,500 sec.-ft.).- Feb. 14 (1 a.m.) 2,420 sec.-ft.; Mar. 27 (11 a.m.) 2,370 sec.-ft.; Apr. 1 (12:30 a.m.) 7,890 sec.-ft.; Apr. 8 (12:30 p.m.) 1,750 sec.-ft.; May 7 (8:30 a.m.) 2,220 sec.-ft.; Aug. 4 (about 12 m.) 14,900 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Otter River near Evington, Pigg River near Toshes, and Goose Creek near Huddleston.

b Stage-discharge relation affected by ice.

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. Datum of gage is 544.02 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 325 square miles.

Records available.- November 1936 to September 1948.

Average discharge.- 11 years (1937-48), 341 second-feet.

Extremes.- Maximum discharge during year, 9,580 second-feet Aug. 4 (gage height, 17.82 feet); minimum, 73 second-feet Oct. 6, 7; minimum gage height, 1.57 feet Oct. 5, 6, 7.

1936-48: Maximum discharge, 27,500 second-feet Oct. 19, 1937, Aug. 19, 1939 (gage height, 23.1 feet), from rating curve extended above 6,600 second-feet by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River Basin; minimum, 39 second-feet Dec. 16, 1943 (gage height, 1.07 feet), result of low temperature.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor.

Revisions (water years).- W 852: 1937. W 892: 1938-39(M). W 972: 1937-39. W 1032: 1940.

Rating table, water year 1947-48, except period of ice effect (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1 to Nov. 15)

1.4	71	4.0	621	11.0	3,420
1.6	94	5.0	918	13.0	4,370
2.0	154	6.0	1,250	14.5	5,420
2.5	240	7.0	1,640	16.0	6,920
3.0	345	9.0	2,520		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	154	240	196	157	290	6,200	357	345	345	199	290
2	84	146	231	240	b250	395	1,940	408	290	236	345	208
3	84	2,200	229	215	269	436	1,110	382	279	211	218	187
4	82	1,630	224	202	279	369	888	345	290	201	4,420	173
5	78	606	227	204	300	322	738	1,040	269	189	3,040	167
6	78	422	229	196	*334	300	664	606	250	192	753	164
7	76	334	213	189	345	1,080	1,010	2,560	422	185	503	185
8	83	636	217	185	322	978	1,080	1,010	322	170	395	300
9	166	436	208	187	345	592	978	694	259	170	322	233
10	606	322	204	185	300	492	753	548	240	164	273	360
11	888	617	236	168	290	436	694	464	229	162	269	226
12	422	828	231	187	311	382	694	436	218	168	259	189
13	357	492	209	2,360	1,980	345	650	1,770	209	184	250	173
14	269	395	199	1,120	4,270	334	592	918	211	194	222	165
15	226	548	204	a700	2,380	322	708	636	215	279	218	160
16	204	578	357	*436	1,180	395	578	534	422	202	209	149
17	413	436	290	345	978	738	520	382	311	222	204	146
18	534	369	250	300	918	464	478	436	1,200	197	201	143
19	478	345	238	233	694	408	450	382	738	170	193	141
20	290	334	224	248	592	408	436	357	311	165	231	141
21	227	300	217	290	478	382	422	334	250	192	204	144
22	201	279	213	290	450	357	395	322	229	178	1,680	141
23	182	369	208	250	408	1,700	382	300	901	231	322	141
24	165	357	199	184	395	2,060	369	290	1,000	162	250	135
25	157	422	196	b160	369	1,040	357	290	345	146	218	134
26	151	345	199	b250	408	738	345	311	279	141	199	134
27	151	311	196	b240	369	1,580	422	300	408	152	184	132
28	167	290	190	b240	345	1,430	694	290	279	386	170	134
29	233	269	187	b230	322	858	478	290	322	229	159	201
30	180	259	184	b220	-	694	408	290	334	178	163	422
31	162	-	187	244	-	1,270	-	357	-	172	592	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	7,481	888	76	241	0.742	0.86
November	15,029	2,200	146	501	1.54	1.72
December	6,836	357	184	221	.680	.78
Calendar year 1947	113,499	3,010	65	311	.957	12.98
January	10,674	2,360	160	344	1.06	1.22
February	20,038	4,270	157	691	2.13	2.30
March	21,595	2,060	290	697	2.14	2.47
April	25,433	6,200	345	848	2.61	2.91
May	17,639	2,560	290	569	1.75	2.02
June	11,377	1,200	209	379	1.17	1.30
July	6,173	386	141	199	.612	.71
August	16,880	4,420	159	545	1.68	1.94
September	5,618	422	132	187	.575	.64
Water year 1947-48	164,773	6,200	76	450	1.38	18.87

Peak discharge (base, 4,000 sec.-ft.).- Feb. 14 (9:30 p.m.) 5,690 sec.-ft.; Apr. 1 (6:30 a.m.) 8,220 sec.-ft.; May 7 (12 m.) 4,170 sec.-ft.; Aug. 4 (9:30 p.m.) 9,580 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Otter River near Bedford, Goose Creek near Huddleston, and Pigg River near Toshes.

b Stage-discharge relation affected by ice.

Falling River near Naruna, Va.

Location.- Water-stage recorder, lat. 37°07', long. 78°58', at highway bridge 2 miles upstream from Little Falling River and 2½ miles northeast of Naruna, Campbell County. Datum of gage is 412.32 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 172 square miles.

Records available.- July 1929 to January 1935, September 1941 to September 1948.

Average discharge.- 12 years (1929-34, 1941-48), 144 second-feet.

Extremes.- Maximum discharge during year, 4,240 second-feet Feb. 14 (gage height, 13.25 feet); minimum, 36 second-feet Feb. 1 (gage height, 2.58 feet), result of low temperature.

1929-35, 1941-48: Maximum discharge, 15,800 second-feet Sept. 18 or 19, 1944 (gage height, 23.9 feet, from floodmarks), from rating curve extended above 6,100 second-feet on basis of slope-area determinations at gage heights 23.9 and 26.5 feet; minimum observed, 3 second-feet Oct. 9, 1932 (gage height, 2.18 feet).

Flood in August 1940 reached a stage of 26.5 feet, from floodmarks (discharge, 22,000 second-feet, by slope-area method).

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor.

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 7				May 8 to Sept. 30			
2.6	38	3.7	273	2.7	48	4.0	338
2.7	50	4.5	522	2.8	59	4.5	500
2.8	64	5.5	860	3.0	89	5.5	860
3.0	100	7.0	1,430	3.5	200		
3.3	165	10.0	2,700				

Note.- Same as preceding table above 5.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	64	104	90	76	156	a2,000	156	125	212	a140	67
2	49	61	100	120	*b70	358	a600	200	109	89	a90	62
3	50	486	100	94	b160	311	a450	172	103	81	a1,800	62
4	49	247	100	90	154	230	a350	151	103	78	a1,200	59
5	48	147	100	*90	170	190	a300	244	100	76	a300	59
6	49	110	102	90	168	178	a350	175	96	76	a200	66
7	46	96	98	89	168	656	a450	261	216	73	a150	73
8	54	389	96	85	170	407	a470	190	136	70	a110	70
9	69	185	96	89	180	258	a400	150	109	69	a100	66
10	163	129	94	85	163	244	a350	136	102	69	a90	86
11	236	676	112	76	147	208	a310	127	96	67	a85	76
12	170	506	108	89	172	188	a250	123	93	72	a80	66
13	131	208	96	1,410	672	172	285	182	89	72	75	65
14	94	154	94	571	2,670	165	244	160	98	128	69	58
15	81	279	102	227	1,460	165	323	127	115	107	70	62
16	110	244	233	198	571	198	247	125	109	83	66	58
17	98	168	147	147	622	285	216	143	105	79	66	58
18	129	138	124	138	571	200	200	117	184	70	65	57
19	96	147	116	118	413	188	188	111	255	66	66	57
20	83	133	110	138	317	195	180	107	115	a60	79	57
21	76	118	104	165	244	195	178	107	98	a70	70	59
22	69	120	100	158	236	180	168	105	91	a90	636	60
23	67	264	100	135	216	636	163	102	102	a70	89	57
24	64	238	96	92	211	490	160	107	126	a60	78	a55
25	67	208	90	b120	216	279	156	123	89	a60	72	a55
26	60	160	92	b130	241	230	149	536	83	a60	70	a55
27	64	135	90	129	208	758	156	203	86	a150	67	a55
28	71	127	90	124	190	381	264	152	86	a100	66	a60
29	83	116	89	120	170	256	185	138	83	a70	63	a100
30	67	110	87	114	-	a350	170	132	97	a70	63	a250
31	64	-	87	98	-	a900	-	160	-	a80	63	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,607	236	46	84.1	0.489	0.56
November	6,163	676	61	205	1.19	1.33
December	3,257	233	87	105	.610	.70
Calendar year 1947	52,031	1,600	33	143	.831	11.22
January	5,419	1,410	76	175	1.02	1.18
February	11,126	2,670	76	384	2.23	2.40
March	9,607	900	156	310	1.80	2.08
April	9,912	2,000	149	330	1.92	2.14
May	5,022	536	102	162	.942	1.09
June	3,399	255	83	113	.657	.73
July	2,577	212	60	83.1	.483	.56
August	6,238	1,800	63	201	1.17	1.35
September	2,090	250	55	69.7	.405	.45
Water year 1947-48	67,417	2,670	46	184	1.07	14.57

Peak discharge (base, 1,600 sec.-ft.).- Nov. 11 (8:30 p.m.) 1,760 sec.-ft.; Jan. 13 (4 p.m.) 2,830 sec.-ft.; Feb. 14 (11 p.m.) 4,240 sec.-ft.; Aug. 22 (4 a.m.) 2,740 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, engineer's readings, recorded range in stage, and records for Otter River near Evington, Roanoke Creek at Saxe, and Slate River near Arvonia.

b Stage-discharge relation affected by ice.

Cub Creek at Phenix, Va.

Location.- Staff gage, lat. 37°05', long. 78°46', at bridge on State Highway 40, 0.9 mile west of Phenix, Charlotte County, and 2 miles downstream from Rough Creek.

Drainage area.- 102 square miles.

Records available.- August 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 2,340 second-feet Apr. 1 (gage height, 11.88 feet from floodmark); minimum observed, 16 second-feet Oct. 31; minimum gage height observed, 1.22 feet Oct. 31, Sept. 4.

1946-48: Maximum discharge observed, that of Apr. 1, 1948; minimum observed, that of Oct. 31, 1947; minimum gage height observed, 1.16 feet Sept. 5, 1947.

Remarks.- Records poor. Gage read once daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	17	87	65	97	97	1,900	107	82	185	35	33
2	34	41	78	82	*b96	92	702	140	78	74	69	30
3	28	173	69	87	118	97	245	118	74	61	69	30
4	23	173	82	87	129	102	233	118	74	61	221	29
5	25	197	61	*82	140	107	151	118	69	57	173	30
6	27	124	87	69	140	112	140	102	65	51	92	32
7	30	74	97	65	140	221	283	129	69	49	69	42
8	28	309	74	61	140	245	283	107	107	47	a60	37
9	74	364	107	61	140	173	322	92	78	44	a50	34
10	102	309	61	57	140	107	162	87	69	43	a45	61
11	173	162	57	57	140	92	270	82	74	44	49	a50
12	197	350	53	57	151	118	a210	87	69	44	57	36
13	336	770	48	322	209	107	197	87	87	46	57	34
14	350	309	45	866	*554	107	151	a100	78	49	47	33
16	25	82	97	496	*1,690	97	270	87	74	65	44	32
16	23	173	162	350	*724	129	185	78	82	53	42	32
17	27	185	107	140	442	209	185	102	78	47	42	34
18	30	134	92	87	209	151	134	87	61	44	42	32
19	23	221	173	74	173	112	124	82	87	42	40	a32
20	25	554	78	97	151	87	118	74	a70	42	87	32
21	28	496	69	140	140	74	107	69	61	112	49	35
22	27	680	69	134	151	87	102	65	57	173	a50	34
23	24	173	78	107	162	92	a100	65	245	49	51	33
24	23	197	87	87	197	270	97	61	97	43	40	33
25	29	173	97	97	140	245	97	65	74	39	40	33
26	19	134	87	140	129	245	92	74	74	38	39	33
27	20	151	82	140	124	270	a120	112	69	44	a38	32
28	22	124	69	b120	151	594	185	107	65	48	36	33
29	20	102	65	b110	107	283	129	102	61	39	a34	50
30	18	102	65	97	-	209	107	92	78	42	32	209
31	16	-	61	97	-	140	-	97	-	35	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,846	350	16	59.5	0.583	0.67
November	7,053	770	17	235	2.30	2.57
December	2,544	173	45	82.1	.805	.93
Calendar year 1947	38,257	938	16	105	1.03	13.94
January	4,531	866	57	146	1.43	1.65
February	7,024	1,690	96	242	2.37	2.56
March	5,071	594	74	164	1.61	1.86
April	7,401	1,900	92	247	2.42	2.70
May	2,893	140	61	93.3	.915	1.05
June	2,406	245	57	80.2	.786	.88
July	1,810	185	35	58.4	.573	.66
August	1,831	221	32	59.1	.579	.67
September	1,230	209	29	41.0	.402	.45
Water year 1947-48	45,640	1,900	16	125	1.23	16.65

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, engineer's readings, and records for Falling River near Naruna, Roanoke Creek at Saxe, and Slate River near Arvonia.

b Stage-discharge relation affected by ice.

Roanoke Creek at Saxe, Va.

Location.- Staff gage, lat. 36°56', long. 78°41', at highway bridge 500 feet northwest of Saxe, Charlotte County, and 4 miles upstream from Roanoke River.

Drainage area.- 162 square miles.

Records available.- August 1946 to September 1948.

Extremes.- Maximum discharge observed during year, 2,790 second-feet Feb. 15 (gage height, 11.44 feet); minimum observed, 19 second-feet Sept. 3-6 (gage height, 1.84 feet).

1946-48: Maximum discharge observed, 2,790 second-feet Sept. 25, 1947, Feb. 15, 1948; maximum gage height observed, 11.44 feet Feb. 15, 1948; minimum discharge observed, 19 second-feet Sept. 5, 6, 1947, Sept. 3-6, 1948; minimum gage height observed, 1.73 feet Sept. 6, 1947.

Remarks.- Records fair. Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 16

2.1	33	6.0	275	8.5	870
2.5	50	6.5	325	9.0	1,110
3.0	75	7.0	400	10.0	1,740
4.0	133	7.5	525	11.3	2,710
5.0	197	8.0	680		

Feb. 17 to Sept. 30

1.8	18	3.0	74	5.0	211
2.0	25	3.5	106	6.0	281
2.5	47	4.0	141	6.5	325

Note.- Same as preceding table above 6.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	97	85	70	97	113	500	99	289	54	27	20
2	41	91	80	75	97	155	1,410	a100	183	57	74	20
3	39	157	80	80	109	315	645	106	120	50	80	20
4	39	362	80	70	115	400	336	113	99	44	162	19
5	37	400	80	65	127	225	239	92	86	42	281	19
6	37	233	80	65	145	239	148	86	71	42	267	20
7	35	127	80	62	157	306	425	99	80	40	148	21
8	37	157	75	60	157	336	615	86	120	35	54	23
9	45	225	70	60	249	475	379	80	155	31	44	23
10	176	225	70	60	225	267	246	71	106	29	37	23
11	169	241	80	55	218	204	197	62	74	29	35	47
12	190	715	80	52	225	183	183	60	60	29	44	47
13	183	910	80	169	362	141	204	80	54	29	35	42
14	169	400	75	525	1,230	127	169	127	57	29	33	31
15	121	249	70	680	2,630	113	274	148	54	33	31	27
16	91	275	266	294	c1,350	225	306	92	52	40	33	25
17	75	275	218	145	555	870	225	74	52	40	31	24
18	91	197	176	127	450	715	169	80	52	35	29	23
19	85	151	115	91	315	315	134	74	50	31	29	23
20	75	139	103	91	239	197	120	60	47	29	29	23
21	70	133	85	163	183	183	106	54	47	29	29	24
22	65	121	80	218	169	169	99	52	47	31	29	24
23	58	163	80	225	169	155	92	50	232	92	29	24
24	52	294	75	109	176	190	86	54	253	99	27	23
25	50	325	70	115	169	232	86	62	315	57	27	23
26	50	225	65	121	176	232	80	297	92	40	25	23
27	48	176	65	109	169	281	80	715	68	33	25	23
28	50	121	55	109	155	500	155	830	92	33	24	25
29	157	103	50	109	134	475	162	348	71	33	23	33
30	204	a90	65	97	-	253	127	225	60	31	24	80
31	169	-	60	97	-	169	-	348	-	29	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,756	204	35	88.9	0.549	0.63
November	7,377	910	90	246	1.52	1.70
December	2,793	266	50	90.1	.556	.64
Calendar year 1947	47,525	2,230	19	130	.802	10.91
January	4,368	680	52	141	.870	1.00
February	10,552	2,630	97	364	2.25	2.43
March	8,760	870	113	283	1.75	2.02
April	7,997	1,410	80	267	1.65	1.84
May	4,824	830	50	156	.963	1.11
June	3,138	315	47	105	.648	.72
July	1,255	99	29	40.5	.250	.29
August	1,787	281	22	57.6	.356	.41
September	822	80	19	27.4	.169	.19
Water year 1947-48	56,429	2,630	19	154	.951	12.98

a No gage-height record; discharge computed on basis of weather records and records for Falling River near Naruna and Slate River near Arvonia.

c Backwater from Roanoke River; discharge computed from estimated gage-height graph.

Dan River near Francisco, N. C.

Location.- Water-stage recorder, lat. 36°30'15", long. 80°20'55", at bridge on State Highway 704 just downstream from Georges Mill, 3 miles east of Francisco, Stokes County, and 7.9 miles downstream from Little Dan River.

Drainage area.- 124 square miles.

Records available.- August 1924 to September 1948.

Average discharge.- 23 years (1924-26, 1927-48), 188 second-feet.

Extremes.- Maximum discharge during year, 1,740 second-feet May 12 (gage height, 4.26 feet); minimum, 27 second-feet Sept. 28 (gage height, 0.89 foot); minimum daily, 48 second-feet Sept. 20, 27.

1924-48: Maximum discharge, 12,400 second-feet Oct. 19, 1937 (gage height, 12.45 feet); minimum, 7.1 second-feet Sept. 8, 1932 (gage height, 0.43 foot); minimum daily, 30 second-feet Sept. 18, 20, 1932.

Remarks.- Records good except those for periods of doubtful gage-height record, which are poor. Considerable diurnal fluctuation and some regulation caused by Pinnacles power plant, 28 miles above station, and two reservoirs with a combined capacity of 416,000,000 cubic feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	146	161	173	160	127	126	1,380	232	187	170	84	130
2	140	118	209	201	142	232	698	224	183	153	95	125
3	142	154	212	185	224	217	485	213	174	146	343	123
4	137	188	205	172	187	113	404	230	174	141	265	116
5	96	183	208	175	202	200	382	253	170	140	207	82
6	65	171	196	192	271	196	360	228	161	135	155	64
7	138	171	178	195	248	256	451	295	222	150	145	178
8	168	206	194	185	176	243	540	234	205	159	104	170
9	416	128	201	188	184	247	432	214	191	172	8[illegible]	160
10	366	107	208	180	218	232	377	204	180	169	13[illegible]	169
11	210	266	209	161	199	222	320	218	184	100	14[illegible]	141
12	137	237	204	164	372	215	340	344	180	94	14[illegible]	88
13	107	204	197	394	429	199	298	d521	170	188	13[illegible]	66
14	165	195	176	265	576	141	350	d256	150	180	12[illegible]	138
15	175	306	194	203	359	134	402	d228	161	243	8[illegible]	139
16	165	187	228	253	289	223	380	d213	198	173	6[illegible]	124
17	175	153	210	195	258	220	289	d201	153	166	15[illegible]	102
18	492	208	202	130	238	203	263	214	153	109	14[illegible]	98
19	219	287	199	140	232	216	266	209	180	113	14[illegible]	72
20	151	244	194	193	223	211	271	199	d148	172	13[illegible]	48
21	182	231	182	204	210	155	263	178	d138	171	12[illegible]	99
22	173	224	184	182	158	143	247	174	d143	136	9[illegible]	107
23	169	218	200	182	144	303	241	168	d162	131	7[illegible]	111
24	175	223	151	170	201	304	247	190	d162	124	14[illegible]	95
25	167	265	146	213	213	257	238	192	d164	91	14[illegible]	94
26	112	244	117	163	215	232	230	288	d150	62	13[illegible]	68
27	93	220	116	188	207	586	244	192	d177	122	14[illegible]	48
28	223	209	97	181	203	375	245	190	d206	145	14[illegible]	70
29	189	209	78	203	139	332	260	191	d175	155	8[illegible]	142
30	197	180	138	180	-	304	244	269	172	152	6[illegible]	113
31	170	-	142	172	-	529	-	232	-	124	14[illegible]	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,660	492	65	183	1.48	1.70
November	6,097	306	107	203	1.64	1.83
December	5,548	228	78	179	1.44	1.66
Calendar year 1947	71,403	3,680	65	196	1.58	21.40
January	5,969	394	130	193	1.56	1.79
February	6,844	576	127	236	1.90	2.05
March	7,566	586	113	244	1.97	2.27
April	11,147	1,380	230	372	3.00	3.34
May	7,194	521	168	232	1.87	2.16
June	5,173	222	138	172	1.39	1.55
July	4,486	243	62	145	1.17	1.35
August	4,227	343	65	136	1.10	1.27
September	3,280	178	48	109	.879	.98
Water year 1947-48	73,191	1,380	48	200	1.61	21.95

Peak discharge (base, 2,000 sec.-ft.).- No peak above base.
d Computed on basis of doubtful gage-height record.

Dan River near Wentworth, N. C.

Location.- Water-stage recorder, lat. 36°24'45", long. 79°49'45", at Settles Bridge, 3½ miles northwest of Wentworth, Rockingham County, and 7½ miles downstream from Mayo River.

Drainage area.- 1,050 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 22,400 second-feet Oct. 10 (gage height, 21.47 feet); minimum not determined (occurred during period of no gage-height record); minimum daily, 391 second-feet Sept. 26.

1939-48: Maximum discharge, 56,800 second-feet Sept. 18, 1945 (gage height, 27.78 feet), from rating curve extended above 16,500 second-feet on basis of slope-area determination at gage height 26.9 feet and runoff comparisons; minimum, 149 second-feet Sept. 11, 1944 (gage height, 1.32 feet); minimum daily, 182 second-feet Sept. 11, 1944.

Flood of 1908 reached a stage about 7 feet higher than that of Sept. 18, 1945, and flood of 1937 reached a stage of about 29.8 feet, from information by local residents.

Remarks.- Records fair. Slight diurnal fluctuation and regulation at low stage caused by power plants above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	d589	a720	990	a720	a720	1,020	12,000	1,120	1,390	1,220	a560	d539
2	d568	a700	d900	a820	968	1,120	5,180	1,060	1,160	900	d654	d522
3	a547	1,920	d945	a860	900	1,880	2,720	1,060	1,090	765	d766	d506
4	d547	1,830	d922	a780	a1,100	1,490	2,120	990	1,040	742	2,580	d482
5	a540	1,260	d968	a780	a1,300	1,290	1,880	1,090	1,040	a720	2,760	d506
6	a540	1,060	a880	a740	f2,930	1,160	1,700	1,090	990	a700	1,120	d494
7	a500	968	a840	742	3,210	2,100	4,130	1,550	2,270	a680	d855	d535
8	d518	1,140	a820	765	2,240	3,230	3,760	1,390	2,080	654	d720	1,010
9	7,380	1,340	a840	742	2,510	1,880	3,070	1,090	1,290	654	d720	968
10	19,200	990	a840	765	1,640	1,590	2,120	1,020	1,090	654	a640	765
11	4,680	1,290	a860	698	1,490	1,440	1,880	968	968	654	1,210	765
12	1,760	3,130	a860	698	2,020	1,340	1,880	990	922	676	900	654
13	1,340	1,640	a860	2,710	6,350	1,190	1,880	4,660	900	900	d742	d547
14	1,120	1,290	a820	4,170	8,050	1,120	1,650	2,060	1,220	945	d742	d451
15	1,020	2,880	a780	1,610	4,730	1,060	3,880	1,390	1,090	1,880	1,020	d506
16	d968	3,290	1,190	1,160	2,440	1,610	2,300	1,190	1,060	1,340	720	d518
17	d1,090	1,760	1,220	1,220	1,940	5,200	1,940	1,120	1,240	945	d589	d486
18	1,130	1,390	1,020	1,090	1,700	2,120	1,590	990	900	810	654	d451
19	1,380	3,950	968	855	1,490	1,590	1,490	945	1,310	765	698	d451
20	1,090	2,520	a860	788	1,390	1,490	1,440	922	1,060	810	632	d455
21	a940	1,640	a820	1,160	1,290	1,390	1,390	900	878	810	742	d413
22	a860	1,390	a840	1,290	1,290	1,290	1,340	855	810	855	654	d395
23	a800	1,340	a800	1,140	1,290	1,720	1,290	832	922	d720	632	d466
24	a740	1,540	a800	a940	1,160	2,650	1,260	855	1,660	a600	d531	d478
25	a720	1,540	a780	a640	1,240	1,820	1,220	968	1,090	a540	d589	d443
26	a720	1,390	a780	a840	1,290	1,540	1,220	4,190	900	a560	d568	d391
27	a660	1,260	a740	990	1,240	4,690	1,160	2,690	810	a540	d539	d428
28	a660	1,160	a720	990	1,190	4,510	1,140	1,340	1,460	d698	d514	d410
29	1,210	1,060	a720	a920	1,090	2,180	1,160	2,440	1,340	d676	d518	764
30	968	1,020	a660	a960	-	1,820	1,240	2,360	1,040	d654	d518	1,290
31	a760	-	a680	a940	-	2,320	-	1,940	-	d654	d568	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	55,545	19,200	500	1,793	1.71	1.97
November	48,408	3,950	700	1,614	1.54	1.71
December	26,723	1,220	660	862	.821	.95
Calendar year 1947	454,573	19,200	366	1,245	1.19	16.11
January	33,523	4,170	640	1,081	1.03	1.19
February	60,198	8,050	720	2,076	1.98	2.13
March	60,850	5,200	1,020	1,963	1.87	2.16
April	71,030	12,000	1,140	2,368	2.26	2.52
May	46,065	4,660	832	1,486	1.42	1.63
June	35,020	2,270	810	1,167	1.11	1.24
July	24,721	1,880	540	797	.759	.88
August	25,655	2,760	514	828	.789	.91
September	17,089	1,290	391	570	.543	.61
Water year 1947-48	504,827	19,200	391	1,379	1.31	17.90

Peak discharge (base, 12,000 sec.-ft.).- Oct. 10 (3 p.m.) 22,400 sec.-ft.; Apr. 1 (3 p.m.) 13,800 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for station at Leaksville.

d Doubtful gage-height record; discharge computed on basis of doubtful gage heights and records for station at Leaksville.

f Computed on basis of partly estimated gage-height record.

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. Datum of gage is 490.33 feet above mean sea level, datum of 1929.

Drainage area.- 1,150 square miles.

Records available.- July 1929 to September 1948.

Average discharge.- 19 years, 1,276 second-feet.

Extremes.- Maximum discharge during year, about 24,000 second-feet Oct. 10; maximum gage height, 20.90 feet Oct. 10 (backwater from Smith River); minimum discharge, 383 second-feet Sept. 22 (gage height, 1.12 feet).

1929-48: Maximum discharge, 54,200 second-feet Sept 18, 1945 (gage height, 28.27 feet); minimum, 84 second-feet Sept 12, 1932 (gage height, 0.25 foot); minimum daily, 114 second-feet Sept. 12, 1932.

Remarks.- Records fair. Slight diurnal fluctuation and regulation during periods of low flow caused by power plants above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	778	1,030	772	772	1,060	13,900	1,200	1,540	1,370	602	554
2	651	765	928	862	994	1,260	6,230	1,130	1,300	994	664	536
3	627	2,870	961	928	928	1,980	3,100	1,030	1,160	830	817	518
4	615	2,460	961	830	1,060	1,640	2,390	1,060	1,130	810	2,120	506
5	566	1,430	961	830	1,330	1,370	2,110	1,090	1,090	778	3,160	506
6	560	1,130	928	791	2,880	1,260	1,980	1,160	1,060	759	1,300	518
7	501	994	895	791	3,340	2,560	4,260	1,430	2,430	746	928	536
8	566	1,160	862	791	2,460	3,650	3,820	1,710	2,170	707	752	895
9	c6,000	1,370	895	778	2,740	2,110	3,340	1,230	1,400	676	739	961
10	d19,500	1,030	895	784	1,910	1,770	2,390	1,130	1,200	707	670	798
11	c6,600	1,410	928	752	1,640	1,570	2,050	1,090	1,090	695	1,060	765
12	2,320	3,260	928	752	2,100	1,430	2,050	1,060	994	727	994	682
13	1,710	1,840	928	2,570	6,200	1,300	1,980	4,220	994	895	765	572
14	1,330	1,370	862	4,450	10,500	1,230	1,910	2,550	1,330	891	746	489
15	1,200	2,750	830	1,840	5,770	1,160	3,820	1,500	1,200	2,220	994	489
16	1,090	3,580	1,200	1,300	2,740	1,930	2,530	1,260	1,160	1,570	830	542
17	1,300	1,980	1,300	1,260	2,180	4,800	2,050	1,160	1,370	1,060	658	524
18	1,300	1,430	1,060	1,130	1,910	2,320	1,770	1,060	1,030	862	664	489
19	1,670	3,370	994	928	1,710	1,710	1,600	994	1,370	791	714	460
20	1,230	2,810	928	830	1,540	1,600	1,540	961	1,200	830	645	460
21	1,030	1,770	895	1,200	1,400	1,570	1,470	928	961	895	733	432
22	928	1,500	895	1,370	1,400	1,430	1,400	895	895	862	682	388
23	862	1,400	862	1,200	1,430	2,220	1,370	862	994	791	664	438
24	791	1,640	862	1,030	1,260	3,100	1,330	928	1,640	658	560	483
25	765	1,640	830	701	1,300	2,180	1,260	994	1,230	578	590	477
26	772	1,500	830	895	1,370	1,710	1,260	4,940	994	608	602	426
27	701	1,330	791	994	1,330	4,760	1,200	2,810	1,570	584	566	438
28	689	1,200	778	1,030	1,260	5,220	1,200	1,570	1,420	627	524	432
29	1,160	1,090	778	961	1,160	2,460	1,200	2,600	1,500	752	524	d700
30	1,030	1,060	720	1,030	-	1,980	1,260	2,810	1,130	682	524	1,230
31	830	-	739	994	-	2,640	-	2,110	-	689	578	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	59,564	19,500	501	1,921	1.67	1.93
November	51,917	3,580	765	1,731	1.51	1.68
December	28,254	1,300	720	911	.792	.91
Calendar year 1947	473,018	19,500	372	1,296	1.13	15.30
January	35,374	4,450	701	1,141	.992	1.14
February	66,614	10,500	772	2,297	2.00	2.15
March	66,980	5,220	1,060	2,161	1.88	2.17
April	77,770	13,900	1,200	2,592	2.25	2.52
May	49,532	4,940	862	1,598	1.39	1.60
June	38,552	2,430	895	1,285	1.12	1.25
July	26,644	2,220	578	859	.747	.86
August	26,369	3,160	524	851	.740	.85
September	17,244	1,230	388	575	.500	.56
Water year 1947-48	544,814	19,500	388	1,489	1.29	17.62

Peak discharge (base, 14,000 sec.-ft.).- Oct. 10 (about 8 p.m.) about 24,000 sec.-ft.; Apr. 1 (12 m.) 14,600 sec.-ft.

c Backwater from Smith River; discharge computed on basis of records for station at Wentworth.

d Doubtful gage-height record; discharge computed on basis of records for station at Wentworth.

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. Datum of gage is 379.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,050 square miles.

Records available.- August 1934 to September 1948.

Average discharge.- 14 years, 2,391 second-feet.

Extremes.- Maximum discharge during year, 34,400 second-feet Oct. 11 (gage height, 13.96 feet); minimum, 58 second-feet Sept. 18 (gage height, 1.29 feet); minimum daily, 648 second-feet Oct. 5.

1934-48: Maximum discharge, 75,000 second-feet Aug. 15, 1940 (gage height, 20.96 feet); minimum, 40 second-feet Dec. 8, 1946 (gage height, 1.19 feet); minimum daily, 338 second-feet Sept. 12, 1944.

Remarks.- Records good except those for periods of doubtful gage-height record, which are poor. Flow regulated by cotton mills above station.

Revisions (water years).- W 972: 1936.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	966	1,580	1,870	1,280	1,240	2,110	20,300	d1,800	2,820	2,040	1,300	1,070
2	874	1,210	1,660	1,500	1,530	2,050	16,500	1,760	2,200	2,040	1,500	972
3	875	4,100	1,600	1,560	1,920	3,020	6,100	d1,700	1,960	1,500	1,700	848
4	898	5,860	1,590	1,380	1,830	3,130	4,020	d1,600	1,840	1,200	2,060	810
5	648	3,290	1,540	1,470	2,340	2,540	3,820	d1,600	1,720	1,410	5,020	764
6	839	2,210	1,680	1,430	3,400	2,220	3,360	d1,600	1,460	1,100	3,050	840
7	794	1,920	1,330	1,340	5,420	3,460	5,860	d1,900	2,380	1,160	d1,300	1,000
8	936	2,060	1,600	1,340	4,180	6,880	6,490	d2,200	4,680	1,170	d1,300	1,140
9	3,750	2,190	1,480	1,360	4,500	4,500	6,100	2,140	2,820	992	d1,200	1,620
10	26,500	2,270	1,540	1,280	3,640	3,300	4,320	d1,700	2,080	882	1,250	1,430
11	26,200	2,580	1,520	1,220	2,820	2,860	3,360	d1,600	1,820	1,030	1,540	1,230
12	4,480	5,380	1,580	1,260	3,120	2,620	3,590	d1,600	1,480	1,120	2,240	1,120
13	3,100	3,820	1,510	2,720	9,260	2,460	3,570	3,240	1,340	1,080	1,340	1,080
14	2,340	2,540	1,390	8,240	15,300	2,010	3,510	7,300	1,980	1,380	1,150	868
15	2,020	3,540	1,610	3,940	13,300	2,240	5,620	3,510	1,980	2,390	1,360	780
16	1,860	6,880	1,810	2,340	5,380	2,620	5,260	2,240	2,020	3,560	1,700	862
17	2,020	3,940	2,320	1,910	3,890	7,680	3,890	d1,800	2,310	1,640	1,250	903
18	2,520	2,620	1,850	1,880	3,490	5,140	3,000	d1,800	1,750	d1,500	1,010	680
19	2,680	3,260	1,630	1,920	3,040	3,190	d2,580	d1,600	1,520	d1,400	1,160	746
20	2,670	5,000	1,620	1,440	2,670	2,680	d2,400	d1,500	2,020	1,250	1,800	871
21	2,060	3,080	1,300	1,840	2,580	3,100	d2,300	d1,400	1,920	1,360	1,190	774
22	1,700	2,280	1,620	2,350	2,070	2,950	d2,200	d1,400	1,350	1,120	1,260	754
23	1,600	2,040	1,550	2,180	2,590	3,010	d2,000	d1,500	1,540	1,260	1,300	799
24	1,480	2,640	1,300	1,800	2,270	5,540	d1,900	d1,200	2,040	d1,000	1,120	869
25	1,490	2,680	1,380	1,300	2,190	4,680	d1,800	2,130	2,820	d950	947	790
26	1,040	2,500	1,420	1,400	2,360	3,500	d1,900	6,710	1,460	d1,000	1,040	740
27	1,490	2,140	1,420	1,760	2,320	6,030	d1,900	6,230	1,570	d960	1,070	842
28	1,400	2,040	1,410	1,840	2,150	10,500	d2,200	2,960	1,780	d940	814	878
29	1,540	1,740	1,420	1,900	1,980	4,980	d2,000	2,780	2,460	d1,100	922	1,490
30	2,210	1,650	1,300	1,740	-	3,600	d1,800	3,900	2,200	1,110	948	1,220
31	1,650	-	1,280	1,800	-	3,230	-	4,270	-	1,100	1,500	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	104,630	26,500	648	3,375	1.65	1.90
November	89,040	6,880	1,210	2,968	1.45	1.62
December	48,130	2,320	1,280	1,553	.758	.87
Calendar year 1947	810,258	26,900	440	2,220	1.08	14.70
January	60,720	8,240	1,220	1,959	.956	1.10
February	112,780	15,300	1,240	3,889	1.90	2.05
March	117,830	10,500	2,010	3,801	1.85	2.13
April	133,650	20,300	1,800	4,455	2.17	2.42
May	78,670	7,300	1,200	2,538	1.24	1.43
June	61,320	4,680	1,340	2,044	.997	1.11
July	41,744	3,560	882	1,347	.657	.76
August	46,341	5,020	814	1,495	.729	.84
September	28,790	1,620	680	960	.468	.52
Water year 1947-48	923,645	26,500	648	2,524	1.23	16.75

Peak discharge (base 22,000 sec.-ft.).- Oct. 11 (5 a.m.) 34,400 sec.-ft.; Apr. 1 (time unknown) 26,200 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for Dan River at South Boston and Smith River at Martinsville.

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, 1 mile downstream from Lawson Creek and 6 miles upstream from Banister River. Datum of gage is 299.23 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,730 square miles.

Records available.- August 1900 to May 1907, April 1923 to September 1948.

Average discharge.- 30 years (1900-1902, 1903-6, 1923-48), 2,928 second-feet.

Extremes.- Maximum discharge during year, 29,000 second-feet Oct. 12 (gage height, 25.0 feet); minimum, 683 second-feet Sept. 20 (gage height, 4.66 feet); minimum daily, 850 second-feet Sept. 19.

1900-1907, 1923-48: Maximum discharge, 81,000 second-feet Aug. 16, 1940 (gage height, 31.8 feet, from floodmark); minimum, 161 second-feet Sept. 20, 1932 (gage height, 3.11 feet); minimum daily, 208 second-feet Sept. 15, 1932.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Water supply for South Boston diverted just above station. Diurnal fluctuation at low flow caused by cotton mills at Danville.

Revisions (water years).- W 697: Drainage area. W 972: 1930, 1936-40, 1942. W 1002: 1942.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1-12

5.7	1,050	9.0	2,950
6.0	1,200	10.0	3,800
7.0	1,720	12.5	6,350
8.0	2,290		

Note.- Same as following table above 12.5 feet.

Oct. 13 to Sept. 30

5.0	830	9.0	3,070	20.0	16,800
5.5	1,060	11.0	4,850	22.0	21,000
6.0	1,310	14.0	8,000	24.0	26,000
7.0	1,830	17.0	11,800	25.0	29,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,560	a2,100	2,230	1,720	2,050	2,590	11,200	2,470	5,050	2,410	1,560	1,720
2	1,500	a1,700	2,290	1,830	1,720	2,720	22,200	2,350	3,470	2,530	1,720	1,410
3	1,300	a4,400	2,170	1,940	1,940	3,470	22,200	2,290	2,790	2,110	1,940	1,260
4	1,300	a8,000	2,110	2,000	2,350	4,450	7,450	2,230	2,530	1,780	2,230	1,140
5	1,450	6,350	2,050	1,830	2,530	3,630	5,050	2,170	2,350	1,610	4,750	1,110
6	1,160	3,720	2,050	1,830	3,470	3,000	4,450	2,230	2,290	1,780	5,550	1,010
7	1,100	2,720	2,170	1,830	6,050	4,550	5,950	2,590	2,050	1,510	2,790	1,140
8	1,180	3,000	1,780	1,720	7,670	8,360	9,560	3,150	4,650	1,510	1,780	1,260
9	1,400	3,390	2,000	1,720	7,230	9,320	8,120	3,000	4,550	1,510	1,780	1,460
10	11,600	3,070	1,940	1,720	6,460	5,750	6,460	2,290	2,860	1,360	1,720	1,830
11	22,200	4,170	2,000	1,660	4,750	4,550	5,150	2,170	2,410	1,310	1,560	1,720
12	27,500	9,680	2,000	1,610	4,260	3,810	4,450	2,050	2,110	1,410	2,000	a1,600
13	9,290	8,960	2,110	2,310	8,960	3,310	4,350	2,290	1,940	1,480	2,290	a1,500
14	3,720	5,250	2,000	7,780	19,000	3,150	4,170	6,490	2,590	1,610	1,610	a1,400
15	2,930	4,530	1,880	9,560	23,900	2,530	7,120	4,950	2,410	a2,300	1,460	a1,200
16	2,650	9,200	3,150	4,450	22,700	2,790	8,600	2,860	2,410	a5,200	1,660	a1,000
17	2,590	9,080	3,310	2,790	9,170	6,490	5,850	2,410	2,930	3,660	1,780	a1,100
18	3,390	5,050	3,070	2,590	5,750	9,080	4,080	2,470	2,650	2,170	1,410	a1,200
19	3,630	3,720	2,530	2,470	4,850	5,150	3,630	2,170	2,230	1,940	1,310	a850
20	3,470	6,350	2,230	2,290	4,080	3,630	3,230	2,050	2,110	1,880	1,720	920
21	a3,300	6,250	2,170	2,170	3,550	3,810	3,000	1,940	2,470	1,880	2,000	1,080
22	a2,300	3,900	1,940	2,860	3,470	4,450	2,930	1,880	2,000	2,050	1,660	1,040
23	a2,100	3,550	2,110	3,150	3,150	3,550	2,790	2,000	2,000	1,660	1,560	1,010
24	a2,000	3,550	2,000	2,720	3,310	5,250	2,650	1,660	2,590	1,720	1,560	1,010
25	a2,000	3,900	1,830	2,230	3,070	7,010	2,470	2,170	3,310	1,360	1,360	1,110
26	a1,400	3,630	1,880	1,720	3,070	5,150	2,530	4,350	2,930	1,260	1,210	1,110
27	a1,900	3,230	1,880	1,830	3,150	4,950	2,530	10,200	2,110	1,360	1,260	988
28	a1,900	2,790	1,880	2,230	2,930	11,400	3,070	5,750	2,350	1,310	1,260	1,080
29	a2,000	2,590	1,830	2,290	2,720	10,200	2,590	3,230	2,650	1,260	1,110	1,410
30	a3,000	2,350	1,830	2,350	-	5,550	2,470	4,750	2,930	1,510	1,140	3,480
31	a2,300	-	1,720	2,230	-	4,170	-	8,240	-	1,510	1,240	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	129,140	27,500	1,100	4,166	1.53	1.76
November	140,180	9,680	1,700	4,673	1.71	1.91
December	66,140	3,310	1,720	2,134	.782	.90
Calendar year 1947	1,090,692	30,600	732	2,988	1.09	14.86
January	81,430	9,560	1,610	2,627	.962	1.11
February	177,310	23,900	1,720	6,114	2.24	2.42
March	157,820	11,400	2,530	5,091	1.86	2.14
April	180,300	22,200	2,470	6,010	2.20	2.46
May	100,850	10,200	1,660	3,253	1.19	1.37
June	81,720	5,050	1,940	2,724	.998	1.11
July	57,930	5,200	1,260	1,869	.685	.79
August	57,980	5,550	1,110	1,870	.685	.79
September	39,148	3,480	850	1,305	.478	.53
Water year 1947-48	1,269,948	27,500	850	3,470	1.27	17.29

Peak discharge (base, 22,000 sec.-ft.).- Oct. 12 (11 a.m.) 29,000 sec.-ft.; Feb. 16 (1 to 4 a.m.) 24,400 sec.-ft.; Apr. 3 (4 to 5 a.m.) 25,200 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Dan River at Danville and Roanoke River at Clarksville.

Mayo River near Price, N. C.

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

Drainage area.- 260 square miles.

Records available.- July 1929 to September 1948.

Average discharge.- 19 years, 323 second-feet.

Extremes.- Maximum discharge during year, 20,800 second-feet Oct. 10 (gage height, 11.59 feet); minimum, 128 second-feet Feb. 1 (gage height, 1.14 feet); minimum daily, 133 second-feet Sept. 22, 26, 27.

1929-48: Maximum discharge, 30,000 second-feet Oct. 19, 1937 (gage height, 14.00 feet), from rating curve extended above 8,000 second-feet; minimum, 41 second-feet Sept. 19, 1932 (gage height, 0.52 foot); minimum daily, 44 second-feet Sept. 19, 1932.

Remarks.- Records good except those for periods of fragmentary or no gage-height record, which are poor. Some diurnal fluctuation at low flow caused by mills above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.0	103	3.0	1,060	5.5	3,810
1.3	162	3.5	1,420	6.0	4,690
1.6	265	4.0	1,850	7.0	6,750
2.0	462	4.5	2,400	8.0	9,100
2.5	748	5.0	3,050		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a150	211	253	204	218	278	2,360	319	362	a380	173	146
2	a150	204	241	249	319	382	970	305	338	a300	233	139
3	a150	755	245	214	314	408	676	305	296	a260	265	139
4	a150	539	237	204	278	357	562	296	296	a240	523	135
5	a150	352	233	200	338	319	506	343	300	a220	382	137
6	a150	296	233	194	484	305	478	300	310	a230	253	150
7	a150	265	225	194	506	699	728	462	f732	214	200	233
8	155	402	229	197	457	676	772	343	398	211	204	278
9	5,580	323	225	197	534	457	602	300	347	f200	200	237
10	8,410	274	222	197	393	398	506	287	296	a194	190	253
11	869	462	233	187	338	367	484	274	274	194	214	222
12	523	619	229	190	576	338	523	287	257	204	184	170
13	408	388	218	774	932	314	473	991	249	245	182	148
14	328	328	214	623	1,340	305	462	484	257	a240	187	155
15	291	636	214	343	834	296	700	372	309	a600	218	153
16	287	562	314	328	556	409	523	333	a600	a340	176	148
17	309	408	253	283	473	446	462	314	a340	a260	170	146
18	423	347	233	265	430	338	424	296	a300	a240	176	141
19	382	430	222	237	393	319	408	278	a700	229	170	137
20	314	367	218	287	362	328	398	261	a340	278	197	135
21	269	323	214	287	343	372	382	265	a260	257	179	135
22	253	300	211	287	347	333	367	253	a280	245	173	133
23	229	338	208	261	338	435	357	249	a500	211	162	150
24	218	377	204	208	319	495	352	257	a600	190	160	139
25	211	372	204	333	319	413	347	283	a320	182	157	135
26	208	333	208	352	323	372	333	490	a260	182	153	133
27	200	305	204	283	300	1,080	328	343	a360	184	139	133
28	269	283	200	274	300	807	323	296	a1,000	241	144	146
29	338	269	197	274	287	539	333	300	a750	204	144	408
30	249	265	194	249	-	457	343	593	a460	211	155	357
31	218	-	197	214	-	709	-	398	-	182	162	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	21,991	8,410	150	709	2.73	3.15
November	11,333	755	204	378	1.45	1.62
December	6,932	314	194	224	.862	.99
Calendar year 1947	116,470	8,410	112	319	1.23	16.66
January	8,589	774	187	277	1.07	1.23
February	12,951	1,340	218	447	1.72	1.85
March	13,751	1,080	278	444	1.71	1.97
April	16,482	2,360	323	549	2.11	2.36
May	10,877	991	249	351	1.35	1.56
June	12,091	1,000	249	403	1.55	1.73
July	7,618	600	182	246	.946	1.09
August	6,225	523	139	201	.773	.89
September	5,271	408	133	176	.677	.75
Water year 1947-48	134,111	8,410	133	366	1.41	19.19

Peak discharge (base, 3,000 sec.-ft.).- Oct. 10 (12:30 a.m.) 20,800 sec.-ft.; Apr. 1 (6 a.m.) 3,340 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for other stations in basin.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

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, 2 miles downstream from Horse Pasture Creek, and 4 miles southeast of Spencer, Henry County. Datum of gage is 730.94 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 108 square miles.

Records available.- October 1928 to September 1948.

Average discharge.- 18 years (1929-35, 1936-48), 121 second-feet.

Extremes.- Maximum discharge during year, 17,200 second-feet Oct. 9 (gage height, 15.80 feet), from rating curve extended above 7,200 second-feet by logarithmic plotting on basis of velocity-area study; minimum, 52 second-feet Oct. 5-7 (gage height, 1.50 feet).
1928-48: Maximum discharge, that of Oct. 9, 1947; minimum observed, 19 second-feet Sept. 2-5, 1930 (gage height, 2.12 feet, site and datum then in use).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 2-14, June 29, to Aug. 27)

Oct. 1-10

1.5	52	2.0	141	3.5	710	7.0	3,060
1.6	59	2.3	226	4.0	975	8.0	4,040
1.7	72	2.6	322	5.0	1,570	9.0	5,240
1.8	90	3.0	478	6.0	2,270	10.0	6,650

Oct. 11 to Sept. 30

1.5	53	2.2	201
1.6	62	2.6	325
1.7	77	3.0	478
1.9	120		

Note.- Same as preceding table above 3.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	70	85	72	a78	87	1,030	106	141	151	70	58
2	53	70	83	87	154	133	328	104	125	120	89	57
3	53	308	81	74	168	143	218	102	106	106	99	56
4	53	227	79	71	111	125	181	99	104	97	176	55
5	52	133	79	70	128	106	168	115	102	93	128	57
6	52	106	77	70	193	104	157	99	99	120	89	61
7	52	95	76	68	201	301	230	151	230	97	79	91
8	56	154	76	68	195	248	245	113	133	87	77	111
9	3,610	a120	74	68	218	157	187	104	123	87	74	70
10	6,160	a110	74	68	160	138	160	97	102	85	74	77
11	375	a150	79	65	138	120	157	93	91	85	93	76
12	210	a180	77	66	229	113	173	97	87	89	74	62
13	160	136	74	282	386	106	173	224	85	93	72	60
14	128	115	72	207	655	102	173	136	99	91	85	59
15	111	254	76	108	299	97	279	113	157	230	97	58
16	108	201	113	141	190	111	176	106	216	130	72	57
17	123	143	91	93	165	130	149	99	118	111	70	57
18	108	120	81	87	146	104	136	93	102	95	70	57
19	108	146	77	81	130	102	130	89	333	89	68	56
20	93	125	76	102	120	108	128	87	130	111	93	56
21	83	108	76	99	111	149	123	87	102	93	74	57
22	77	102	76	99	115	113	120	85	111	93	70	56
23	74	115	74	89	111	157	118	83	200	79	65	58
24	70	133	72	71	106	187	115	83	270	76	65	57
25	70	125	72	a80	106	143	113	95	130	76	64	56
26	70	108	71	a110	108	125	108	151	102	76	61	55
27	68	99	71	a98	102	520	108	115	157	77	59	54
28	85	93	71	a98	97	279	106	102	428	97	57	58
29	113	87	70	a94	93	176	111	99	314	81	57	182
30	81	87	68	a86	-	149	115	279	190	81	60	136
31	74	-	70	a82	-	262	-	149	-	72	65	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,584	6,160	52	406	3.76	4.34
November	4,020	308	70	134	1.24	1.38
December	2,391	113	68	77.1	.714	.82
Calendar year 1947	44,585	6,160	37	122	1.13	15.36
January	2,954	282	65	95.3	.882	1.02
February	5,013	655	78	173	1.60	1.73
March	4,895	520	87	158	1.46	1.68
April	5,715	1,030	106	190	1.76	1.96
May	3,555	279	83	115	1.06	1.22
June	4,687	428	85	156	1.44	1.61
July	3,068	230	72	99.0	.917	1.06
August	2,446	176	57	78.9	.731	.84
September	2,060	182	54	68.7	.636	.71
Water year 1947-48	53,388	6,160	52	146	1.35	18.37

Peak discharge (base, 1,400 sec.-ft.).- Oct. 9 (11:30 p.m.) 17,200 sec.-ft.; Apr. 1 (7:30 a.m.) 1,510 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Smith River near Philpott and Sandy River near Danville.

Smith River near Philpott, Va.

Location.- Water-stage recorder, lat. 36°48', long. 80°01', 1 mile upstream from bridge on State Highway 674, 1¼ miles west of Philpott, Henry County, and 6¾ miles upstream from Reed Creek. Datum of gage is 784.59 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 201 square miles.

Records available.- August 1946 to September 1948.

Extremes.- Maximum discharge during year, 7,600 second-feet Oct. 9 (gage height, 13.15 feet); minimum, 113 second-feet Oct. 6, 7 (gage height, 3.17 feet).

1946-48: Maximum discharge, that of Oct. 9, 1947; minimum, 92 second-feet Sept. 5, 6, 1947 (gage height, 3.04 feet).

Remarks.- Records good. Occasional diurnal fluctuation at low flow from work above station at Philpott dam site.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 17 to Jan. 12)

3.1	100	3.9	305	5.6	1,080
3.3	139	4.2	410	6.8	1,880
3.6	214	4.8	665	8.3	3,210

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	258	223	174	209	249	1,670	289	446	299	203	141
2	122	249	220	228	279	295	885	289	315	211	261	128
3	122	946	217	192	267	315	642	283	267	195	448	126
4	120	636	217	182	243	295	548	279	264	177	885	122
5	116	434	211	182	299	267	518	338	258	170	502	128
6	113	362	211	177	406	267	450	279	246	228	286	155
7	113	322	206	172	442	834	598	442	679	174	234	252
8	146	399	206	170	370	834	785	308	325	164	228	172
9	2,860	335	203	172	406	490	575	273	270	167	195	160
10	3,170	305	200	172	331	414	486	258	243	160	398	155
11	860	388	211	160	283	366	466	255	228	162	255	155
12	575	478	203	162	420	335	450	267	220	174	206	137
13	490	377	198	508	810	308	406	1,500	214	182	184	128
14	392	338	192	454	1,420	299	418	539	211	291	172	126
15	335	635	195	279	810	289	598	392	258	1,120	174	124
16	348	562	273	305	539	292	462	345	255	373	162	118
17	462	380	223	270	458	299	422	315	228	270	170	118
18	1,050	331	206	252	410	273	388	289	214	234	174	128
19	688	322	200	209	373	273	373	270	312	255	160	167
20	478	289	192	273	348	305	362	258	220	226	195	157
21	384	270	192	279	318	348	352	255	203	203	174	174
22	331	264	192	261	318	305	338	246	209	177	180	192
23	299	322	187	237	302	1,160	331	237	226	162	160	200
24	279	328	184	192	289	835	322	252	223	157	170	190
25	264	308	184	209	299	575	318	289	209	148	157	184
26	255	283	187	299	305	414	305	289	182	148	146	182
27	243	264	174	258	286	1,030	302	276	340	148	139	180
28	308	255	172	258	279	860	299	258	558	264	135	180
29	506	243	167	258	261	575	312	258	331	318	128	429
30	328	234	167	228	-	482	315	295	352	328	146	324
31	286	-	167	220	-	618	-	388	-	211	200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,169	3,170	113	522	2.60	3.00
November	11,117	946	234	371	1.85	2.06
December	6,180	273	167	199	.990	1.14
Calendar year 1947	101,173	3,170	93	277	1.38	18.73
January	7,392	508	160	238	1.18	1.36
February	11,780	1,420	209	406	2.02	2.18
March	14,501	1,160	249	468	2.33	2.89
April	14,696	1,670	299	490	2.44	2.72
May	10,511	1,500	237	339	1.69	1.95
June	8,506	679	182	284	1.41	1.57
July	7,496	1,120	148	242	1.20	1.38
August	7,227	885	128	233	1.16	1.34
September	5,132	429	118	171	.851	.95
Water year 1947-48	120,707	3,170	113	330	1.64	22.34

Peak discharge (base, 3,000 sec.-ft.).- Oct. 9 (9 p.m.) 7,600 sec.-ft.; May 13 (6 a.m.) 3,720 sec.-ft.; July 15 (1:30 a.m.) 4,360 sec.-ft.

Smith River at Bassett, Va.

Location.- Water-stage recorder, lat. 36°46'15", long. 80°00'00", at highway bridge at north edge of North Bassett, 1 mile northwest of Bassett, Henry County, and 2½ miles downstream from Town Creek. Datum of gage is 753.09 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 253 square miles.

Records available.- April 1939 to September 1948.

Extremes.- Maximum discharge during year, 8,560 second-feet Oct. 9 (gage height, 8.58 feet); minimum, 131 second-feet Sept. 5, 18 (gage height, 1.52 feet).

1939-48: Maximum discharge, 26,000 second-feet Aug. 14, 1940 (gage height, 18.28 feet); minimum, 58 second-feet Jan. 3, 1940 (gage height, 1.32 feet).

Maximum stage known, about 22.9 feet Oct. 19, 1937, from information by local residents (discharge, 38,200 second-feet, from rating curve extended above 24,000 second-feet on basis of backwater studies and records for station at Martinsville).

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

1.5	125	2.9	900
1.7	189	3.5	1,430
1.9	275	4.2	2,130
2.3	495	5.0	3,130
2.6	680	5.5	3,850

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	155	310	285	234	b290	290	a2,000	342	507	369	213	158
2	155	295	275	305	b320	358	1,070	336	358	247	310	146
3	152	1,380	275	247	*b310	380	750	325	300	225	466	140
4	149	799	275	229	408	352	628	374	300	209	946	137
5	143	537	275	229	477	315	573	402	300	193	573	140
6	140	435	270	221	519	310	543	325	285	257	320	175
7	140	380	266	217	531	1,090	715	543	806	201	257	295
8	169	495	261	213	453	980	908	369	380	189	266	197
9	3,210	408	261	217	501	603	628	315	315	189	213	179
10	3,700	364	257	213	391	513	567	300	275	189	426	172
11	1,050	471	275	201	347	447	543	290	261	189	290	179
12	667	615	261	209	486	408	525	300	252	197	234	155
13	573	441	252	686	989	374	483	1,530	247	213	209	146
14	465	391	243	*543	*1,810	358	489	603	243	313	189	140
15	396	792	252	352	*980	347	715	447	290	1,290	189	143
16	418	674	369	396	654	352	537	391	290	435	179	137
17	667	519	295	315	555	364	495	358	261	315	182	134
18	1,160	447	266	290	501	320	447	325	247	266	193	140
19	868	435	257	285	453	320	430	310	352	285	175	182
20	567	391	252	325	418	369	418	300	252	257	229	179
21	453	358	247	325	386	408	408	295	229	234	197	201
22	391	347	243	295	380	352	396	285	243	205	197	209
23	352	435	238	266	364	a1,300	380	275	266	189	179	217
24	325	435	234	b250	342	a960	380	285	261	182	182	209
25	305	402	229	b350	352	a700	369	352	234	172	179	205
26	295	369	229	b320	352	a460	352	347	209	172	162	201
27	275	347	225	b320	338	a1,300	352	325	354	172	155	201
28	356	325	225	b320	325	a900	347	300	625	305	152	209
29	660	310	221	b280	305	a610	369	315	391	322	146	463
30	391	300	221	b270	-	a540	369	369	419	369	143	411
31	342	-	221	b260	-	a1,000	-	435	-	243	245	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	19,089	3,700	140	616	2.43	2.80
November	14,207	1,380	295	474	1.87	2.09
December	7,955	369	221	257	1.02	1.18
Calendar year 1947	119,735	3,700	122	328	1.30	17.61
January	9,183	686	201	296	1.17	1.35
February	14,535	1,810	290	501	1.98	2.14
March	17,380	1,300	290	561	2.22	2.56
April	17,186	2,000	347	573	2.26	2.52
May	12,068	1,530	275	389	1.54	1.78
June	9,752	806	209	325	1.28	1.43
July	8,593	1,290	172	277	1.09	1.26
August	7,996	946	143	258	1.02	1.18
September	5,800	463	134	193	.763	.85
Water year 1947-48	143,744	3,700	134	393	1.55	21.14

Peak discharge (base, 4,500 sec.-ft.).- Oct. 9 (10:30 p.m.) 8,560 sec.-ft.; July 15 (1:30 a.m.) 4,900 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for stations near Philpott and at Martinsville.

b Stage-discharge relation affected by ice.

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 downstream from Grassy Creek. Datum of gage is 657.22 feet above mean-sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 374 square miles.

Records available.- August 1929 to September 1948.

Average discharge.- 19 years, 454 second-feet.

Extremes.- Maximum discharge during year, 14,400 second-feet Oct. 9 (gage height, 12.00 feet); minimum, 19 second-feet June 5, 6, July 9, 13 (gage height, 1.49 feet); minimum daily, 152 second-feet Oct. 5, Sept. 5.

1929-48: Maximum discharge, 39,000 second-feet Oct. 19, 1937 (gage height, 21.50 feet), from rating curve extended above 14,000 second-feet on basis of computations of flow over dam at gage heights 16.76 and 12.50 feet; minimum, 5 second-feet May 20, 1934 (gage height, 1.20 feet); minimum daily, 19 second-feet Oct. 6, 1935.

Remarks.- Records good. Flow regulated by power plant 1,000 feet above station.

Revisions (water years).- W 1032: 1933-35(M), 1936-39, 1940(P), 1941(P).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.9	116	3.0	790	5.0	2,860
2.0	152	3.5	1,240	6.0	4,280
2.3	292	4.0	1,720	7.5	6,600
2.6	468	4.5	2,240		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	194	342	368	322	238	362	3,200	432	632	631	244	200
2	192	346	366	380	372	482	1,330	410	529	422	396	190
3	200	1,760	362	373	337	554	993	395	434	267	436	176
4	204	1,110	362	296	388	478	801	405	396	290	1,120	184
5	152	774	352	332	402	429	716	440	400	266	932	152
6	203	586	353	293	678	388	667	454	360	271	478	234
7	184	512	344	302	790	1,140	928	584	907	346	346	420
8	187	596	342	288	636	1,420	1,100	539	576	252	356	298
9	5,450	630	337	288	757	822	858	402	525	248	314	214
10	6,260	436	330	297	612	681	718	412	390	250	310	276
11	1,410	622	390	258	456	580	667	372	343	218	600	272
12	962	878	446	290	584	516	670	370	348	290	316	201
13	659	649	328	966	1,380	445	600	1,650	315	276	308	195
14	608	543	324	950	2,480	430	604	792	324	284	254	190
15	522	947	314	540	1,360	422	985	581	374	1,570	262	194
16	508	960	527	404	910	460	714	516	412	632	252	179
17	916	697	412	422	760	458	625	459	404	490	244	176
16	1,180	582	376	382	683	423	566	431	369	323	274	175
19	1,090	572	354	266	587	399	537	390	438	388	246	230
20	756	514	333	338	542	441	514	364	402	497	352	216
21	580	454	312	474	456	586	515	360	326	326	279	258
22	466	433	354	390	499	486	490	380	323	293	252	252
23	428	534	318	374	477	1,300	467	323	390	250	256	260
24	416	586	312	268	437	1,330	448	364	353	236	228	254
25	316	542	322	217	447	952	434	440	390	219	248	242
26	312	488	320	386	460	631	450	486	264	218	208	244
27	414	446	322	400	434	1,810	434	487	322	190	216	221
28	382	420	286	330	428	1,280	418	411	695	386	192	243
29	682	398	296	310	396	898	422	392	656	320	181	518
30	540	392	310	351	-	722	460	582	546	538	199	732
31	449	-	287	267	-	1,490	-	569	-	390	324	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	26,822	6,260	152	865	2.31	2.66
November	18,749	1,760	342	625	1.67	1.86
December	10,759	527	286	347	.928	1.07
Calendar year 1947	164,856	6,260	80	452	1.21	16.38
January	11,754	966	217	379	1.01	1.16
February	18,986	2,480	238	655	1.75	1.89
March	22,815	1,810	362	736	1.97	2.27
April	22,331	3,200	418	744	1.99	2.22
May	15,192	1,650	323	490	1.31	1.51
June	13,143	907	264	438	1.17	1.30
July	11,577	1,570	190	373	.997	1.15
August	10,623	1,120	181	343	.917	1.06
September	7,596	732	152	253	.676	.75
Water year 1947-48	190,347	6,260	152	520	1.39	18.90

Peak discharge (base, 6,500 sec.-ft.).- Oct. 9 (8:30 p.m.) 14,400 sec.-ft.

Smith River at Spray, N. C.

Location.- Water-stage recorder, lat. 36°31'47", long. 79°46'08", 0.9 mile south of Virginia-North Carolina State line, 1 mile downstream from Stuart Creek, and 1 mile north of Spray, Rockingham County. Datum of gage is 539.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 538 square miles.

Records available.- October 1939 to September 1948.

Extremes.- Maximum discharge during year, 20,400 second-feet Oct. 10 (gage height, 13.18 feet); minimum, 96 second-feet Oct. 5 (gage height, 1.57 feet); minimum daily, 184 second-feet Oct. 5.

1939-48: Maximum discharge, 45,600 second-feet Aug. 15, 1940 (gage height, 19.28 feet), by computation of flow over dam; minimum, 63 second-feet Jan. 12, 1942 (gage height, 1.38 feet); minimum daily, 68 second-feet Sept. 10, 1944.

Remarks.- Records good except those for periods of ice effect or fragmentary or no gage-height record, which are poor. Diurnal fluctuation and some regulation caused by power plant at Martinsville, Va.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	a440	475	355	b300	521	6,360	559	774	882	348	335
2	226	a440	463	444	b480	682	2,170	534	708	597	370	266
3	223	a2,500	457	466	b420	895	1,420	526	592	406	500	253
4	210	a1,500	445	358	b480	758	1,120	512	561	371	1,040	217
5	184	a1,000	439	432	b550	644	1,000	578	500	362	1,260	222
6	226	a800	439	*371	896	557	936	588	508	400	634	f288
7	221	a650	421	368	1,080	1,340	1,290	756	1,380	413	452	f387
8	242	a750	421	359	920	2,250	1,460	745	938	343	402	464
9	4,110	a800	421	350	1,110	1,160	1,250	526	782	322	424	341
10	13,700	644	404	359	846	933	1,000	523	572	316	420	374
11	2,220	800	439	318	*656	810	928	452	508	301	767	354
12	1,210	1,340	554	368	940	737	944	446	478	378	426	289
13	914	882	426	1,220	1,970	597	864	1,950	462	395	362	294
14	714	717	400	1,760	3,480	600	832	1,170	494	366	358	256
15	624	1,210	402	802	2,800	628	1,290	760	504	1,500	324	266
16	570	1,460	616	528	1,290	817	1,040	632	627	856	352	251
17	1,070	968	562	552	1,040	993	872	572	624	640	310	243
18	1,270	768	484	490	935	698	776	523	506	421	f350	228
19	1,280	784	444	438	808	630	738	494	754	459	337	259
20	918	692	418	382	752	640	722	472	520	643	490	270
21	694	618	364	570	620	948	692	455	463	453	425	308
22	a600	575	436	514	672	760	653	459	448	408	329	312
23	a550	662	384	b460	681	1,480	627	416	533	345	362	328
24	a500	776	390	b340	603	1,870	629	474	570	320	312	324
25	a400	752	362	b280	608	1,380	570	574	622	274	316	290
26	a400	662	380	b500	634	952	589	922	484	315	311	316
27	a500	603	384	b500	657	2,350	571	760	443	286	281	322
28	a480	554	342	b440	582	2,040	564	574	679	317	283	308
29	a900	520	367	b400	532	1,250	554	610	1,010	446	226	497
30	a700	494	356	b440	-	1,000	610	1,190	686	510	297	896
31	a550	-	359	b340	-	1,690	-	824	-	468	331	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	36,653	13,700	184	1,182	2.20	2.53
November	25,361	2,500	440	845	1.57	1.75
December	13,254	616	342	428	.796	.92
Calendar year 1947	213,629	13,700	148	585	1.09	14.76
January	15,504	1,760	280	500	.929	1.07
February	27,342	3,480	300	943	1.75	1.89
March	32,610	2,350	521	1,052	1.96	2.25
April	33,071	6,360	554	1,102	2.05	2.29
May	20,576	1,950	416	664	1.23	1.42
June	18,730	1,380	443	624	1.16	1.29
July	14,513	1,500	274	468	.870	1.00
August	13,399	1,260	226	432	.803	.93
September	9,758	896	217	325	.604	.67
Water year 1947-48	260,771	13,700	184	712	1.32	18.01

Peak discharge (base, 8,000 sec.-ft.).- Oct. 10 (7 a.m.) 20,400 sec.-ft.; Apr. 1 (4 a.m.) 8,550 sec.-ft.

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for other stations in basin.
b Stage-discharge relation affected by ice.
f Fragmentary gage-height record; discharge computed on basis of partly estimated gage heights.

Sandy River near Danville, Va.

Location.- Water-stage recorder, lat. 36°37'10", long. 79°30'10", 200 feet downstream from Hickory Forest Creek, 400 feet upstream from bridge on road between Callahans Store and Mount Cross, 6 miles northwest of Danville, Pittsylvania County, and 6 miles upstream from mouth. Datum of gage is 460.38 feet above mean sea level, unadjusted.

Drainage area.- 113 square miles.

Records available.- November 1929 to September 1948.

Average discharge.- 18 years (1930-48), 104 second-feet.

Extremes.- Maximum discharge during year, 3,180 second-feet Apr. 1; maximum gage height, 5.84 feet Oct. 10; minimum discharge, 17 second-feet Aug. 29 (gage height, 1.07 feet); minimum daily, 37 second-feet Aug. 29.

1929-48: Maximum discharge, 23,000 second-feet Aug. 14, 1940 (gage height, 14.8 feet, from floodmarks), from rating curve extended above 3,600 second-feet by logarithmic plotting; minimum, 3 second-feet Sept. 29, 1930 (gage height, 0.40 foot, site and datum then in use); minimum daily, 8 second-feet Aug. 29, 31, Sept. 1, 2, 1932.

Remarks.- Records good. Diurnal fluctuation at low flow by small mill above station.

Revisions (water years).- W 972: 1930-41.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 14 to Feb. 9, Apr. 1 to May 26, June 21 to Aug. 8)

1.2	31	2.0	208	4.0	1,190
1.4	70	2.3	300	4.5	1,570
1.6	113	2.7	460	5.0	2,050
1.8	159	3.2	710	5.5	2,640

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	56	87	66	68	98	2,250	100	95	157	66	52
2	50	56	85	78	98	152	429	100	80	87	76	46
3	50	744	76	68	109	178	235	98	80	78	83	44
4	50	252	72	64	104	141	193	95	80	74	158	44
5	50	136	74	64	111	118	176	109	74	68	124	44
6	48	106	72	62	129	111	164	98	70	80	72	48
7	48	91	70	60	145	318	276	176	512	68	64	56
8	62	131	72	60	152	286	211	113	171	64	83	54
9	940	104	72	62	188	164	173	98	188	64	60	54
10	1,580	89	70	60	138	145	154	93	100	62	106	168
11	481	254	76	58	120	129	161	87	87	64	115	78
12	190	298	74	62	222	120	161	91	80	66	68	58
13	136	143	70	424	550	111	145	118	113	68	60	52
14	109	115	66	291	1,220	106	152	104	144	66	58	50
15	93	306	72	131	492	104	188	89	85	109	60	50
16	87	243	106	127	232	277	152	85	154	80	54	46
17	87	145	85	89	200	348	141	85	109	78	50	46
18	85	118	78	83	176	169	129	78	98	78	52	44
19	100	127	74	78	150	143	127	74	120	87	76	44
20	76	113	70	98	134	136	124	74	85	98	180	42
21	68	100	70	100	120	148	124	74	80	74	70	44
22	64	95	70	100	127	127	118	74	74	72	60	40
23	60	109	68	87	120	188	115	70	85	64	56	46
24	58	120	68	68	113	238	113	85	148	64	54	40
25	58	115	68	104	115	173	111	122	267	58	54	40
26	56	106	70	111	120	141	109	282	127	60	50	40
27	58	95	70	87	113	535	106	129	138	60	48	40
28	72	93	66	85	106	262	115	102	102	64	50	46
29	78	87	64	89	102	169	109	100	95	62	37	85
30	62	87	64	74	-	145	106	115	93	66	50	80
31	58	-	64	64	-	380	-	100	-	60	102	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,064	1,580	48	163	1.44	1.66
November	4,634	744	56	154	1.36	1.52
December	2,263	106	64	73.0	.646	.74
Calendar year 1947	38,910	1,640	19	107	.947	12.79
January	3,054	424	58	98.5	.872	1.01
February	5,774	1,220	68	199	1.76	1.90
March	5,860	535	98	189	1.67	1.92
April	6,867	2,250	106	229	2.03	2.26
May	3,218	282	70	104	.920	1.06
June	3,734	512	70	124	1.10	1.23
July	2,300	157	58	74.2	.657	.76
August	2,296	180	37	74.1	.656	.76
September	1,621	168	40	54.0	.478	.53
Water year 1947-48	46,685	2,250	37	128	1.13	15.35

Peak discharge (base, 1,500 sec.-ft.).- Oct. 10 (5 a.m.) 3,110 sec.-ft.; Feb. 14 (4:30 p.m.) 1,530 sec.-ft.; Apr. 1 (8 a.m.) 3,180 sec.-ft.

Banister River at Halifax, Va.

Location.- Water-stage recorder, lat. 36°45'30", long. 78°54'05", 1,000 feet downstream from Terrible Creek, 1 mile north of Halifax, Halifax County, and 10 miles upstream from mouth. Datum of gage is 318.54 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 552 square miles.

Records available.- December 1928 to September 1948. September 1904 to December 1905 (gage heights only) published as Banister River near Houston.

Average discharge.- 19 years (1929-48), 553 second-feet.

Extremes.- Maximum discharge during year, 6,100 second-feet Feb. 15, Apr. 2 (gage height, 19.0 feet); minimum, 17 second-feet Aug. 1 (gage height, 0.28 foot); minimum daily, 34 second-feet Sept. 26.

1928-48: Maximum discharge, 50,000 second-feet Sept. 20, 1944 (gage height, 40.8 feet, from floodmarks), from rating curve extended above 11,000 second-feet on basis of slope-area measurement at gage height 40.8 feet and velocity-area study; minimum, 6 second-feet on many days in August and September 1932; minimum daily, 6 second-feet Aug. 30, 1932.

Remarks.- Records good except those for period of no gage-height record, which are poor. Low and medium flow regulated by power plant half a mile above station.

Revisions (water years).- W 892: 1929-30, 1932-35. W 972: 1938(M), 1940.

Correction.- The maximum gage height for the water year 1943 has been corrected to 16.86 feet Dec. 31, from recorded range in stage (discharge, 4,750 second-feet), superseding figures published in Water-Supply Paper 972.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 4

2.5	148	5.0	639
3.0	214	7.0	1,190
3.5	298	10.0	2,110
4.0	401	14.4	3,610

Nov. 5 to Sept. 30

0.5	30	2.0	210	11.0	2,440
.7	44	2.5	290	13.0	3,100
1.0	73	3.0	380	15.0	3,850
1.2	96	5.0	790	17.0	4,800
1.5	135	9.0	1,860	19.0	6,100

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	204	170	436	434	278	566	3,610	574	992	380	233	290
2	160	252	427	440	360	664	5,680	528	440	346	292	200
3	201	1,710	425	439	576	1,060	3,120	546	510	337	616	203
4	162	3,570	496	413	670	1,020	1,220	526	468	320	960	190
5	170	2,170	362	360	524	854	1,150	369	461	268	1,040	146
6	150	1,060	448	400	786	556	863	644	392	320	934	155
7	183	580	380	370	750	1,140	1,860	708	592	284	435	226
8	177	891	408	302	928	1,940	2,230	1,220	1,140	320	303	237
9	264	1,120	516	371	937	1,250	1,190	786	1,010	306	92	188
10	424	780	366	355	998	1,030	1,020	489	638	238	84	343
11	632	908	456	356	956	1,000	814	468	308	314	92	a350
12	902	2,600	395	306	594	670	822	682	372	236	114	a320
13	510	1,780	468	812	1,520	648	774	708	420	280	275	a280
14	285	1,060	330	2,380	3,660	610	744	885	377	350	290	a250
15	330	1,120	534	1,550	5,750	554	1,090	432	384	934	254	a220
16	240	1,500	1,120	974	3,970	705	1,040	490	542	358	187	a180
17	346	1,250	647	645	1,920	1,940	990	448	536	196	272	a200
18	553	986	552	481	1,500	1,660	570	471	400	258	213	208
19	692	712	487	620	1,170	1,040	604	426	610	565	424	-139
20	704	714	476	417	1,060	556	466	419	1,090	846	377	188
21	349	638	462	828	860	752	552	334	478	180	250	150
22	297	621	429	700	849	806	542	343	473	512	106	206
23	228	695	426	724	746	733	712	409	845	276	239	154
24	234	768	425	632	859	852	358	352	1,280	267	254	147
25	231	955	400	194	686	1,020	630	696	932	222	196	256
26	188	578	380	396	756	742	416	1,540	630	248	201	34
27	196	475	384	515	729	1,100	411	1,940	570	202	243	219
26	332	526	428	551	708	1,970	1,140	1,120	567	474	186	188
29	701	474	350	468	596	1,220	1,060	714	540	200	56	521
30	383	476	364	512	-	986	692	672	457	423	433	1,660
31	276	-	373	478	-	769	-	1,140	-	266	40	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,704	902	150	345	0.625	0.72
November	31,139	3,570	170	1,038	1.88	2.10
December	14,150	1,120	330	456	.826	.95
Calendar year 1947	193,040	5,890	45	529	.958	13.01
January	18,423	2,370	194	594	1.08	1.24
February	35,696	5,750	278	1,231	2.23	2.40
March	30,413	1,970	554	981	1.78	2.05
April	36,370	5,680	358	1,212	2.20	2.46
May	21,079	1,940	334	680	1.23	1.42
June	18,454	1,280	308	615	1.11	1.24
July	10,726	934	180	346	.627	.72
August	9,696	1,040	40	313	.567	.65
September	8,048	1,660	34	268	.486	.54
Water year 1947-48	244,898	5,750	34	669	1.21	16.49

Peak discharge (base, 5,000 sec.-ft.).- Feb. 15 (4 p.m.) 6,100 sec.-ft.; Apr. 2 (4 a.m.) 6,100 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Dan River at Danville and at South Boston.

Hyco River near Omega, Va.

Location.- Water-stage recorder, lat. 36°38', long. 78°48', at highway bridge 1½ miles upstream from Hilly Creek, 2½ miles south of Omega, Halifax County, and 7 miles upstream from mouth. Datum of gage is 294.45 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 338 square miles.

Records available.- March 1934 to September 1948.

Average discharge.- 14 years, 407 second-feet.

Extremes.- Maximum discharge during year, 6,810 second-feet Feb. 15 (gage height, 22.08 feet); minimum, 6.4 second-feet Sept. 28 (gage height, 1.60 feet).

1984-48: Maximum discharge, 11,900 second-feet Sept. 20, 1945 (gage height, 28.4 feet), from rating curve extended above 6,800 second-feet by logarithmic plotting; minimum, 1.4 second-feet Oct. 25, 26, 1941 (gage height, 1.47 feet).

Remarks.- Records good except those for period of ice effect, which are poor.

Revisions (water years).- W 972: 1934-38, 1940.

Rating tables, water year 1947-48, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 8 to Apr. 7, Aug. 21, to Sept. 30)

Oct. 1 to Nov. 12

2.1	43	4.0	302
2.4	77	5.6	548
3.0	158		

Note.- Same as following table above 5.6 feet.

Nov. 13 to Sept. 30

1.5	4.0	2.1	41	6.0	620	16.0	3,220
1.6	7.5	2.5	81	8.0	1,010	18.0	4,030
1.7	13	3.0	142	10.0	1,470	20.0	5,200
1.9	26	4.0	280	13.0	2,280	22.0	6,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	100	222	134	b210	311	1,160	168	2,620	88	40	26
2	91	89	201	145	b210	507	1,670	148	3,030	76	139	19
3	76	1,710	188	147	b220	1,050	1,370	134	1,830	66	194	20
4	66	2,160	181	133	b250	*810	810	121	303	54	174	20
5	60	1,620	174	124	b300	548	462	134	236	47	584	18
6	54	674	168	*121	b500	420	356	137	194	48	356	18
7	51	310	162	115	b800	1,400	1,310	143	392	48	146	17
8	45	647	154	111	1,420	2,020	1,010	181	368	34	104	17
9	123	950	152	110	1,830	1,800	674	141	181	31	81	18
10	930	770	147	110	1,600	2,110	445	107	136	32	68	20
11	1,720	1,290	159	104	1,080	1,420	352	95	115	29	61	22
12	1,470	2,900	181	97	1,250	930	352	97	103	27	58	20
13	528	2,740	168	747	2,400	602	327	178	106	27	95	20
14	302	2,470	151	1,830	3,890	479	280	229	232	84	91	18
15	221	2,500	181	1,520	6,320	402	770	167	394	972	60	19
16	183	1,880	870	1,450	6,530	377	890	122	311	1,120	46	16
17	291	1,520	1,010	542	5,340	420	566	98	420	1,160	45	14
18	950	1,450	790	343	3,010	394	352	133	208	201	41	16
19	890	770	356	265	830	335	280	95	139	107	39	15
20	674	930	295	222	620	303	250	76	109	79	152	13
21	302	1,100	243	394	496	295	229	70	88	78	89	11
22	242	930	222	620	479	496	236	68	86	107	77	9.7
23	169	750	201	548	548	428	201	61	100	101	110	8.6
24	137	970	181	343	548	602	174	55	236	93	69	8.6
25	117	830	168	222	530	479	167	121	188	77	51	11
26	106	566	165	222	530	360	152	430	127	61	40	8.6
27	96	402	164	243	496	368	145	730	91	46	39	7.2
28	100	319	159	b220	420	513	602	288	91	43	32	7.5
29	193	265	150	b220	368	445	311	428	215	43	29	15
30	172	236	138	b220	-	327	208	994	147	46	27	273
31	123	-	134	b210	-	295	-	2,250	-	43	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,598	1,720	45	342	1.01	1.16
November	33,848	2,900	89	1,128	3.34	3.73
December	7,835	1,010	134	253	.749	.86
Calendar year 1947	130,145.0	4,190	4.0	357	1.06	14.32
January	11,832	1,830	97	382	1.13	1.30
February	43,025	6,530	210	1,484	4.39	4.74
March	21,246	2,110	295	685	2.03	2.34
April	16,111	1,670	145	537	1.59	1.77
May	8,190	2,250	55	264	.781	.90
June	12,796	3,030	86	427	1.26	1.41
July	5,068	1,160	27	163	.482	.56
August	3,166	584	27	102	.302	.35
September	726.2	273	7.2	24.2	.072	.08
Water year 1947-48	174,450.2	6,530	7.2	477	1.41	19.20

Peak discharge (base, 3,100 sec.-ft.).- Feb. 15 (9 to 10 a.m.) 6,810 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Tar River near Tar River, N. C.

Location.- Water-stage recorder and concrete control, lat. 36°12', long. 78°34', at bridge on State Highway 96, 1¼ miles upstream from Fishing Creek, 2½ miles east of town of Tar River, Granville County, and 8 miles south of Oxford.

Drainage area.- 161 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 6,840 second-feet Oct. 10 (gage height, 13.21 feet); minimum, 3.5 second-feet Sept. 27, 28 (gage height, 0.92 foot).
1939-48: Maximum discharge, 10,600 second-feet Sept. 18, 1945 (gage height, 16.51 feet); minimum, 0.2 second-foot Nov. 9-22, 1941.

Remarks.- Records good. City of Oxford diverts about 0.5 second-foot for water supply.

Revisions (water years).- W 972: 1940-41. Revised figures of discharge, in second-feet for the calendar year 1941, superseding those published in Water-Supply Paper 952, are given herewith.

	Second-foot days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
Calendar year 1941......	21,939.8	1,140	0.2	60.1	0.373	5.07

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	51	91	56	77	122	1,360	69	614	107	15	24
2	14	42	87	74	131	302	1,570	63	193	51	148	15
3	13	1,230	84	71	122	623	365	59	124	26	154	12
4	11	1,040	79	59	124	342	226	53	81	18	67	10
5	10	223	78	53	278	233	180	60	62	15	332	8.8
6	9.1	137	79	50	738	174	157	60	51	20	119	8.5
7	8.8	99	75	47	796	1,190	672	93	49	27	59	12
8	8.5	662	71	44	654	1,410	426	140	79	16	38	28
9	8.5	601	71	43	867	403	250	79	53	12	42	56
10	4,210	197	66	45	412	1,360	174	57	42	10	33	20
11	1,140	694	71	44	330	615	154	49	38	9.4	26	12
12	154	2,120	86	41	697	339	167	45	33	8.5	23	10
13	87	637	79	940	1,720	240	140	48	30	7.9	22	8.8
14	72	240	69	2,110	4,250	197	160	52	40	16	42	7.6
15	57	674	66	381	3,580	177	1,660	49	39	1,680	32	6.9
16	52	1,120	398	200	709	167	578	45	32	565	23	5.4
17	92	357	254	167	510	210	254	40	30	112	18	4.9
18	287	216	147	150	426	180	177	35	28	64	15	5.2
19	117	864	110	117	294	147	140	32	26	43	24	5.2
20	87	555	96	102	237	147	122	30	23	32	103	4.6
21	63	271	87	254	206	150	110	28	20	95	50	3.8
22	48	193	83	345	327	127	119	26	20	382	84	4.4
23	40	321	75	213	348	213	114	24	28	102	41	4.2
24	36	327	71	147	240	378	96	23	21	93	24	4.1
25	30	298	66	105	213	193	86	34	14	51	17	4.1
26	28	193	68	96	213	140	76	47	13	36	14	3.8
27	26	150	68	92	193	134	71	64	12	26	12	3.5
28	95	122	68	107	167	190	75	63	12	22	11	4.6
29	314	105	63	117	147	150	94	51	114	24	9.8	7.7
30	119	96	58	131	-	112	82	106	61	22	440	850
31	69	-	56	134	-	103	-	859	-	18	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October..........................	7,321.9	4,210	8.5	236	1.47	1.69
November..........................	13,835	2,120	42	461	2.86	3.20
December..........................	2,920	398	56	94.2	.585	.68
Calendar year 1947	53,614.0	4,210	3.3	147	913	12.42
January..........................	6,535	2,110	41	211	1.31	1.51
February..........................	19,006	4,250	77	655	4.07	4.39
March..........................	10,468	1,410	103	338	2.10	2.42
April..........................	9,855	1,660	71	328	2.04	2.28
May..........................	2,483	859	23	80.1	.498	.57
June..........................	1,982	614	12	66.1	.411	.46
July..........................	3,710.8	1,680	7.9	120	.745	.86
August..........................	2,084.8	440	9.8	67.3	.418	.48
September..........................	1,155.1	850	3.5	38.5	.239	.27
Water year 1947-48	81,356.6	4,250	3.5	222	1.38	18.81

Peak discharge (base, 2,000 sec.-ft.).- Oct. 10 (3 p.m.) 6,840 sec.-ft.; Nov. 3 (9:30 p.m.) 2,050 sec.-ft.; Nov. 12 (9:30 a.m.) 6,040 sec.-ft.; Jan. 14 (4 a.m.) 3,070 sec.-ft.; Feb. 14 (11 p.m.) 6,440 sec.-ft.; Mar. 8 (12:30 a.m.) 2,460 sec.-ft.; Apr. 1 (11:30 p.m.) 2,930 sec.-ft.; Apr. 15 (1:30 p.m.) 2,050 sec.-ft.; July 15 (6 p.m.) 2,280 sec.-ft.

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. Datum of gage is 110.96 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 701 square miles.

Records available.- October 1928 to September 1948.

Average discharge.- 20 years, 767 second-feet.

Extremes.- Maximum discharge during year, 8,520 second-feet Feb. 18 (gage height, 15.17 feet); minimum, 67 second-feet Sept. 23 (gage height, 2.11 feet); minimum daily, 89 second-feet Sept. 26.

1928-48: 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 period of no gage-height record, which are poor. Considerable diurnal fluctuation and some regulation at low flow caused by small mills above station.

Revisions.- W 822: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 19 to May 30, June 4 to July 15, Sept. 12-30)

2.2	91	5.0	1,200	11.0	4,820
2.4	142	6.0	1,690	12.0	5,630
2.7	239	7.0	2,190	13.0	6,480
3.0	344	8.0	2,720	14.0	7,350
3.5	542	9.0	3,350	15.0	8,300
4.0	752	10.0	4,050		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	290	397	668	440	815	796	752	460	2,040	617	208	501
2	259	315	626	508	542	921	1,530	416	1,830	668	190	232
3	239	510	605	529	a700	1,630	2,530	390	896	420	908	163
4	225	1,320	584	492	a700	2,090	2,480	367	563	249	908	151
5	208	2,340	563	460	a750	1,460	998	374	452	202	2,190	129
6	202	1,470	563	428	a1,500	1,060	796	440	374	179	1,290	137
7	212	626	542	409	2,560	1,360	798	448	363	172	796	132
8	205	529	529	405	2,960	2,290	1,260	405	440	148	428	222
9	232	775	521	393	2,900	3,070	1,510	472	538	142	337	232
10	319	1,630	513	397	2,660	3,840	930	412	428	132	348	292
11	1,000	1,350	525	382	2,190	2,840	752	355	326	121	287	526
12	2,440	2,560	525	371	1,990	3,080	731	330	287	111	246	488
13	2,350	3,140	513	514	2,840	1,950	731	352	259	106	246	239
14	510	3,840	492	1,620	5,070	1,240	689	420	256	124	236	182
15	397	3,640	508	2,720	6,310	1,090	942	416	304	190	202	154
16	460	1,860	774	3,490	6,900	998	2,050	352	371	1,960	195	139
17	513	2,440	1,060	1,830	7,710	952	2,780	322	312	2,660	185	134
18	584	1,970	1,040	952	8,410	952	1,490	319	273	1,470	169	132
19	647	1,700	731	840	6,390	885	774	312	253	456	166	104
20	647	2,290	626	710	1,640	796	647	280	222	344	253	106
21	529	2,500	563	1,110	1,290	796	605	266	208	284	548	96
22	401	1,490	542	1,340	1,390	818	584	253	202	280	397	104
23	330	2,000	517	1,390	1,490	862	563	232	256	492	337	96
24	301	1,990	496	1,090	1,440	975	534	229	219	504	386	96
25	284	1,890	488	796	1,200	1,240	496	222	273	367	344	94
26	263	1,490	508	647	1,090	998	460	270	205	290	225	89
27	263	1,130	529	668	1,040	818	432	330	166	229	188	91
28	284	908	513	774	975	862	416	344	327	198	166	98
29	416	774	492	774	885	818	488	472	979	205	151	154
30	703	710	456	774	-	752	500	921	409	284	148	465
31	584	-	440	796	-	668	-	2,130	-	266	579	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,297	2,440	202	526	0.750	0.86
November	49,584	3,840	315	1,653	2.36	2.63
December	18,052	1,060	440	582	.830	.96
Calendar year 1947	235,612	3,840	91	646	.922	12.49
January	28,049	3,490	371	905	1.29	1.49
February	76,337	8,410	542	2,632	3.75	4.05
March	42,907	3,840	668	1,384	1.97	2.28
April	30,246	2,780	416	1,008	1.44	1.60
May	13,311	2,130	222	429	.612	.71
June	14,031	2,040	166	468	.668	.74
July	13,870	2,660	106	447	.638	.74
August	13,257	2,190	148	428	.611	.70
September	5,778	526	89	193	.275	.31
Water year 1947-48	321,719	8,410	89	879	1.25	17.07

Peak discharge (base, 4,000 sec.-ft.).- Nov. 15 (7 a.m.) 4,200 sec.-ft.; Feb. 18 (12 m.) 8,520 sec.-ft.; Mar. 10 (10 a.m.) 4,200 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Tarboro and records for other nearby stations.

Tar River at Tarboro, N. C.

Location.- Water-stage recorder, lat. 35°53'40", long. 77°32'00", at bridge on U. S. Highway 64 in Tarboro, Edgecombe County, and 6½ miles downstream from Fishing Creek. Datum of gage is 10.37 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,100 square miles.

Records available.- July 1896 to December 1900, October 1931 to September 1948. Gage-height records at different datum collected at same site since 1905 are contained in reports of U. S. Weather Bureau.

Average discharge.- 21 years, 2,304 second-feet.

Extremes.- Maximum discharge during year, 19,800 second-feet Feb. 18; maximum gage height, 25.36 feet Feb. 19; minimum discharge, 178 second-feet Sept. 27 (gage height, 1.47 feet).

1896-1900, 1931-48: Maximum discharge, 37,200 second-feet Aug. 20, 1940 (gage height, 31.77 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, 52,800 second-feet, from rating curve extended above 38,000 second-feet).

Remarks.- Records good except those for periods of doubtful gage-height record and those computed from graph based on once daily gage readings, which are fair. Discharge for days of considerable change in stage computed using rate of change of stage as a factor. Some diurnal fluctuation at low flow caused by mills above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 22 to May 30, Sept. 14-30)

1.6	225	4.0	1,060	14.0	6,650
1.9	302	5.0	1,460	16.0	8,050
2.2	391	6.0	1,900	18.0	9,750
2.6	525	8.0	2,920	20.0	11,800
3.0	670	10.0	4,080	22.0	14,400
3.5	862	12.0	5,320	24.0	17,300

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	g1,630	g1,260	3,140	1,680	2,980	3,480	2,480	1,720	d3,820	g1,500	525	520
2	g1,300	g940	2,700	1,720	2,540	3,250	2,590	1,500	d4,320	d1,340	456	784
3	g1,060	g960	2,430	1,810	2,330	4,020	3,410	1,380	d4,260	g1,380	508	490
4	g862	1,530	2,230	1,860	2,640	4,930	4,260	1,300	d2,870	g1,140	1,030	394
5	g727	2,900	2,080	1,810	3,360	5,780	4,440	1,220	d2,080	g901	1,920	330
6	g652	3,900	1,990	1,630	4,830	5,850	2,900	1,140	d1,580	g746	3,350	305
7	g560	3,070	1,990	1,580	6,410	5,320	2,480	1,220	d1,260	g633	3,540	288
8	g525	2,130	1,900	1,500	7,330	5,450	2,540	1,300	d1,100	525	2,850	299
9	g560	1,860	1,860	1,420	8,530	6,180	2,920	1,180	d1,100	490	1,740	280
10	g652	1,900	1,760	1,380	9,210	7,700	3,360	1,100	d1,300	423	1,260	376
11	g940	2,810	1,720	1,340	8,940	9,290	2,700	1,060	d1,180	410	1,020	394
12	g1,180	4,670	1,760	1,340	8,530	10,000	2,330	940	d1,000	366	862	560
13	g2,600	6,140	1,720	1,380	8,610	10,400	2,230	882	d882	324	652	304
14	g2,780	6,790	1,720	2,660	10,500	9,850	2,180	882	d804	283	578	542
15	g1,470	7,690	g1,680	4,370	13,500	7,790	2,230	1,020	d746	391	542	423
16	g980	8,530	1,810	5,390	17,100	6,120	2,480	1,140	d727	727	508	363
17	g1,260	8,530	2,540	6,180	18,100	4,700	2,820	1,000	d784	2,140	473	283
18	g2,130	7,830	3,250	6,180	19,300	4,080	4,560	980	d708	3,200	456	283
19	g2,280	7,330	3,360	4,700	19,400	3,600	4,200	882	d614	2,420	420	262
20	g1,900	6,650	2,810	3,960	19,300	3,250	2,640	d842	d614	1,500	525	257
21	g1,460	6,450	2,480	3,960	16,000	3,200	2,180	d746	560	1,220	614	249
22	g1,220	6,580	2,280	4,680	12,600	3,300	1,940	d670	525	960	842	239
23	g1,060	6,520	2,040	5,190	9,520	3,420	1,760	d596	473	823	862	209
24	g1,020	7,060	1,900	5,580	7,560	3,540	1,680	d542	490	901	823	225
25	g920	7,620	1,760	5,260	6,450	3,720	1,580	d578	490	1,060	940	220
26	g862	7,760	1,760	4,380	5,320	3,780	1,540	d525	525	1,000	940	237
27	g765	7,400	1,900	3,300	4,930	3,540	1,460	d614	633	862	708	189
28	g670	6,190	1,900	3,030	4,380	3,300	1,380	d823	980	670	578	230
29	g708	4,820	1,940	3,140	3,960	3,200	1,540	d1,000	1,380	578	525	247
30	g842	3,650	1,860	3,140	-	3,030	1,680	d1,260	1,860	490	366	490
31	g1,180	-	1,720	3,140	-	2,760	-	d2,100	-	525	440	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	36,755	2,780	525	1,186	0.565	0.65
November	151,470	8,530	940	5,049	2.40	2.68
December	65,990	3,360	1,680	2,129	1.01	1.17
Calendar year 1947	704,270	8,530	297	1,930	.919	12.48
January	98,690	6,180	1,340	3,184	1.52	1.75
February	264,160	19,400	2,330	9,109	4.34	4.68
March	157,830	10,400	2,760	5,091	2.42	2.80
April	77,490	4,560	1,380	2,583	1.23	1.37
May	32,142	2,100	525	1,037	.494	.57
June	39,665	4,320	473	1,322	.630	.70
July	29,928	3,200	283	965	.460	.52
August	30,853	3,540	366	995	.474	.55
September	10,772	804	189	359	.171	.19
Water year 1947-48	995,745	19,400	189	2,721	1.30	17.63

Peak discharge (base, 8,000 sec.-ft.).- Nov. 16 (6 p.m.) 8,860 sec.-ft.; Feb. 18 (12 m. 19,800 sec.-ft.; Mar. 13 (7 a.m.) 10,400 sec.-ft.

d Doubtful gage-height record; discharge computed from graph based on doubtful gage heights and daily gage readings by U. S. Weather Bureau.

g Computed from graph based on once-daily gage readings by U. S. Weather Bureau.

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. Datum of gage is 76.25 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 462 square miles.

Records available.- October 1923 to September 1948 in reports of Geological Survey. October 1918 to December 1936 (annual discharge summaries) in Bulletin 39 of North Carolina Department of Conservation and Development. Gage-height records collected at same site since July 1910 are contained in reports of U. S. Weather Bureau.

Average discharge.- 30 years (1918-48), 518 second-feet.

Extremes.- Maximum discharge during year, 5,810 second-feet Feb. 17 (gage height, 14.95 feet; minimum, 63 second-feet Sept. 27 (gage height, 0.69 foot).

1923-48: Maximum discharge, 12,600 second-feet Dec. 2, 1934, Aug. 18, 1940; maximum gage height, 17.72 feet Aug. 18, 1940; minimum discharge, about 10 second-feet Oct. 19, 1933.

Maximum stage known, 21.0 feet Apr. 19, 1910. Flood of July 24, 1919, reached a stage of 19.6 feet (discharge, 20,300 second-feet).

Remarks.- Records are fair. Discharge for days of considerable change of stage computed by using rate of change of stage as a factor. Slight diurnal fluctuation and some regulation at low flow caused by mills above station.

Revisions (water years).- W 872: 1935(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	202	226	469	359	488	605	517	441	955	470	119	122
2	184	202	455	399	455	660	857	385	677	372	121	128
3	166	548	441	469	587	1,490	915	346	427	288	363	115
4	156	1,140	427	413	623	1,580	659	320	320	196	501	107
5	150	782	413	359	839	1,080	533	320	274	156	1,120	94
6	144	470	427	346	1,500	785	485	455	244	139	1,180	88
7	139	346	427	333	1,960	995	517	441	226	134	630	85
8	139	307	399	320	1,880	1,820	785	385	380	128	288	93
9	150	630	399	314	1,880	1,740	749	346	427	124	202	86
10	178	569	385	320	1,660	2,110	587	300	333	113	166	94
11	232	648	385	314	1,270	2,480	485	268	250	102	161	142
12	220	2,620	399	294	1,240	2,230	517	256	208	95	150	232
13	208	3,190	385	414	2,270	1,390	533	274	184	92	139	178
14	178	2,730	372	1,660	3,190	975	469	427	172	85	128	128
15	191	1,510	372	1,990	4,600	821	667	413	178	128	128	106
16	1,350	1,310	838	1,560	5,440	749	1,250	359	190	584	125	95
17	1,020	1,200	895	876	5,620	731	1,400	294	184	641	120	91
18	546	857	695	749	4,450	695	879	250	166	517	114	86
19	385	731	533	731	2,100	623	569	232	156	413	108	81
20	469	875	469	569	1,150	605	485	214	144	220	108	81
21	359	875	427	1,310	935	895	441	185	139	166	151	76
22	274	695	413	1,850	995	785	469	103	139	166	288	70
23	232	1,080	385	1,290	1,220	695	501	134	134	190	400	72
24	208	1,660	385	935	1,080	803	441	156	134	292	495	71
25	190	1,500	372	659	875	839	399	156	248	385	288	68
26	184	1,080	385	485	803	695	372	161	281	202	232	65
27	184	767	413	517	767	605	365	190	184	144	166	67
28	184	605	427	587	713	677	569	232	422	125	134	69
29	300	533	413	623	659	605	767	359	485	120	121	72
30	320	501	385	623	-	517	605	346	294	122	115	108
31	262	-	359	623	-	485	-	1,010	-	119	114	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,104	1,350	139	294	0.636	0.73
November	30,187	3,190	202	1,006	2.18	2.43
December	13,949	895	359	450	.974	1.12
Calendar year 1947	168,579	3,190	97	462	1.00	13.56
January	22,291	1,990	294	719	1.56	1.79
February	51,249	5,620	455	1,767	3.82	4.13
March	31,765	2,480	485	1,025	2.22	2.56
April	18,787	1,400	365	626	1.35	1.51
May	9,758	1,010	103	315	.682	.79
June	8,555	955	134	285	.617	.69
July	7,028	641	85	227	.491	.57
August	8,475	1,180	108	273	.591	.68
September	2,970	232	65	99.0	.214	.24
Water year 1947-48	214,118	5,620	65	585	1.27	17.24

Peak discharge (base, 2,400 sec.-ft.).- Nov. 13 (11:30 p.m.) 3,350 sec.-ft.; Feb. 17 (11 a.m.) 5,810 sec.-ft.; Mar. 11 (6 a.m.) 2,530 sec.-ft.

Eno River at Hillsboro, N. C.

Location.- Water-stage recorder with sharp-crested rectangular weir and masonry control, lat. 36°04'20", long. 79°06'30", 1,000 feet downstream from bridge on State Highway 86 (highway renumbered) at Hillsboro, Orange County, and 2 miles downstream from Sevenmile Creek.

Drainage area.- 66.5 square miles.

Records available.- November 1927 to September 1948.

Average discharge.- 18 years (1930-48), 66.5 second-feet.

Extremes.- Maximum discharge during year, 2,110 second-feet Feb. 14 (gage height, 12.65 feet); minimum, 3.6 second-feet Sept. 27-28 (gage height, 1.15 feet).
1927-48: Maximum discharge, 11,000 second-feet Sept. 18, 1945 (gage height, 20.01 feet); minimum daily, 0.3 second-foot Oct. 20-27, 1941.

Remarks.- Records good except those for period of no gage-height record, which are poor. Diversion of about 0.25 second-foot for Hillsboro water supply is partly returned above station as sewage.

Revisions (water years).- W 1032: 1931(M), 1939(M), 1944(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.2	4.7	2.0	37	4.0	312
1.3	7.5	2.3	59	5.0	482
1.4	11	2.6	89	6.0	655
1.6	18	3.0	144	8.0	1,030
1.8	27	3.5	227	10.0	1,430

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	15	39	30	60	55	785	39	135	38	21	8.1
2	11	15	38	35	56	113	286	36	71	24	93	7.5
3	10	105	36	32	52	164	136	35	53	18	82	6.9
4	9.7	61	36	29	57	97	101	33	45	16	297	6.9
5	9.4	34	35	28	182	75	88	36	39	15	207	6.9
6	9.0	27	35	28	557	65	80	33	36	14	49	7.2
7	8.4	22	34	27	301	642	249	72	38	12	31	8.1
8	8.7	142	34	26	270	270	135	46	45	12	a23	9.7
9	9.7	71	33	26	244	144	102	34	34	11	a24	11
10	18	40	32	26	132	346	78	31	30	10	a22	11
11	20	622	34	24	114	173	76	30	26	10	a20	9.7
12	15	502	34	24	451	125	78	31	24	10	19	7.8
13	12	110	32	755	634	99	67	46	23	11	19	7.2
14	11	71	30	301	1,500	86	105	60	24	13	17	6.7
15	10	383	38	106	331	78	348	35	24	227	16	5.8
16	10	210	164	74	186	76	126	30	29	49	15	5.8
17	105	99	66	66	147	110	89	28	28	30	15	5.5
18	190	72	49	61	121	81	73	26	23	21	15	5.3
19	45	482	42	50	101	70	64	24	21	24	40	5.3
20	126	171	39	46	90	67	61	23	20	46	39	5.0
21	44	97	36	71	79	68	57	22	19	68	20	4.3
22	28	76	36	81	99	64	53	21	20	32	17	4.3
23	22	126	34	59	102	124	49	20	31	26	16	4.0
24	19	102	32	52	84	130	48	36	38	30	14	4.0
25	17	92	32	42	79	81	46	66	24	21	13	4.0
26	16	66	32	40	79	66	44	54	19	16	12	4.0
27	16	56	34	42	73	76	42	49	17	14	11	4.0
28	16	49	33	62	66	103	42	36	16	14	10	6.6
29	22	45	30	64	62	68	43	46	63	15	9.7	134
30	19	42	29	66	-	60	42	451	24	14	9.0	374
31	16	-	29	78	-	80	-	475	-	12	8.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	884.9	190	8.4	28.5	0.429	0.49
November	4,005	622	15	134	2.02	2.24
December	1,237	164	29	39.9	.600	.69
Calendar year 1947	19,072.7	1,040	3.6	52.3	.786	10.66
January	2,451	755	24	79.1	1.19	1.37
February	6,309	1,500	52	218	3.28	3.53
March	3,856	642	55	124	1.86	2.16
April	3,593	785	42	120	1.80	2.01
May	2,004	475	20	64.6	.971	1.12
June	1,038	134	16	34.6	.520	.58
July	873	227	10	28.2	.424	.49
August	1,204.1	297	8.4	38.8	.583	.67
September	690.6	374	4.0	23.0	.346	.39
Water year 1947-48	28,145.6	1,500	4.0	76.9	1.16	15.74

Peak discharge (base, 1,500 sec.-ft.).- Nov. 11 (9 p.m.) 1,690 sec.-ft.; Jan. 13 (4 p.m.) 1,610 sec.-ft.; Feb. 14 (11 a.m.) 2,110 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for other stations in basin.

Neuse River near Northside, N. C.

Location.- Water-stage recorder, lat. 36°02'25", long. 78°45'05", at Fish Dam Bridge, 1 mile downstream from Rocky Creek, 1½ miles downstream from Seaboard Airline Railway bridge, and 2 miles south of Northside, Granville County. Datum of gage is 226.32 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 526 square miles.

Records available.- July 1927 to September 1948.

Average discharge.- 21 years, 546 second-feet.

Extremes.- Maximum discharge during year, 12,200 second-feet Feb. 15; maximum gage height, 22.80 feet Feb. 15; minimum discharge, 29 second-feet Sept. 25, 26 (gage height, 1.28 feet).

1927-48: Maximum discharge, 36,600 second-feet Sept. 18, 1945; maximum gage height, 31.02 feet, from floodmark, Sept. 18, 1945; minimum discharge, 3.1 second-feet Sept. 20, 1932 (gage height, 0.87 foot).

Remarks.- Records good except those for periods of no gage-height record or backwater from overbank flow returning to channel, which are poor. Discharge for periods of changing stage usually computed using rate of change of stage as a factor. Moderate diurnal fluctuation caused by power plants above station. Flow slightly regulated by Durham municipal dam. For diversion, see "Flat River at dam, near Bahama."

Revisions (water years).- W 822: Drainage area. W 1032: 1933(M), 1935-36, 1937(M), 1938-39, 1944(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	215	137	a360	215	420	372	2,220	240	3,530	484	121	72
2	210	111	302	332	640	604	4,430	210	1,840	246	703	55
3	139	1,960	280	260	600	1,500	3,620	204	660	160	1,170	55
4	106	3,180	273	204	528	1,100	1,460	215	456	94	804	55
5	81	1,250	266	204	882	804	762	227	438	93	2,140	52
6	70	564	260	227	2,420	660	680	227	280	123	1,320	55
7	77	438	227	215	3,340	1,950	1,140	253	188	88	510	55
8	88	439	234	215	3,100	4,190	1,540	372	266	111	356	60
9	84	1,400	388	210	3,060	3,520	961	221	227	69	396	72
10	2,080	741	246	210	2,030	2,540	741	193	182	59	253	72
11	1,860	1,250	253	176	1,250	2,800	660	204	166	55	204	115
12	572	4,260	253	a190	1,620	1,430	700	193	153	59	204	91
13	332	5,580	240	a300	3,840	938	564	266	108	54	429	62
14	204	3,390	204	a3,000	6,320	783	570	266	110	81	227	60
15	158	2,120	204	a3,600	11,300	741	2,770	246	161	848	170	59
16	157	3,220	715	a2,000	c7,000	720	2,740	188	169	1,580	137	45
17	212	a2,600	771	812	c3,100	848	5,370	129	193	448	136	45
18	863	a1,600	492	660	c1,900	741	720	193	188	210	124	44
19	656	a1,000	420	a550	c1,250	564	640	182	161	356	136	42
20	492	a3,000	388	a500	938	528	564	170	127	310	356	44
21	474	a2,000	a340	a550	783	564	474	166	124	637	240	42
22	318	938	a260	a600	892	600	456	153	150	564	154	42
23	188	1,010	a240	a600	826	623	420	124	219	399	127	39
24	154	1,050	a220	620	870	1,270	364	96	240	1,440	129	37
25	135	1,010	a220	492	783	957	266	270	188	436	116	30
26	121	a800	a220	364	783	680	260	295	169	210	113	31
27	84	a650	227	380	720	546	266	332	137	169	111	32
28	147	a550	210	492	640	620	260	253	104	146	108	41
29	240	a500	215	564	564	564	260	310	136	183	93	170
30	215	a420	215	582	-	474	253	576	225	193	143	1,190
31	158	-	215	640	-	474	-	2,560	-	143	104	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,890	2,080	70	351	0.667	0.77
November	47,168	5,580	111	1,572	2.99	3.33
December	9,358	771	204	302	.574	.66
Calendar year 1947	178,859	5,580	21	490	.932	12.65
January	19,964	3,600	176	644	1.22	1.41
February	62,399	11,300	420	2,152	4.09	4.41
March	34,705	4,190	372	1,120	2.13	2.45
April	36,131	5,370	253	1,204	2.29	2.55
May	9,534	2,560	96	308	.586	.67
June	11,295	3,530	104	376	.715	.80
July	10,047	1,580	54	324	.616	.71
August	11,334	2,140	93	366	.696	.80
September	2,864	1,190	30	95.5	.182	.20
Water year 1947-48	265,689	11,300	30	726	1.38	18.76

Peak discharge (base, 4,500 sec.-ft.).- Nov. 13 (5 a.m.) 6,030 sec.-ft.; Jan. 14 or 15 (time unknown) 4,770 sec.-ft.; Feb. 15 (1 p.m.) 12,200 sec.-ft.; Mar. 8 (10 p.m.) 4,570 sec.-ft.; Apr. 2 (8 p.m.) 4,820 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for other stations in basin.

c Backwater from return of overbank flow.

Neuse River near Clayton, N. C.

Location.- Water-stage recorder, lat. 35°38'55", long. 78°24'30", at bridge on State Highway 42, 1.8 miles upstream from Mill Creek and 3 miles east of Clayton, Johnston County. Datum of gage is 128.12 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 1,140 square miles.

Records available.- July 1927 to September 1948.

Average discharge.- 21 years, 1,255 second-feet.

Extremes.- Maximum discharge during year, 11,200 second-feet Feb. 15 (gage height, 14,16 feet); minimum, 113 second-feet Sept. 27 (gage height, 1.13 feet)

1927-48: Maximum discharge, 22,900 second-feet Sept. 19, 1945 (gage height, 22.12 feet); minimum, 44 second-feet Sept. 15, 1932 (gage height, 0.28 foot, site then in use).

Remarks.- Records good except those for periods of fragmentary of no gage height record, which are poor.

Revisions (water years).- W 1032: 1930, 1935(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 15

1.7	350	3.0	1,080
2.0	500	3.5	1,390
2.3	662	4.0	1,700
2.6	838	5.0	2,360

Note.- Same as following table above 6.0 feet.

Feb. 16 to Sept. 30

1.1	104	2.6	850	7.0	3,940
1.3	165	3.0	1,120	8.0	4,800
1.5	232	3.5	1,430	10.0	6,680
1.7	316	4.0	1,730	12.0	8,730
2.0	479	5.0	2,380	14.0	11,000
2.3	655	6.0	3,130		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	548	564	1,020	607	1,450	1,310	1,640	668	2,600	352	326	289
2	500	490	930	690	1,270	1,390	3,470	649	3,210	619	307	228
3	474	1,580	838	724	1,330	2,960	3,940	607	3,530	531	1,020	197
4	428	4,460	777	712	1,450	2,890	4,460	578	1,620	347	1,670	184
5	364	3,860	748	634	1,700	2,240	4,060	674	990	252	3,010	a180
6	341	3,240	748	591	3,820	1,730	1,750	637	818	240	2,310	a190
7	341	1,330	718	602	6,000	2,340	1,720	649	655	248	2,120	a200
8	a360	1,080	684	585	5,720	5,120	2,040	637	607	232	990	a220
9	a360	1,170	662	580	5,910	4,800	2,380	740	619	200	668	a200
10	a500	1,820	759	569	5,530	5,580	1,760	637	578	222	619	200
11	a1,500	1,980	765	569	4,710	5,720	1,490	572	479	181	491	267
12	a3,000	4,980	707	526	3,860	4,890	1,430	580	422	156	411	248
13	a2,000	5,160	690	764	5,820	3,690	1,370	700	389	165	389	232
14	a1,000	4,800	662	3,760	8,510	2,080	1,220	746	357	222	525	214
15	a550	5,530	640	4,200	10,500	1,730	2,040	714	367	244	595	200
16	a500	6,480	1,080	4,460	10,500	1,610	3,450	643	394	944	387	194
17	a550	4,980	1,580	4,620	9,500	1,550	3,860	572	411	2,040	302	165
18	a900	4,280	1,520	2,460	9,500	1,610	3,000	589	411	1,180	294	156
19	a1,400	3,210	1,140	1,420	9,060	1,490	1,550	531	416	772	280	153
20	a1,200	3,860	960	1,140	7,240	1,280	1,280	514	384	554	598	137
21	a1,000	4,120	868	1,480	3,040	1,220	1,180	496	326	625	560	140
22	a800	4,030	808	1,640	2,310	1,220	1,060	468	312	707	1,060	134
23	a650	2,820	730	1,580	2,660	1,400	990	439	378	804	625	131
24	a550	2,440	690	1,360	2,240	1,460	920	406	362	885	367	140
25	a460	2,360	668	1,140	1,980	1,980	885	439	468	1,520	307	128
26	f418	2,020	679	1,050	1,790	1,790	740	520	372	955	280	131
27	f403	1,640	662	960	1,730	1,490	688	688	326	473	259	119
28	a400	1,420	662	1,110	1,610	1,340	694	792	289	331	248	146
29	a750	1,240	624	1,270	1,460	1,280	688	1,040	321	601	240	653
30	f1,550	1,140	602	1,360	-	1,180	694	850	276	613	a260	1,980
31	f736	-	612	1,640	-	1,090	-	1,650	-	445	a300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	24,533	3,000	341	791	0.694	0.80
November	88,084	6,480	490	2,936	2.58	2.87
December	25,233	1,580	602	814	.714	.82
Calendar year 1947	404,481	6,480	147	1,108	.972	13.19
January	44,803	4,620	526	1,445	1.27	1.46
February	132,200	10,500	1,270	4,559	4.00	4.31
March	71,460	5,720	1,090	2,305	2.02	2.33
April	56,449	4,460	688	1,882	1.65	1.84
May	20,405	1,650	406	658	.577	.67
June	22,687	3,530	276	756	.663	.74
July	17,660	2,040	156	570	.500	.58
August	21,818	3,010	240	704	.618	.71
September	7,756	1,980	119	259	.227	.25
Water year 1947-48	533,088	10,500	119	1,457	1.28	17.38

Peak discharge (base, 7,100 sec.-ft.).- Feb. 15 (11:30 p.m.) 11,200 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations near Northside and near Goldsboro.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Neuse River near Goldsboro, N. C.

Location.- Water-stage recorder, lat. 35°20'15", long. 77°59'45", at county road bridge 0.2 mile upstream from Stoney Creek, 1.5 miles downstream from Atlantic Coast Line Railroad bridge, 4.3 miles below Little River, and 3 miles south of Goldsboro, Wayne County. Datum of gage is 42.95 feet above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 1, 1948, water-stage recorder 2.3 miles upstream at 1.71 feet higher datum.

Drainage area.- 2,390 square miles. Prior to Sept. 1, 1948, 2,370 square miles.

Records available.- September 1948. February 1930 to August 1948 at site 2.3 miles upstream.

Average discharge.- 18 years, 2,502 second-feet.

Extremes.- Maximum discharge during year, 20,300 second-feet Feb. 19 (gage height, 24.47 feet, site and datum then in use); minimum, 239 second-feet Sept. 2[illegible] (gage height, 1.82 feet).

1930-48: Maximum discharge, 30,700 second-feet Sept. 23, 1945; maximum gage height, 26.72 feet Sept. 23, 1945, site and datum then in use; minimum discharge, 85 second-feet Sept. 14, 1932 (gage height, 1.03 feet, site and datum then in use.

Maximum discharge known, 38,600 second-feet Oct. 5, 1939 (gage height, 31.14 feet, at railroad bridge and present datum), by current-meter measurement.

Remarks.- Records good except those computed from graph based on gage readings, which are fair. Discharge for days of considerable change in stage computed by using rate of change in stage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,160	2,260	4,690	1,730	4,560	4,650	2,770	1,300	1,880	550	885	430
2	1,790	1,720	3,780	1,730	4,490	4,140	2,770	1,260	2,570	520	815	462
3	1,420	1,630	3,130	1,830	4,360	4,250	3,480	1,220	3,150	550	745	446
4	1,160	1,860	2,800	1,930	4,250	4,820	4,140	1,140	3,530	712	780	430
5	1,040	3,290	2,600	1,930	4,560	5,420	4,430	1,140	3,590	662	1,450	385
6	917	3,980	2,450	1,830	5,420	5,760	4,820	1,140	2,380	535	2,530	359
7	821	4,240	2,350	1,730	6,360	6,090	5,220	1,180	1,550	461	3,150	350
8	821	4,560	2,300	1,600	7,270	6,290	5,420	1,180	1,340	432	3,420	345
9	859	4,560	2,220	1,550	8,280	6,360	5,160	1,140	1,180	418	2,700	348
10	878	3,320	2,170	1,470	g9,160	6,650	4,490	1,060	1,020	418	1,580	376
11	1,080	3,430	2,220	1,420	g9,700	7,480	4,190	1,060	990	418	1,140	391
12	1,870	5,930	2,400	1,380	g10,400	8,120	3,860	990	920	418	955	415
13	2,600	6,600	2,500	1,420	g11,400	8,760	3,370	990	815	418	798	430
14	2,910	7,160	2,400	1,780	g12,600	9,080	3,090	1,140	762	388	696	415
15	2,120	7,860	2,300	3,460	14,400	9,160	3,040	1,340	1,640	388	630	388
16	1,680	8,490	2,300	4,250	16,000	9,000	3,480	1,380	1,220	490	679	364
17	1,630	8,860	2,700	4,820	17,600	8,360	4,140	1,180	1,020	476	712	348
18	1,770	9,100	3,410	5,220	19,400	6,630	4,490	1,100	920	1,100	580	336
19	1,630	9,260	3,780	5,620	20,000	4,990	4,620	1,180	885	1,730	520	311
20	1,680	9,420	3,370	6,030	18,800	4,250	4,690	1,060	832	1,340	535	283
21	2,080	9,500	2,820	6,290	17,000	3,700	3,850	990	885	1,100	728	276
22	2,080	9,420	2,460	5,960	15,600	3,310	2,600	868	1,060	990	920	276
23	1,770	9,260	2,210	5,620	14,000	3,090	2,210	780	832	990	955	263
24	1,500	9,100	2,070	5,490	12,600	3,040	g2,020	712	885	1,020	1,140	257
25	1,240	9,020	1,930	5,160	11,600	3,150	g1,880	696	955	1,060	832	252
26	1,020	8,940	2,020	4,000	10,400	3,370	g1,730	662	990	1,140	613	252
27	917	8,860	2,120	3,530	8,700	3,590	g1,600	745	798	1,420	520	250
28	840	8,630	g2,170	3,420	7,330	3,480	g1,420	955	662	1,100	490	255
29	840	8,070	g2,120	3,750	5,850	3,420	g1,340	1,180	580	815	446	353
30	1,530	6,460	1,970	4,140	-	3,370	1,340	1,380	535	646	432	526
31	2,700	-	1,830	4,430	-	3,090	-	1,780	-	815	432	-

Month	Second-feet-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	48,353	3,160	821	1,560	0.658	0.76
November	194,790	9,500	1,630	6,493	2.74	3.06
December	79,590	4,690	1,830	2,567	1.08	1.25
Calendar year 1947	876,085	9,500	363	2,400	1.01	13.74
January	104,520	6,290	1,380	3,372	1.42	1.64
February	312,090	20,000	4,250	10,760	4.54	4.90
March	167,070	9,190	3,040	5,389	2.27	2.62
April	101,660	5,420	1,340	3,389	1.43	1.60
May	33,928	1,780	662	1,094	.462	.53
June	40,376	3,590	535	1,346	.568	.63
July	23,520	1,730	388	759	.320	.37
August	32,808	3,420	432	1,058	.446	.51
September	10,572	526	250	352	.147	.17
Water year 1947-48	1,149,277	20,000	250	3,140	1.32	18.04

Peak discharge (base, 7,700 sec.-ft.).- Nov. 21 (1 p.m.) 9,500 sec.-ft.; Feb. 19 (6 a.m.) 20,300 sec.-ft.; Mar. 15 (9 a.m.) 9,160 sec.-ft.

g Computed from graph based on once-daily readings by U. S. Weather Bureau.

Neuse River at Kinston, N. C.

Location.- Water-stage recorder, lat. 35°15'30", long. 77°35'10", at Kinston, Lenoir County, two city blocks downstream from bridge on State Highway 11. Datum of gage is 10.90 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,690 square miles.

Records available.- February 1930 to September 1948.

Average discharge.- 18 years, 2,906 second-feet.

Extremes.- Maximum discharge during year, 21,100 second-feet Feb. 22 (gage height, 20.75 feet); minimum, 300 second-feet Sept. 25 (gage height, 2.51 feet).

1930-48: Maximum discharge, 25,900 second-feet Sept. 27, 1945; maximum gage height, 22.44 feet Sept. 27, 1945; minimum discharge, 124 second-feet Sept. 26, 1932 gage height, 1.29 feet, site and datum then in use).

Maximum stage known, 25.0 feet, present site and datum, July 1919 (discharge, about 39,000 second-feet), from information by North Carolina State Highway and Public Works Commission.

Remarks.- Records good. Discharge for days of considerable change in stage computed by using rate of change of stage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,800	2,420	8,880	2,460	5,420	10,300	3,800	1,580	1,870	696	872	462
2	5,490	2,580	7,970	2,400	5,720	8,050	3,600	1,540	2,020	696	1,000	446
3	3,510	2,340	6,070	2,400	5,800	6,650	3,420	1,500	2,280	678	1,000	479
4	1,980	2,520	4,830	2,400	5,800	6,120	3,540	1,450	2,820	660	957	462
5	1,580	2,580	3,920	2,460	5,800	5,720	3,930	1,400	3,120	771	936	446
6	1,360	3,000	3,540	2,460	6,120	5,720	4,340	1,360	3,300	830	1,440	415
7	1,270	3,540	3,180	2,340	6,620	6,040	4,690	1,360	2,910	715	2,190	400
8	1,270	4,000	2,940	2,230	7,300	6,440	5,040	1,360	1,880	604	2,640	386
9	1,270	4,410	2,820	2,120	7,970	6,900	5,420	1,320	1,540	550	2,940	371
10	1,220	4,690	2,700	2,070	8,740	7,730	5,560	1,270	1,360	532	2,940	371
11	1,220	4,690	2,760	1,970	9,470	8,210	5,490	1,220	1,180	514	1,950	400
12	1,320	4,830	2,820	1,920	10,400	8,600	5,120	1,220	1,110	496	1,450	415
13	1,820	6,060	2,880	1,920	11,900	8,740	4,690	1,220	1,040	479	1,180	415
14	2,760	6,710	2,940	2,400	14,100	9,020	4,200	1,270	978	462	1,000	430
15	3,360	7,400	3,000	2,820	15,800	9,470	3,800	1,320	1,250	446	872	430
16	3,420	7,970	3,120	3,300	16,800	9,780	3,670	1,400	2,340	479	771	400
17	2,620	8,470	3,240	3,930	17,400	10,100	3,740	1,450	1,900	622	771	386
18	2,520	9,020	3,360	4,620	17,800	10,100	4,000	1,360	1,450	641	830	371
19	2,820	9,320	3,600	5,190	18,600	9,780	4,270	1,270	1,220	958	752	371
20	2,700	9,780	3,930	5,560	19,600	8,600	4,480	1,270	1,090	1,540	678	354
21	2,400	10,100	4,000	6,120	20,600	6,770	4,620	1,220	1,020	1,500	696	332
22	2,400	10,400	3,740	6,710	20,800	5,530	4,690	1,140	1,270	1,220	771	324
23	2,400	10,600	3,300	7,100	20,600	4,660	3,880	1,040	1,580	1,140	936	321
24	2,180	10,600	2,940	7,200	19,600	4,200	2,900	936	1,400	1,140	1,020	313
25	1,870	10,600	2,700	6,900	18,400	3,800	2,400	851	1,220	1,110	1,140	306
26	1,630	10,600	2,880	6,530	16,800	3,670	2,180	810	1,180	1,140	1,040	306
27	1,400	10,400	3,000	6,120	15,400	3,740	2,020	830	1,180	1,180	771	316
28	1,320	10,100	3,000	5,640	13,800	3,930	1,870	893	1,020	1,400	622	335
29	1,220	9,780	2,880	5,190	12,100	4,000	1,720	1,040	872	1,320	568	365
30	1,180	9,470	2,820	4,970	-	3,930	1,630	1,270	752	1,110	514	550
31	1,540	-	2,640	5,120	-	3,860	-	1,500	-	893	479	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	68,850	5,800	1,180	2,221	0.826	0.95
November	208,980	10,600	2,340	6,966	2.59	2.89
December	112,400	8,880	2,640	3,626	1.35	1.55
Calendar year 1947	1,037,317	10,600	514	2,842	1.06	14.34
January	124,570	7,200	1,920	4,018	1.49	1.72
February	375,260	20,800	5,420	12,940	4.81	5.19
March	210,160	10,300	3,670	6,779	2.52	2.91
April	114,710	5,560	1,630	3,824	1.42	1.59
May	38,670	1,580	810	1,247	.464	.53
June	48,152	3,300	752	1,605	.597	.67
July	26,522	1,540	446	856	.318	.37
August	35,726	2,940	479	1,152	.428	.49
September	11,678	550	306	389	.145	.16
Water year 1947-48	1,375,678	20,800	306	3,759	1.40	19.02

Peak discharge (base, 7,600 sec.-ft.).- Nov. 25 (7 a.m.) 10,800 sec.-ft.; Feb. 22 (9 a.m.) 21,100 sec.-ft.; Mar. 18 (1 a.m.) 10,100 sec.-ft.

Flat River at Bahama, N. C.

Location.- Water-stage recorder and rectangular weirs in masonry dam, 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. Datum of gage is 255.05 feet above mean sea level.

Drainage area.- 150 square miles.

Records available.- July 1925 to September 1948.

Average discharge.- 23 years, 145 second-feet.

Extremes.- Maximum discharge during year, 6,820 second-feet May 31 (gage height, 8.42 feet); minimum, 5.6 second-feet Oct. 7 (gage height, 1.14 feet).
1925-48: Maximum discharge, 16,100 second-feet Sept. 18, 1945 (gage height, 11.90 feet); minimum, 0.37 second-foot Sept. 26, 27, 1932 (gage height, 0.23 foot).

Remarks.- Records fair. Some diurnal fluctuation and occasional regulation at low flow caused by small mill 5 miles above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	32	87	56	82	126	1,800	71	411	62	20	14
2	20	30	81	62	112	353	613	66	192	43	64	12
3	15	1,410	77	59	101	438	289	62	126	32	177	11
4	18	299	73	52	109	270	209	56	97	25	167	10
5	14	145	72	52	264	190	174	57	84	24	366	9.7
6	19	100	72	51	728	156	158	56	71	22	89	8.8
7	11	76	69	50	615	1,750	611	88	69	19	56	9.1
8	11	570	66	48	587	620	309	92	72	16	47	8.8
9	12	260	65	48	675	369	218	59	65	15	41	8.6
10	127	128	62	48	314	918	158	55	57	14	38	8.8
11	126	1,460	77	46	255	413	149	52	52	12	35	8.8
12	68	1,540	85	44	853	289	163	52	49	12	36	8.6
13	49	299	71	1,600	1,440	228	131	56	47	13	55	8.8
14	32	187	64	800	4,850	195	160	61	49	14	49	8.8
15	24	945	68	269	1,100	179	902	56	68	462	38	9.1
16	63	590	444	174	549	168	283	50	102	116	33	9.1
17	51	262	184	147	441	192	187	46	66	53	20	8.8
18	398	181	123	134	350	166	140	39	58	40	20	8.8
19	96	1,070	101	109	270	135	122	33	49	32	20	8.6
20	61	414	87	94	228	131	110	35	42	33	20	8.3
21	52	234	80	193	198	235	102	33	39	129	22	8.0
22	40	181	76	245	273	156	108	29	34	252	22	7.7
23	33	328	71	158	273	189	90	30	34	74	29	7.4
24	28	273	67	117	224	192	82	35	18	76	24	7.1
25	26	238	63	91	209	135	79	62	12	41	25	6.6
26	24	161	64	81	215	111	74	163	25	34	18	6.1
27	24	132	65	83	187	130	70	150	27	29	17	6.1
28	66	114	63	94	166	233	182	72	25	27	18	8.8
29	120	101	59	106	149	127	94	406	76	25	14	12
30	55	91	56	117	-	105	78	585	75	24	14	927
31	40	-	54	123	-	128	-	3,500	-	18	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,747	398	11	56.3	0.375	0.43
November	11,851	1,540	30	395	2.63	2.94
December	2,746	444	54	89.5	.590	.68
Calendar year 1947	42,091.89	2,030	2.74	115	.767	10.45
January	5,351	1,600	44	173	1.15	1.33
February	15,817	4,850	82	545	3.63	3.92
March	9,027	1,750	105	291	1.94	2.24
April	7,845	1,800	70	262	1.75	1.94
May	6,207	3,500	29	200	1.33	1.54
June	2,191	411	12	73.0	.487	.54
July	1,788	462	12	57.7	.385	.44
August	1,608	366	14	51.9	.346	.40
September	1,185.3	927	6.1	39.5	.236	.29
Water year 1947-48	67,363.3	4,850	6.1	184	1.23	16.69

Peak discharge (base, 4,500 sec.-ft.).- Feb. 14 (5 p.m.) 6,500 sec.-ft.; May 31 (10 a.m.) 6,820 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 1948.

Average discharge.- 21 years, 159 second-feet.

Extremes.- Maximum discharge during year, 7,050 second-feet Feb. 14 (gage height, 12.98 feet); minimum, 7 second-feet Oct. 26.
1927-48: Maximum discharge, 18,600 second-feet July 26, 1938 (gage height, 19.50 feet), by computation of flow over Durham municipal dam; no flow Sept. 3-14, 1938.

Remarks.- Records fair. Considerable regulation since 1926 by Lake Michie (usable capacity, 12,610 acre-feet) just above station where about 13.3 second-feet daily was diverted during year for Durham municipal water supply. About 5.3 second-feet was returned as sewage to Neuse River 3 miles above Northside gage. Large diurnal fluctuation caused by power plant at Durham municipal dam.

Revisions (water years).- W 802: 1935.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	49	100	82	129	59	1,590	40	774	81	63	11
2	112	39	67	108	288	106	915	45	285	53	47	11
3	70	1,030	67	40	191	241	384	60	317	11	67	11
4	49	553	65	34	152	304	250	68	210	12	204	12
5	32	276	70	71	152	250	245	69	177	51	482	12
6	49	251	39	71	203	250	255	69	76	32	260	12
7	49	143	32	76	428	1,310	425	71	46	49	176	12
8	44	228	134	67	575	1,040	414	47	36	32	137	11
9	54	410	128	79	807	428	321	39	45	12	102	12
10	148	308	68	46	463	945	301	68	46	13	73	11
11	146	973	66	39	342	550	277	68	48	13	66	11
12	137	2,630	70	68	613	342	249	67	11	14	78	11
13	77	460	41	864	1,700	294	154	68	11	15	58	12
14	49	298	14	1,440	5,030	270	211	70	47	46	75	12
15	48	659	84	384	2,100	294	467	49	54	169	41	11
16	55	940	141	292	652	311	400	14	68	243	48	11
17	47	369	149	297	488	256	300	63	72	80	46	11
18	119	328	149	189	413	144	246	72	69	54	46	11
19	140	917	138	147	335	146	262	72	46	62	42	12
20	154	617	148	145	315	146	187	72	44	47	46	10
21	152	328	90	145	294	131	156	70	69	47	46	10
22	74	297	69	141	274	146	162	48	69	48	42	10
23	48	267	68	144	308	140	162	17	68	143	47	10
24	47	274	59	212	317	220	81	55	79	195	47	10
25	46	304	46	175	318	256	32	85	71	95	47	10
26	18	280	56	149	304	169	70	73	50	43	47	10
27	37	263	36	154	258	140	69	71	48	47	47	10
28	47	252	37	155	247	130	72	72	60	48	47	10
29	48	234	66	150	118	131	65	80	72	48	36	10
30	49	132	59	168	-	146	72	560	78	48	31	136
31	49	-	65	76	-	150	-	3,780	-	48	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,344	154	18	75.6		
November	14,109	2,630	39	470		
December	2,421	149	14	78.1		
Calendar year 1947	45,724	2,630	8	125		
January	6,208	1,440	34	200		
February	17,814	5,030	118	614		
March	9,445	1,310	59	305		
April	8,794	1,590	32	293		
May	6,102	3,780	14	197		
June	3,146	774	11	105		
July	1,899	243	11	61.3		
August	2,605	482	11	84.0		
September	453	136	10	15.1		
Water year 1947-48	75,340	5,030	10	206		

Dial Creek near Bahama, N. C.

Location.- Water-stage recorder and combination 90° V-notch and masonry weir, lat. 36°10'50", long. 78°51'55", three-eighths of a mile upstream from mouth and Lake Michie and 1½ miles northeast of Bahama, Durham County.

Drainage area.- 4.9 square miles.

Records available.- October 1925 to September 1948.

Average discharge.- 22 years (1926-48), 4.30 second-feet.

Extremes.- Maximum discharge during year, 263 second-feet May 30 (gage height, 4.09 feet), from rating curve extended above 130 second-feet on basis of computation of flow over artificial control at gage heights 3.5, 4.0, and 4.5 feet; minimum discharge not determined, occurred during period of no gage-height record.

1925-48: Maximum discharge, 1,270 second-feet May 24, 1940 (gage height, 7.60 feet), from rating curve extended above 130 second-feet on basis of computation of flow over artificial control at gage heights 3.5, 4.0, and 4.5 feet; no flow at times in many years.

Remarks.- Records fair except those for periods of doubtful or no gage-height record, which are poor.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 16 to Jan. 6)

0.4	0.30	0.9	1.85	2.0	14
.5	.48	1.0	2.42	2.3	26
.6	.73	1.2	3.87	2.6	51
.7	1.02	1.4	5.7	3.0	99
.8	1.38	1.7	9.4	3.3	140

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.78	1.42	3.71	2.48	4.11	4.57	51	1.95	15	6.5	3.39	0.84
2	.73	1.42	3.55	3.39	4.84	12	14	1.75	7.2	2.54	25	.81
3	.73	59	3.47	2.60	4.57	9.7	8.8	1.70	4.93	1.95	11	.78
4	.68	9.9	3.31	2.54	5.3	7.5	6.8	1.80	4.12	1.70	26	.78
5	.66	5.4	3.31	2.54	10	5.9	6.0	2.54	3.47	1.65	15	.84
6	.60	4.03	3.23	2.42	25	5.5	5.5	1.80	2.94	1.42	4.93	.81
7	.58	3.23	3.01	2.30	18	48	26	4.43	5.1	1.26	3.31	1.41
8	.73	24	3.15	2.30	19	16	10	2.42	4.48	1.11	4.90	1.11
9	11	7.3	3.01	2.36	16	14	7.0	2.24	2.80	1.08	2.94	.96
10	67	4.66	2.94	2.30	10	27	5.5	2.24	2.30	1.05	2.30	1.25
11	7.4	74	3.23	2.06	8.3	13	5.9	2.36	2.06	.99	2.30	1.05
12	3.95	36	2.94	2.24	32	9.7	5.4	2.42	1.90	.93	8.1	.93
13	2.66	9.9	2.80	50	38	7.8	4.48	2.87	1.80	.96	5.6	.78
14	2.06	6.6	2.66	18	126	6.8	17	2.66	2.42	1.02	2.73	.75
15	2.74	27	3.58	8.0	28	6.4	34	2.00	2.12	9.8	2.24	.73
18	3.10	14	7.6	5.9	16	6.5	11	1.75	2.30	3.24	1.90	.66
17	2.59	8.4	3.79	5.3	15	7.9	7.3	1.70	2.06	1.95	1.90	.63
18	3.96	6.4	3.23	4.66	12	5.8	5.7	1.65	1.90	1.65	1.75	.60
19	2.24	37	3.08	3.87	9.8	5.5	4.93	1.50	1.80	1.60	1.75	.58
20	1.95	12	2.66	3.95	8.3	5.5	4.39	1.46	1.65	6.0	1.80	.50
21	1.60	8.3	2.60	8.2	7.2	6.7	3.87	1.46	1.50	8.8	1.65	.48
22	1.42	7.0	2.54	5.9	11	5.3	3.31	1.34	1.60	4.63	1.75	.46
23	1.30	10	2.48	4.57	8.0	11	3.01	1.30	1.70	9.6	1.42	.50
24	1.22	8.4	2.36	3.95	6.8	9.2	2.87	1.68	1.46	4.18	1.30	.43
25	1.18	6.9	2.42	3.39	6.8	6.4	2.60	3.38	1.38	2.24	1.26	.41
26	1.18	5.5	2.54	3.47	6.7	5.7	2.48	4.66	1.22	1.75	1.18	a.4
27	1.18	4.75	2.48	3.95	6.0	6.6	2.42	2.80	1.11	1.50	1.11	a.4
28	2.94	4.39	2.36	4.57	5.7	5.0	2.80	2.30	1.08	3.03	1.05	a.6
29	2.48	4.03	2.18	4.48	5.1	4.03	2.42	7.7	1.22	3.68	.96	a4
30	1.75	3.87	2.18	5.0	-	3.87	2.24	80	27	1.85	2.05	d22
31	1.55	-	2.18	4.55	-	5.9	-	48	-	1.46	.96	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	133.94	67	0.58	4.32	0.882	1.02
November	414.80	74	1.42	13.8	2.82	3.15
December	94.58	7.6	2.18	3,05	.622	.72
Calendar year 1947	1,696.99	74	.25	4.65	.949	12.89
January	181.24	50	2.06	5.85	1.19	1.38
February	473.52	126	4.11	16.3	3.33	3.59
March	294.77	48	3.87	9.51	1.94	2.24
April	268.72	51	2.24	8.96	1.83	2.04
May	197.86	80	1.30	6.38	1.30	1.50
June	111.62	27	1.08	3.72	.759	.85
July	91.12	9.8	.93	2.94	.600	.69
August	143.53	26	.96	4.63	.945	1.09
September	46.48	22	.4	1.55	.316	.35
Water year 1947-48	2,452.18	126	.4	6.70	1.37	18.62

Peak discharge (base, 160 sec.-ft.).- Oct. 9 (11:30 p.m.) 222 sec.-ft.; Nov. 11 (8:30 p.m.) 174 sec.-ft.; Feb. 14 (12:30 a.m.) 192 sec.-ft.; May 30 (2:30 p.m.) 263 sec.-ft.

a No gage-height record; discharge computed on basis of records for other stations in basin.

d Doubtful gage-height record; discharge based on basis of doubtful gage heights.

Middle Creek near Clayton, N. C.

Location.- Water-stage recorder, lat. 35°34'10", long. 78°35'30", 300 feet downstream from bridge on State Highway 50, a quarter of a mile upstream from Buffalo Branch, 3¼ miles downstream from county line, and 9¼ miles southwest of Clayton, Johnston County.

Drainage area.- 80.7 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 1,550 second-feet Feb. 14 (gage height, 9.50 feet); minimum, 1.0 second-foot Sept. 21 (gage height, 0.46 foot).

1939-48: Maximum discharge, 2,740 second-feet Sept. 18, 1945 (gage height, 11.70 feet), from rating curve extended above 1,400 second-feet by logarithmic plotting; minimum, that of Sept. 21, 1948.

Remarks.- Records fair. Slight diurnal fluctuation at low flow caused by gristmills above station.

Revisions (water years).- W 952: 1940(M), 1941.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 13

1.3	17	2.6	92	5.0	305
1.5	25	3.0	120	6.0	440
1.8	41	3.5	160	7.0	650
2.2	65	4.0	205		

Feb. 14 to Sept. 30

0.6	3.2	2.2	70	5.0	329
.9	9.6	2.6	97	6.0	483
1.2	18	3.0	129	7.0	690
1.5	31	3.5	174	8.0	985
1.8	46	4.0	222	9.0	1,350

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	30	116	50	192	125	236	42	48	11	16	2.9
2	31	23	110	77	174	189	329	40	38	8.4	11	2.6
3	27	108	86	72	140	400	272	46	39	7.3	10	2.6
4	23	187	70	60	140	466	138	42	32	6.2	16	2.4
5	22	189	66	60	210	276	117	46	26	5.8	44	2.7
6	20	74	67	58	381	165	113	44	21	6.7	50	2.7
7	23	54	63	52	652	288	246	40	17	5.2	19	3.2
8	40	107	61	49	626	449	293	38	21	7.3	12	3.6
9	42	121	61	48	422	466	184	30	26	5.6	11	5.2
10	42	70	63	47	330	356	121	26	24	4.6	9.1	5.8
11	60	128	85	45	257	316	130	24	16	9.1	8.2	6.5
12	50	368	81	42	321	252	160	24	16	5.8	8.0	5.2
13	40	375	67	104	804	188	121	51	13	4.4	7.1	4.2
14	34	235	60	343	1,430	165	105	57	12	5.8	6.0	3.4
15	32	220	67	348	1,350	152	187	38	12	8.2	6.7	2.9
16	32	362	124	155	667	147	170	25	14	12	6.0	2.2
17	35	311	128	110	365	160	113	23	29	12	5.2	2.1
18	44	154	84	124	252	142	88	24	25	11	4.8	1.9
19	35	148	70	102	207	125	79	23	16	8.9	5.3	1.6
20	28	196	64	92	183	121	75	19	14	9.1	16	1.3
21	26	169	63	169	174	117	69	18	12	14	15	1.3
22	23	136	60	196	244	109	69	18	11	18	11	1.9
23	20	201	56	144	282	160	63	16	11	13	8.2	2.4
24	19	205	54	110	232	197	60	14	20	14	6.7	2.6
25	19	200	54	92	188	152	55	24	17	11	5.6	2.6
26	20	148	61	82	174	117	50	38	14	11	4.8	2.9
27	18	116	61	92	165	137	48	44	12	10	4.2	3.4
28	22	128	56	164	152	188	46	72	8.7	9.4	3.6	6.0
29	57	124	51	160	142	125	48	59	8.4	11	3.4	46
30	66	124	47	148	-	101	46	47	9.2	38	3.2	315
31	40	-	48	196	-	101	-	46	-	30	2.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,024	66	18	33.0	0.409	0.47
November	5,011	375	23	167	2.07	2.31
December	2,204	128	47	71.1	.881	1.02
Calendar year 1947	26,200.1	561	7.0	71.8	.890	12.08
January	3,591	348	42	116	1.44	1.65
February	10,856	1,430	140	374	4.63	5.00
March	6,452	466	101	208	2.58	2.97
April	3,831	329	46	128	1.59	1.77
May	1,098	72	14	35.4	.439	.51
June	582.3	48	8.4	19.4	.240	.27
July	333.8	38	4.4	10.8	.134	.15
August	340.0	50	2.9	11.0	.136	.16
September	449.1	315	1.3	15.0	.186	.21
Water year 1947-48	35,772.2	1,430	1.3	97.7	1.21	16.49

Peak discharge (base, 600 sec.-ft.).- Feb. 7 (9 p.m.) 730 sec.-ft.; Feb. 14 (10 p.m.) 1,550 sec.-ft.

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 1948.

Average discharge.- 18 years, 251 second-feet.

Extremes.- Maximum discharge during year, 3,750 second-feet Feb. 16 (gage height, 12.10 feet); minimum, 14 second-feet Sept. 29; minimum daily, 16 second-feet Sept. 27, 28.
1930-48: Maximum discharge, 4,030 second-feet Dec. 2, 1934 (gage height, 12.68 feet); minimum, 1.0 second-foot several times in September and October 1932.
Maximum stage known, 14.90 feet in September 1924.

Remarks.- Records fair except those for period of no gage-height record, which are poor. Slight diurnal fluctuation and occasionally considerable regulation for short periods caused by mills above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Ang.	Sept.
1	110	141	351	205	a600	370	235	75	198	76	100	44
2	76	112	322	237	a550	398	322	75	246	75	95	68
3	58	188	294	266	a550	674	342	76	322	56	76	46
4	50	408	275	226	a550	790	304	80	284	45	120	39
5	31	408	256	218	a600	693	266	75	166	38	351	40
6	39	342	266	211	a800	598	226	73	98	36	418	39
7	56	284	266	193	a1,300	617	266	76	81	36	474	38
8	48	256	246	177	a1,600	916	380	88	92	33	418	36
9	54	275	237	169	1,620	960	322	83	75	30	304	36
10	66	266	231	160	1,370	1,090	246	68	109	30	122	35
11	195	366	266	157	1,030	1,190	220	66	83	29	83	36
12	214	1,090	313	153	1,120	1,000	256	61	75	29	68	33
13	146	1,320	284	189	1,800	790	237	86	61	28	54	33
14	119	1,050	246	588	2,760	636	195	175	54	27	42	33
15	98	872	233	712	3,640	522	408	160	50	26	38	32
16	98	1,000	398	522	3,640	436	503	112	54	26	33	30
17	105	960	522	436	3,070	408	313	86	54	61	44	29
18	92	732	436	456	2,460	380	231	83	52	168	40	29
19	100	636	351	436	1,520	332	195	81	54	224	36	28
20	134	674	304	370	850	304	159	81	58	196	115	27
21	266	731	266	655	655	284	141	58	58	175	143	24
22	256	693	237	830	693	266	127	55	46	110	75	22
23	164	837	228	731	894	256	119	52	34	97	46	22
24	132	1,140	218	560	850	313	114	50	210	85	42	22
25	115	1,210	222	456	693	342	109	41	313	76	42	21
26	105	1,030	266	380	598	294	104	44	117	78	52	19
27	83	790	304	351	541	294	98	45	61	115	42	16
28	81	636	294	503	474	389	90	73	49	86	38	16
29	162	503	256	560	427	418	92	100	64	63	35	23
30	246	408	229	503	-	313	85	173	73	48	33	317
31	177	-	213	a600	-	256	-	164	-	78	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,676	266	31	119	0.520	0.60
November	19,358	1,320	112	645	2.82	3.14
December	8,830	522	213	285	1.24	1.43
Calendar year 1947	80,795	1,320	10	221	.965	13.11
January	12,210	830	153	394	1.72	1.98
February	37,255	3,640	427	1,285	5.61	6.05
March	16,529	1,190	256	533	2.33	2.68
April	6,705	503	85	224	.978	1.09
May	2,615	175	41	84.4	.369	.42
June	3,291	322	34	110	.480	.53
July	2,280	224	26	73.5	.321	.37
August	3,610	474	31	116	.507	.59
September	1,233	317	16	41.1	.179	.20
Water year 1947-48	117,592	3,640	16	321	1.40	19.08

Peak discharge (base, 1,200 sec.-ft.).- Nov. 13 (7 a.m.) 1,370 sec.-ft.; Nov. 24 (11 p.m.) 1,240 sec.-ft.; Feb. 8 (time unknown) 1,660 sec.-ft.; Feb. 16 (1 a.m.) 3,750 sec.-ft. Mar. 11 (8 a.m.) 1,210 sec.-ft.

a No gage-height record; discharge computed on basis of weather records, recorded range in stage and records for other stations in basin.

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 1948.

Average discharge.- 18 years, 248 second-feet.

Extremes.- Maximum discharge during year, 4,070 second-feet Feb. 16 (gage height, 12.35 feet); minimum 0.4 second-foot Sept. 28; minimum daily, 0.5 second-foot Sept. 27.
1930-48: Maximum discharge, 4,830 second-feet Aug. 17, 1940 (gage height, 13.80 feet); minimum, about 0.2 second-foot Oct. 6-15, 1932, Nov. 24 to Dec. 26, 1933.
Maximum stage known, about 24.3 feet in September 1924.

Remarks.- Records fair except those for periods of doubtful or fragmentary or no gage-height record, which are poor. Extreme diurnal fluctuation and considerable regulation during low flow caused by municipal power plant above station. City of Wilson diverted an average of 2.9 second-feet above station for municipal supply.

Revisions (water years).- W 782: 1934.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	155	363	157	364	410	357	d122	380	430	32	a24
2	98	42	365	202	295	410	327	d81	438	494	39	a5
3	50	270	244	226	312	575	419	d86	454	224	40	1.6
4	42	352	313	247	352	755	400	d59	265	71	96	1.6
5	29	356	279	236	414	815	d312	d69	108	67	519	1.6
6	60	258	295	148	684	755	d223	d63	83	57	572	1.6
7	60	171	245	133	1,240	635	254	d100	62	36	542	1.5
8	71	302	276	138	1,460	785	d302	d86	61	35	659	1.5
9	61	160	295	96	1,520	935	395	d65	85	31	261	1.5
10	150	227	284	140	1,350	1,240	322	d70	188	31	108	2.4
11	460	288	277	121	1,070	1,360	d214	d57	59	26	73	3.0
12	352	1,260	324	122	1,040	1,200	d233	d60	44	28	68	4.6
13	188	1,380	364	141	1,600	1,060	d249	74	44	29	48	6.1
14	144	1,320	262	308	2,630	815	d212	129	44	28	42	7.0
15	127	1,280	229	539	3,660	575	d300	115	44	26	51	7.8
16	128	1,180	304	568	3,950	485	440	93	44	27	f52	8.2
17	141	976	483	469	3,200	455	440	64	47	50	f47	8.2
18	195	880	483	349	2,240	425	356	56	84	91	f46	8.2
19	195	753	399	313	1,400	410	d212	57	59	85	f63	8.2
20	205	722	326	242	1,180	380	d118	58	57	292	f52	7.8
21	204	880	289	311	740	367	d146	57	57	208	248	22
22	184	912	189	539	740	301	d150	47	57	59	306	19
23	120	1,040	220	583	1,020	327	d148	47	46	73	123	21
24	120	1,380	167	539	995	291	d154	39	51	35	f80	21
25	98	1,380	171	402	875	419	d99	21	255	28	a55	4.2
26	38	1,380	203	272	695	455	d127	21	194	56	f64	1.5
27	87	1,210	243	230	575	410	d108	32	64	40	f69	.5
28	88	888	290	240	500	440	d80	131	36	34	f49	14
29	161	614	257	314	455	500	d91	151	54	36	27	16
30	267	455	191	377	-	470	d93	193	202	47	f80	444
31	302	-	190	402	-	395	-	350	-	40	a55	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,503	460	29	145	0.614	0.71
November	22,471	1,380	42	749	3.17	3.54
December	8,820	483	167	285	1.21	1.39
Calendar year 1947	85,764	1,380	11	235	.996	13.52
January	9,104	583	96	294	1.25	1.43
February	36,556	3,950	295	1,261	5.34	5.76
March	18,855	1,360	291	608	2.58	2.97
April	7,281	440	80	243	1.03	1.15
May	2,653	350	21	85.6	.363	.42
June	3,666	454	36	122	.517	.58
July	2,814	494	26	90.8	.385	.44
August	4,566	659	27	147	.623	.72
September	674.6	444	.5	22.5	.095	.11
Water year 1947-48	121,963.6	3,950	.5	333	1.41	19.22

a No gage-height record; discharge computed on basis of power-plant records and engineer's inspections.
d Doubtful gage-height record; discharge computed on basis of doubtful gage heights.
f Fragmentary gage-height record; discharge computed on basis of partly estimated gage heights.

Contentnea Creek at Hookerton, N. C.

Location.- Water-stage recorder, lat. 35°25'40", long. 77°35'05", at Hookerton, Greene County, about half a mile above State Highway 123 (highway relocated) and 2½ miles upstream from Wheat Swamp Creek.

Drainage area.- 789 square miles.

Records available.- November 1928 to September 1948.

Average discharge.- 19 years (1929-48), 766 second-feet.

Extremes.- Maximum discharge during year, 10,000 second-feet Feb. 17 (gage height, 17.75 feet); minimum, 45 second-feet Sept. 22-25; minimum gage height, 2.41 feet Sept. 24, 25.
1928-48: Maximum discharge, 11,100 second-feet Oct. 6, 1929 (gage height, 18.9 feet), from rating curve extended above 7,200 second-feet; minimum, 13 second-feet Sept. 16, 17, 1932 (gage height, 1.17 feet).
Maximum stage known, 23.3 feet sometime in September 1928. High water of autumn 1924 was at practically the same stage.

Remarks.- Records good. Discharge for periods of changing stage computed using rate of change of stage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	760	482	2,710	829	2,020	2,330	1,200	318	1,340	138	108	81
2	454	499	2,330	808	2,020	2,120	1,200	310	1,480	173	119	81
3	357	661	1,970	788	2,020	2,020	1,120	310	1,680	350	122	82
4	312	852	1,600	788	2,070	2,020	1,020	302	1,760	432	130	73
5	282	894	1,290	788	2,120	2,070	940	286	1,680	350	143	66
6	232	938	1,120	788	2,380	2,120	894	294	1,330	226	543	63
7	211	960	990	749	2,710	2,280	850	302	780	155	814	63
8	239	873	917	676	3,050	2,440	850	286	568	132	978	60
9	304	916	872	622	3,440	2,570	850	271	499	121	1,040	60
10	433	1,060	850	586	3,870	2,840	829	256	440	110	922	59
11	417	1,280	850	550	4,060	3,120	829	234	374	106	604	67
12	600	1,890	872	533	4,160	3,200	808	219	358	98	340	88
13	867	2,470	894	621	4,470	3,200	730	234	326	93	226	79
14	1,090	2,780	917	1,000	5,260	3,200	676	286	310	90	173	70
15	1,130	3,120	940	1,170	6,940	3,120	843	350	466	88	145	63
16	863	3,440	1,040	1,260	8,690	2,980	1,080	374	550	124	126	57
17	674	3,520	1,120	1,360	9,600	2,780	1,150	366	399	170	119	54
18	710	3,440	1,120	1,480	9,400	2,380	1,150	350	286	137	109	51
19	810	3,280	1,150	1,600	7,790	2,070	1,120	383	226	114	109	50
20	810	3,120	1,170	1,640	6,340	1,800	940	358	205	148	133	48
21	790	2,980	1,200	1,800	5,110	1,560	707	302	205	326	180	46
22	750	2,780	1,150	2,020	4,690	1,390	604	271	205	366	198	45
23	672	2,640	1,020	2,180	4,160	1,260	516	234	248	358	248	45
24	567	2,640	850	2,280	3,690	1,150	499	191	248	264	326	45
25	465	2,710	768	2,330	3,360	1,070	482	176	205	184	248	45
26	417	2,780	894	2,330	3,200	1,020	440	173	173	163	170	50
27	380	2,840	1,020	2,280	3,050	1,040	408	350	177	131	132	51
28	364	2,910	1,040	2,180	2,840	1,100	374	537	226	108	115	73
29	320	2,910	1,020	2,020	2,640	1,120	358	736	205	119	106	103
30	334	2,840	990	1,880	-	1,170	342	768	155	126	100	468
31	402	-	940	1,880	-	1,200	-	974	-	116	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	17,016	1,130	211	549	0.696	0.80
November	64,505	3,520	482	2,150	2.72	3.04
December	35,614	2,710	768	1,149	1.46	1.68
Calendar year 1947	278,036	3,520	76	762	.966	13.11
January	41,816	2,330	533	1,349	1.71	1.97
February	125,150	9,600	2,020	4,316	5.47	5.90
March	63,740	3,200	1,020	2,056	2.61	3.00
April	23,809	1,200	342	794	1.01	1.12
May	10,801	974	173	348	.441	.51
June	17,104	1,760	155	570	.722	.81
July	5,616	432	88	181	.229	.26
August	8,918	1,040	92	288	.365	.42
September	2,286	468	45	76.2	.097	.11
Water year 1947-48	416,375	9,600	45	1,138	1.44	19.62

Peak discharge (base, 1,900 sec.-ft.).- Nov. 17 (12 m.) 3,520 sec.-ft.; Jan. 25 (9 p.m.) 2,330 sec.-ft.; Feb. 17 (10 p.m.) 10,000 sec.-ft.; Mar. 14 (7 a.m.) 3,200 sec.-ft.

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 1948.

Average discharge.- 20 years, 168 second-feet.

Extremes.- Maximum discharge during year, 1,670 second-feet Apr. 2 (gage height, 7.94 feet); minimum, 26 second-feet Sept. 27 (gage height, 112 feet).
1928-48: Maximum discharge, 12,300 second-feet Sept. 25, 1947 (gage height, 19.22 feet, from high-water mark), by slope-area method; minimum, 6.3 second-feet Sept. 1, 1932 (gage height, 0.73 foot).
Flood of July 1916 reached a stage of about 17.5 feet, from floodmarks on tree 500 feet below gage.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-9)

Oct. 1 to Apr. 2

1.2	27	3.0	323
1.4	44	4.0	576
1.7	80	5.0	816
2.0	125	6.0	1,080
2.5	216	7.0	1,380

Apr. 3 to Sept. 30

1.1	25	1.6	69
1.2	32	1.8	94
1.4	48		

Note.- Same as preceding table above 1.8 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	81	134	112	320	153	518	125	323	64	38	70
2	76	83	127	130	234	193	1,580	115	205	59	59	50
3	67	258	123	134	188	248	1,220	109	149	54	81	44
4	65	373	122	122	164	269	672	103	128	50	122	41
5	60	386	120	117	201	234	451	106	117	47	212	40
6	55	323	120	112	348	191	311	104	108	45	222	43
7	53	208	115	108	425	357	364	128	112	42	144	47
8	66	191	114	104	514	438	412	169	111	40	81	52
9	125	201	115	104	540	451	399	144	104	39	67	50
10	230	186	117	104	386	451	348	111	93	40	58	46
11	348	269	132	100	399	250	288	98	84	40	69	44
12	360	438	139	96	386	288	252	93	79	42	93	42
13	273	490	134	220	564	234	238	146	75	45	104	38
14	205	451	122	277	1,070	197	313	238	75	53	90	36
15	146	465	131	288	1,320	182	648	197	84	60	120	35
16	112	490	195	252	997	173	527	123	122	76	106	33
17	122	477	193	186	672	208	490	100	164	67	75	32
18	140	438	189	164	490	256	373	94	140	57	67	31
19	147	616	156	134	360	264	262	88	100	53	60	31
20	162	624	139	130	258	222	195	81	84	48	56	30
21	156	624	130	167	212	197	173	76	73	44	55	27
22	162	490	125	203	205	182	160	73	211	44	58	27
23	162	386	119	203	212	188	146	70	184	40	59	29
24	132	311	117	151	214	256	137	71	93	37	51	31
25	98	250	114	132	205	266	132	103	79	35	48	30
26	90	220	115	132	201	226	128	162	69	33	45	28
27	84	188	117	132	191	252	123	438	61	32	44	26
28	84	164	117	139	178	360	120	438	60	31	39	35
29	103	146	115	144	167	360	119	311	67	34	39	86
30	102	139	111	149	-	336	125	258	61	36	44	135
31	90	-	108	304	-	262	-	348	-	35	69	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,173	360	53	135	0.804	0.92
November	9,966	624	81	332	1.98	2.21
December	4,025	195	108	130	.774	.89
Calendar year 1947	69,900	7,990	16	192	1.14	15.47
January	4,850	304	96	156	.929	1.07
February	11,621	1,320	164	401	2.39	2.57
March	8,144	451	153	263	1.57	1.80
April	11,224	1,580	119	374	2.23	2.48
May	4,820	438	70	155	0.923	1.07
June	3,415	323	60	114	.679	.76
July	1,422	76	31	45.9	.273	.31
August	2,475	222	38	79.8	.475	.55
September	1,289	135	26	43.0	.256	.29
Water year 1947-48	67,424	1,580	26	184	1.10	14.92

Peak discharge (base, 1,400 sec.-ft.).- Apr. 2 (5 p.m.) 1,670 sec.-ft.

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 and 3 miles downstream from Stony Creek.

Drainage area.- 599 square miles.

Records available.- October 1928 to September 1948.

Average discharge.- 20 years, 592 second-feet.

Extremes.- Maximum discharge during year, 9,500 second-feet Feb. 14 (gage height, 18.08 feet; minimum, 20 second-feet Sept. 15 (gage height, 1.21 feet); minimum daily, 40 second-feet Sept. 17.

1928-48: Maximum discharge, 37,000 second-feet Sept. 18, 1945 (gage height, 31.10 feet, from high-water mark on gage shelter), by contracted-opening method; minimum, 3 second-feet Sept. 5, 1930; minimum daily, 5 second-feet Sept. 6, 1930.

Remarks.- Records good except those above 6,000 second-feet, which are fair, and those for periods of no gage-height record, which are poor. Large diurnal fluctuation and some regulation for short periods at low flow caused by power plants above station.

Revisions (water years).- W 757: 1929(M). W 782: 1934.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 14

2.0	138	3.5	538	9.0	2,790
2.3	212	4.0	696	11.0	3,920
2.6	289	5.0	1,040	14.0	5,970
3.0	393	7.0	1,860	17.0	8,400

Feb. 15 to Sept. 30

1.4	38	2.6	299	7.0	1,900
1.6	67	3.0	405	9.0	2,800
1.8	103	3.5	549	11.0	3,920
2.0	148	4.0	707	14.0	5,970
2.3	222	5.0	1,070		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	294	152	398	329	816	504	2,110	320	715	345	68	182
2	208	195	535	408	740	643	3,200	311	556	295	460	179
3	183	1,510	418	405	490	1,110	2,880	315	340	200	1,120	159
4	148	1,240	312	341	514	862	1,460	298	302	171	1,340	105
5	182	1,240	359	296	930	724	992	287	264	148	2,080	79
6	170	725	326	283	2,830	626	758	293	270	186	878	123
7	138	504	351	285	2,440	2,930	1,330	312	242	98	621	142
8	158	942	343	295	2,400	2,310	1,150	346	271	173	381	150
9	417	827	384	335	2,290	1,510	1,070	373	263	106	272	132
10	1,560	582	429	297	1,240	1,730	954	332	244	112	202	94
11	839	2,370	377	300	1,120	1,430	741	305	236	89	209	58
12	765	3,460	319	280	1,920	992	690	264	158	141	240	83
13	585	1,910	314	1,660	3,680	724	642	280	169	89	241	225
14	441	1,160	341	2,220	7,740	610	564	604	180	118	298	103
15	363	2,360	423	1,080	4,710	549	3,770	606	186	373	232	61
16	250	2,210	1,280	844	2,750	549	1,990	474	796	309	256	44
17	347	1,680	785	696	1,640	724	1,510	283	750		242	40
18	515	1,120	654	600	1,230	758	916	242	443	a200	192	51
19	492	3,580	533	524	992	674	638	223	298		180	80
20	1,040	2,260	411	407	792	610	508	200	250		244	67
21	557	1,650	407	476	674	579	504	188	217		153	74
22	482	1,200	407	709	775	534	435	178	198	a130	98	87
23	421	1,200	393	596	775	626	378	172	955		189	71
24	349	1,150	380	487	674	954	373	237	836		174	74
25	264	885	380	413	674	826	400	293	344	147	179	67
26	222	645	354	451	674	642	381	332	238	140	176	70
27	228	527	354	517	626	737	349	535	221	120	153	72
28	178	450	380	552	579	1,070	337	817	184	111	136	96
29	311	426	382	574	549	844	312	695	443	121	112	393
30	317	418	332	579	-	724	327	733	342	140	154	450
31	283	-	338	625	-	674	-	756	-	51	289	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,707	1,560	138	410	0.684	0.79
November	38,578	3,580	152	1,286	2.15	2.40
December	13,397	1,280	312	432	.721	.83
Calendar year 1947	225,026	23,900	32	617	1.03	13.98
January	17,864	2,220	280	576	.962	1.11
February	47,264	7,740	490	1,630	2.72	2.93
March	28,779	2,930	504	928	1.55	1.79
April	31,669	3,770	312	1,056	1.76	1.97
May	11,604	817	172	374	.624	.72
June	10,911	955	158	364	.608	.68
July	5,033	373	51	162	.270	.31
August	11,569	2,080	68	373	.623	.72
September	3,611	450	40	120	.200	.22
Water year 1947-48	232,986	7,740	40	637	1.06	14.47

Peak discharge (base, 6,000 sec.-ft.).- Feb. 14 (3:30 p.m.) 9,500 sec.-ft.

a No gage-height record; discharge computed on basis of records for other stations in basin.

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 U. S. Highway 64, and 5 miles east of Pittsboro, Chatham County. Datum of gage is 180.06 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 1,310 square miles.

Records available.- November 1928 to September 1947.

Average discharge.- 19 years (1929-48), 1,267 second-feet.

Extremes.- Maximum discharge during year, 20,500 second-feet Feb. 14 (gage height, 15.28 feet); minimum, 4.5 second-feet Sept. 27 (gage height, 1.24 feet); minimum daily, 7.3 second-feet Sept. 26.

1928-48: Maximum discharge, 79,000 second-feet during night of Sept. 18-19, 1945 (gage height, 28.58 feet, from high-water mark in gage shelter), from rating curve extended above 46,000 second-feet and confirmed by discharge measurement made at site 6 miles upstream; minimum, that of Sept. 27, 1948; minimum daily, that of Sept. 26, 1948.

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

Remarks.- Records good above 50 second-feet and fair below, except those for periods of no gage-height record, which are poor. Large diurnal fluctuation and some regulation for short periods at low flow caused by power plants above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.3	6.8	2.6	318	8.0	6,010
1.4	12	3.0	580	9.0	7,600
1.5	19	3.5	950	10.0	9,320
1.6	28	4.0	1,360	11.0	11,200
1.8	52	5.0	2,260	12.0	13,100
2.0	86	6.0	3,320	13.0	15,100
2.3	169	7.0	4,560	14.0	17,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	639	532	868	666	1,480	1,110	6,260	a600	1,840	439	142	385
2	586	240	a1,000	741	1,270	1,700	6,010	a600	1,300	597	220	387
3	434	1,970	a800	730	1,210	2,990	4,700	a600	998	552	1,540	217
4	211	2,700	a600	586	1,180	2,020	2,880	a550	739	203	2,110	55
5	135	1,790	a650	690	2,270	1,570	1,970	a550	658	122	6,130	13
6	139	1,360	a600	768	9,080	1,310	1,570	a550	273	124	2,170	72
7	230	942	a650	589	8,930	8,680	2,520	a600	376	186	1,190	159
8	258	1,260	a650	485	4,980	6,630	2,660	a700	740	237	725	274
9	266	2,260	a700	479	5,260	3,210	2,060	a700	559	99	590	402
10	1,700	1,270	a800	484	3,280	4,430	a1,800	a650	509	156	546	237
11	1,700	5,530	a700	464	2,360	3,320	a1,400	a600	501	143	413	81
12	1,150	10,000	a600	543	3,920	2,410	a1,300	a500	431	210	441	13
13	998	3,520	a600	3,520	11,600	1,740	a1,200	a550	190	250	378	78
14	755	2,160	a650	8,940	17,300	1,400	a1,100	a1,400	179	287	141	93
15	604	5,630	a800	2,870	12,500	1,360	a6,000	905	356	349	305	260
16	597	5,870	a2,400	1,790	5,120	1,230	a5,000	755	442	837	377	261
17	407	3,160	a1,500	1,440	3,380	1,610	a3,000	688	1,080	605	447	141
18	1,880	2,110	a1,200	1,230	2,510	1,700	a1,800	652	974	355	414	34
19	1,230	6,800	a1,100	1,160	2,020	1,400	a1,200	498	650	296	439	9.9
20	1,790	5,020	974	985	1,700	1,230	a1,000	480	324	531	292	45
21	1,280	2,990	725	915	1,440	1,150	a1,000	407	356	345	86	34
22	866	2,160	792	1,270	1,790	1,150	a900	265	526	328	118	136
23	759	2,110	725	1,360	1,970	1,230	a700	159	564	372	276	162
24	695	2,260	658	1,110	1,520	2,260	a700	171	1,640	434	400	73
25	458	2,020	643	832	1,440	1,970	a750	744	958	532	396	21
26	392	1,440	665	846	1,440	1,440	a750	692	587	261	368	7.3
27	428	1,150	643	868	1,360	1,230	a650	725	261	278	220	32
28	619	1,010	658	1,200	1,230	2,060	a650	1,130	355	296	58	124
29	404	800	732	1,440	1,110	1,740	a600	1,110	499	376	69	284
30	306	755	713	1,400	-	1,400	a650	3,410	507	366	176	1,260
31	412	-	664	2,060	-	1,360	-	4,280	-	144	247	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	22,328	1,880	135	720	0.550	0.63
November	80,819	10,000	240	2,694	2.06	2.29
December	25,460	2,400	600	821	.627	.72
Calendar year 1947	433,228	22,200	19	1,187	.906	12.29
January	42,461	8,940	464	1,370	1.05	1.21
February	114,650	17,300	1,110	3,953	3.02	3.25
March	68,040	8,680	1,110	2,195	1.68	1.93
April	62,780	6,260	600	2,093	1.60	1.78
May	26,221	4,280	159	846	.646	.74
June	19,372	1,840	179	646	.493	.55
July	10,310	837	99	333	.254	.29
August	21,424	6,130	58	691	.527	.61
September	5,350.2	1,260	7.3	178	.136	.15
Water year 1947-48	499,215.2	17,300	7.3	1,364	1.04	14.15

Peak discharge (base, 17,000 sec.-ft.).- Feb. 14 (7 p.m.) 20,500 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

Cape Fear River at Lillington, N. C.

Location.- Water-stage recorder, lat. 35°24'25", long. 78°48'45", at bridge on U. S. Highway 15-A, about 1,800 feet downstream from Norfolk Southern Railway bridge at Lillington, Harnett County, and 1 mile downstream from Neill Creek. Datum of gage is 105.71 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 3,440 square miles.

Records available.- December 1923 to September 1948.

Average discharge.- 24 years (1924-48), 3,331 second-feet.

Extremes.- Maximum discharge during year, 49,900 second-feet Feb. 15 (gage height, 18.50 feet); minimum not determined, occurred during period of no record; minimum daily, 60 second-feet Sept. 26.

1923-48: Maximum discharge, 192,000 second-feet Sept. 19, 1945 (gage height, 33.19 feet from high water mark), from rating curve extended above 70,000 second-feet on basis of logarithmic plotting and area-velocity studies; minimum, 29 second-feet Oct. 8, 1926 (gage height, 0.01 foot); minimum daily, 29 second-feet Oct. 8, 1926.

Remarks.- Records excellent except those below 500 second-feet, which are good, and those for periods of fragmentary or no gage-height record, which are poor. Large diurnal fluctuation and considerable regulation for short periods at low flow caused by power plants above station.

Revisions (water years).- W 1032: 1928, 1942(m).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,320	1,220	2,040	1,480	7,760	2,840	10,700	1,530	7,960	1,270	933	f818
2	987	924	2,040	1,640	5,020	3,740	21,200	1,060	4,510	1,530	f651	1,420
3	1,140	6,220	1,420	1,860	4,340	13,000	14,000	1,250	3,610	1,420	f907	782
4	634	9,460	1,860	1,750	4,260	9,230	8,160	1,300	2,560	1,230	4,090	667
5	331	5,880	1,800	1,640	7,670	6,240	5,700	1,480	1,700	f460	9,920	a260
6	426	4,510	1,530	1,530	22,900	4,510	4,260	1,320	1,370	f392	9,620	a80
7	419	3,070	1,320	1,640	30,400	12,100	5,190	1,180	f761	f454	3,820	a120
8	558	2,420	1,320	1,370	20,900	28,700	7,560	1,260	1,000	f364	2,360	325
9	822	3,060	1,530	1,180	14,300	18,400	7,170	1,320	1,420	f381	1,320	586
10	881	3,370	1,530	1,280	10,400	14,000	5,190	1,100	1,320	f331	1,060	f465
11	3,690	4,340	1,530	1,230	7,560	12,200	4,010	1,180	1,370	a260	814	f532
12	2,920	24,700	1,750	1,230	11,800	8,160	3,930	1,180	987	a280	f706	a380
13	a2,400	16,300	1,800	2,510	34,800	6,060	3,850	1,180	1,060	a300	942	a130
14	a1,800	7,760	1,580	23,200	42,300	4,680	3,220	1,080	f673	f426	854	a280
15	a1,400	8,730	1,050	15,800	47,000	3,930	7,660	1,340	f466	f465	868	a280
16	a1,100	19,900	3,480	7,170	31,200	3,610	10,900	1,640	921	f1,150	888	a280
17	a1,500	11,700	7,360	5,020	16,500	3,610	6,790	1,420	2,490	1,980	798	f372
18	a3,000	6,790	4,510	3,850	8,160	4,510	4,850	1,280	2,630	1,320	588	a320
19	3,610	8,350	3,220	3,070	6,060	4,170	3,530	1,100	1,700	870	728	a100
20	3,370	11,900	2,630	2,700	4,850	3,450	2,770	774	987	897	1,990	a80
21	3,690	8,580	2,300	2,700	4,170	3,070	2,420	879	830	774	1,120	a70
22	2,420	6,060	1,750	3,450	4,510	2,840	2,300	879	1,020	f645	1,070	a65
23	1,530	5,190	1,700	3,850	6,980	2,920	3,660	759	1,020	1,640	743	a100
24	1,280	5,020	1,640	3,220	5,700	4,510	3,070	f435	4,680	1,980	918	a240
25	1,040	5,360	1,530	2,630	4,680	5,530	2,360	f684	3,000	1,690	879	a220
26	710	4,680	1,420	2,160	4,170	4,170	1,700	1,530	1,700	f713	879	a60
27	667	3,610	1,640	2,160	3,930	3,370	1,640	2,670	1,120	830	660	72
28	1,470	2,920	1,420	3,380	3,530	3,690	1,640	4,510	682	862	f400	155
29	2,520	2,490	1,480	6,060	3,140	4,510	1,860	4,010	f608	1,180	f389	701
30	1,320	1,710	1,640	5,530	-	3,530	1,480	3,490	f588	1,590	a230	5,320
31	969	-	1,530	8,410	-	3,000	-	13,200	-	1,590	a140	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	49,924	3,690	331	1,610	0.468	0.54
November	206,224	24,700	924	6,874	2.00	2.23
December	63,350	7,360	1,050	2,044	.594	.68
Calendar year 1947	1,131,297	34,400	129	3,099	.901	12.23
January	124,700	23,200	1,180	4,023	1.17	1.35
February	378,990	47,000	3,140	13,070	3.80	4.10
March	208,280	28,700	2,840	6,719	1.95	2.25
April	162,770	21,200	1,480	5,426	1.58	1.76
May	58,020	13,200	435	1,872	.544	.63
June	54,743	7,960	466	1,825	.531	.59
July	29,274	1,980	260	944	.274	.32
August	51,285	9,920	140	1,654	.481	.55
September	15,280	5,320	60	509	.148	.17
Water year 1947-48	1,402,840	47,000	60	3,833	1.11	15.17

Peak discharge (base, 30,000 sec.-ft.).- Feb. 7 (5 a.m.) 32,800 sec.-ft.; Feb. 15 (6 a.m.) 49,900 sec.-ft.; Mar. 8 (6 a.m.) 32,000 sec.-ft.

a No gage-height record; discharge computed on basis of records for Haw River near Pittsboro and Deep River at Moncure.

f Fragmentary gage-height record; discharge computed from graph based on partly estimated gage heights.

Cape Fear River at lock 3, near Tarheel, N. C.

Location.- Water-stage recorder, 100 feet above concrete dam and lock, lat. 34°50'00", long. 78°48'30", 1 mile downstream from county line and 7 miles north of Tarheel, Bladen County. Datum of gage is 29.75 feet above mean sea level (levels by Corps of Engineers). Auxiliary water-stage recorder in lower pool about 600 feet downstream at same datum.

Drainage area.- 4,810 square miles.

Records available.- October 1937 to September 1948.

Average discharge.- 11 years, 4,852 second-feet.

Extremes.- Maximum gage height during year, 28.23 feet Feb. 16; maximum discharge not determined; minimum discharge, 404 second-feet Sept. 27 (gage height, 0.68 foot); minimum daily, 505 second-feet Sept. 26, 27.

1937-48: Maximum gage height, 43.44 feet Sept. 22, 1945 (discharge not determined); minimum discharge, 200 second-feet Oct. 20, 1940 (gage height, 0.42 foot); minimum daily, 260 second-feet Oct. 19, 1940.

Remarks.- Records excellent between 1,000 and 10,000 second-feet, good above and poor below these limits, except those computed from graph based on twice-daily staff-gage readings and those for days of indefinite stage discharge relation, which are poor. Discharge above 11,000 second-feet computed by using submergence of lock and dam as determined by auxiliary gage as a factor. Slight diurnal fluctuation and some regulation for short periods at low flow caused by power plants above station. Records of water analysis for the water year 1948 are given in Water-Supply Paper 1132.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,900	2,660	4,170	2,900	12,000	5,690	6,460	2,500	16,200	1,540	2,900	990
2	2,340	2,270	4,170	2,990	9,850	5,560	e16,000	2,420	8,770	2,420	2,270	1,600
3	1,900	4,230	3,850	3,270	7,810	g10,500	e24,000	2,040	7,270	2,500	1,970	1,830
4	1,900	12,000	3,560	3,360	7,270	g15,100	e18,000	2,200	5,320	2,120	3,000	1,420
5	1,310	12,500	3,750	3,270	8,370	g12,100	e11,000	2,500	3,850	1,640	6,670	1,130
6	1,010	9,250	3,650	3,080	g15,800	9,850	8,370	2,500	2,740	1,210	12,800	906
7	1,200	7,000	3,180	2,990	e24,000	8,660	6,730	2,660	2,500	1,110	9,010	865
8	1,360	5,560	3,080	2,990	e32,000	e28,000	9,250	2,120	2,420	1,070	4,500	948
9	1,700	5,320	3,180	2,580	e26,000	e30,000	9,850	2,270	2,900	969	2,990	1,110
10	1,970	5,940	3,360	2,500	e19,000	e26,000	8,950	2,120	2,900	927	2,120	1,310
11	2,700	6,730	3,650	2,270	g15,400	e22,000	7,270	2,040	2,580	709	1,830	1,480
12	4,390	17,700	3,960	2,340	g12,500	e18,000	6,730	2,120	2,270	662	1,460	1,430
13	3,750	27,600	4,060	2,580	e24,000	g13,000	6,730	2,200	1,830	825	1,310	1,280
14	3,360	18,600	3,960	g12,000	e40,000	11,400	6,200	2,420	1,900	845	1,440	1,020
15	2,900	14,600	3,460	e24,000	e50,000	8,090	6,070	2,270	1,660	958	1,420	980
16	2,580	15,800	3,960	e20,000	e50,000	7,000	12,600	2,420	1,510	1,180	1,510	969
17	2,580	22,500	8,080	g11,200	e40,000	6,860	12,300	2,580	2,660	2,200	1,560	916
18	3,460	17,800	8,950	7,810	e30,000	7,000	8,370	2,270	4,060	2,660	1,440	896
19	4,500	13,400	6,600	6,200	19,400	7,540	6,460	2,120	3,650	2,340	1,280	709
20	4,960	13,300	5,200	5,200	13,500	6,600	4,960	1,830	2,580	2,120	2,720	728
21	4,960	16,100	4,280	5,080	9,970	5,820	4,170	1,470	1,900	2,500	3,270	738
22	4,170	13,300	3,960	5,560	8,090	5,440	4,060	1,470	1,830	1,970	2,420	624
23	3,080	10,800	3,460	6,330	9,550	5,200	4,280	1,420	2,270	1,970	2,340	586
24	2,340	10,200	3,180	5,940	10,800	5,440	5,320	1,260	3,440	2,900	1,830	532
25	2,120	9,850	3,270	5,080	8,950	7,270	4,060	1,090	5,200	2,900	1,760	559
26	1,570	9,250	3,360	4,500	8,090	7,270	3,650	1,520	3,460	2,420	1,530	505
27	1,370	8,090	3,270	4,060	7,270	5,940	3,080	3,100	2,200	1,700	1,440	505
28	1,580	6,730	3,180	5,320	6,730	5,560	2,900	7,540	1,570	1,660	1,210	738
29	3,890	5,690	2,900	7,810	6,200	6,460	2,820	8,950	1,210	2,780	766	948
30	4,280	4,840	3,080	8,950	-	6,730	2,900	8,370	1,160	3,650	709	3,220
31	3,360	-	2,990	9,250	-	5,690	-	12,000	-	3,650	776	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	85,490	4,960	1,010	2,758	0.573	0.66
November	329,610	27,600	2,270	10,990	2.28	2.55
December	124,760	8,950	2,900	4,025	.837	.96
Calendar year 1947	1,772,520	36,400	624	4,856	1.01	13.70
January	191,410	24,000	2,270	6,175	1.28	1.48
February	532,550	50,000	6,200	18,360	3.82	4.12
March	325,770	30,000	5,200	10,510	2.19	2.52
April	233,540	24,000	2,820	7,785	1.62	1.81
May	93,790	12,000	1,090	3,025	.629	.73
June	103,810	16,200	1,160	3,460	.719	.80
July	58,105	3,650	662	1,874	.390	.45
August	82,291	12,800	709	2,655	.552	.64
September	31,472	3,220	505	1,049	.218	.24
Water year 1947-48	2,192,598	50,000	505	5,991	1.25	16.96

e Stage-discharge relation indefinite; discharge computed on basis of records for station at Lillington.

g Computed from graph based on twice-daily gage readings.

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 1948.

Average discharge.- 20 years, 116 second-feet.

Extremes.- Maximum discharge during year, 1,190 second-feet Apr. 2 (gage height, 5.67 feet); minimum, 2.0 second-feet Sept. 22 (gage height, 0.68 foot); minimum daily, 8.7 second-feet Sept. 19.

1928-48: Maximum discharge, 11,600 second-feet Sept. 25, 1947 (gage height, 20.77 feet); minimum, 0.6 second-foot sometime during period Nov. 12 to Dec. 8, 1941; minmum daily, 0.9 second-foot Sept. 25, 1942.

Remarks.- Records good except those for period of no gage-height record, which are poor. Considerable diurnal fluctuation caused by power plants above station. Flow partly regulated since 1923 by reservoir (capacity, 113,256,000 cubic feet) 14 miles above station from which city of Greensboro diverted about 13 second-feet during year.

Rating table, water year 1947-48 (gage heights, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 2, Apr. 4-14, Aug. 24 to Sept. 30)

0.8	5.6	1.3	40	3.0	414
.9	10	1.5	63	4.0	680
1.0	16	1.7	93	5.0	980
1.1	23	2.0	156		
1.2	31	2.5	284		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	25	109	63	58	90	394	40	253	48	34	24
2	25	28	246	74	75	137	1,050	47	90	38	56	21
3	24	287	64	67	69	168	625	63	41	34	69	22
4	23	309	46	63	60	174	255	63	35	30	261	15
5	22	320	42	64	132	174	151	64	32	27	276	13
6	20	81	42	69	350	168	114	60	29	26	258	17
7	18	49	41	80	424	364	186	46	44	23	176	20
8	22	111	50	78	632	328	179	47	50	20	82	18
9	53	107	141	71	440	284	271	66	44	21	34	19
10	83	79	170	55	256	388	245	90	56	16	28	19
11	70	301	88	51	284	349	164	80	25	17	29	14
12	50	511	54	52	336	211	157	41	22	17	24	14
13	39	510	46	190	470	80	116	65	22	15	112	17
14	31	180	42	216	943	62	208	158	24	16	61	19
15	26	255	63	162	940	65	432	265	22	19	31	13
16	28	497	104	258	573	119	531	87	134	22	29	13
17	49	466	152	196	271	146	500	42	126	30	29	13
18	70	219	172	161	214	134	151	37	44	a24	26	9.1
19	116	359	108	134	186	123	69	32	46	a20	26	8.7
20	87	630	76	57	166	122	95	28	42	a19	28	17
21	116	362	71	61	156	119	108	27	40	a19	22	12
22	98	305	69	73	128	115	56	34	106	a19	22	11
23	82	300	67	59	80	137	49	62	94	a19	31	12
24	76	280	66	51	102	159	75	42	50	a17	52	13
25	69	100	64	72	121	133	79	65	49	a15	39	11
26	40	66	67	172	117	118	76	86	43	20	31	9.1
27	29	57	67	153	109	163	75	158	38	18	24	10
28	30	53	64	130	102	188	69	214	36	16	22	14
29	36	50	63	119	98	149	47	103	45	33	18	23
30	29	55	61	119	-	128	44	162	48	25	18	27
31	26	-	59	100	-	144	-	150	-	21	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,516	116	18	48.9		
November	6,952	630	25	232		
December	2,574	246	41	83.0		
Calendar year 1947	46,516.0	7,240	1.2	127		
January	3,270	258	51	105		
February	7,892	943	58	272		
March	5,239	388	62	169		
April	6,571	1,050	44	219		
May	2,524	265	27	81.4		
June	1,730	253	22	57.7		
July	704	48	15	22.7		
August	1,968	276	18	63.5		
September	467.9	27	8.7	15.6		
Water year 1947-48	41,407.9	1,050	8.7	113		

Peak discharge (base, 1,600 sec.-ft.).- No peak above base.

a No gage-height record; discharge computed on basis of recorded range in stage and records for Haw River near Benaja and other nearby stations.

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 county road, a quarter of a mile downstream from U. S. Highway 220, three-quarters of a mile north of Battle Ground, Guilford County, and about 2½ miles upstream from mouth.

Drainage area.- 15.9 square miles.

Records available.- November 1925 to July 1931, May 1934 to September 1948.

Average discharge.- 15 years (1929-30, 1934-48), 14.8 second-feet.

Extremes.- Maximum discharge during year, 262 second-feet Feb. 14 (gage height, 5.78 feet); minimum, 1.9 second-feet Sept. 21 (gage height, 0.55 foot).

1925-31, 1934-48: Maximum discharge, 6,400 second-feet Sept. 24, 1947 (gage height, 10.36 feet), from rating curve extended above 600 second-feet on basis of contracted-opening computation at 10.36 feet; minimum, 0.7 second-foot July 24, 1926.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	4.6	9.0	9.2	19	12	150	8.7	11	6.3	3.3	2.8
2	5.2	5.7	8.6	12	15	33	37	8.3	8.3	5.3	4.4	2.8
3	5.0	92	8.4	8.0	14	23	22	8.2	7.6	5.0	4.4	2.8
4	5.2	21	8.4	7.9	20	17	18	8.2	7.2	5.2	51	2.6
5	4.9	13	8.4	7.9	53	14	15	8.3	6.9	5.9	21	2.9
6	4.8	8.0	8.2	7.9	141	14	15	8.0	6.5	5.2	5.2	3.6
7	4.9	7.1	7.9	7.5	59	124	29	11	7.0	4.4	4.4	3.9
8	5.8	30	8.4	7.3	53	38	28	8.2	7.4	4.4	4.2	3.3
9	16	12	7.7	7.5	35	26	18	7.8	6.5	4.4	3.8	3.1
10	13	8.0	9.2	7.3	27	32	14	7.6	5.8	4.4	4.1	2.8
11	8.0	96	11	7.0	21	21	15	7.2	5.7	4.4	6.8	2.8
12	6.6	77	9.0	7.3	82	17	16	9.1	5.2	4.4	4.4	2.6
13	6.1	21	8.2	88	130	16	13	38	5.4	4.5	4.1	2.5
14	5.5	14	7.9	40	185	14	57	15	15	5.2	3.6	3.9
15	5.2	114	13	20	47	14	71	8.9	35	6.6	4.1	3.6
16	6.0	36	28	16	29	16	23	8.2	40	5.2	3.8	2.5
17	9.4	19	12	15	24	20	18	8.0	10	4.7	3.9	2.8
18	6.8	17	10	14	19	14	15	7.6	8.2	4.4	3.9	2.6
19	20	141	9.4	12	17	14	14	7.0	7.6	4.2	4.2	2.3
20	26	34	8.6	12	16	14	13	6.9	7.0	4.1	4.4	2.0
21	7.7	21	8.4	23	15	13	11	6.9	6.6	3.9	4.4	2.0
22	6.0	17	8.0	21	23	12	11	6.9	10	4.4	4.1	2.3
23	5.5	20	7.7	15	18	16	11	7.0	10	14	3.8	2.5
24	5.2	21	7.5	14	16	17	10	10	7.2	4.2	3.6	2.3
25	5.0	16	8.0	14	17	13	10	9.5	7.0	3.8	3.6	2.3
26	5.2	13	8.6	12	16	12	9.5	16	6.1	3.8	3.5	2.3
27	5.2	12	8.4	15	15	44	9.5	8.9	5.9	3.6	3.1	2.4
28	6.3	11	8.2	18	14	21	9.1	8.2	6.9	4.2	2.8	7.0
29	6.0	10	7.9	17	13	15	9.9	9.1	7.7	4.2	2.8	14
30	5.0	9.6	7.5	20	-	14	9.5	18	6.1	3.8	2.8	20
31	4.8	-	7.5	19	-	53	-	20	-	3.5	3.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	231.8	26	4.8	7.48	0.470	0.54
November	921.0	141	4.6	30.7	1.93	2.15
December	289.0	28	7.5	9.32	.586	.68
Calendar year 1947	6,383.7	1,080	1.8	17.5	1.10	14.93
January	501.8	88	7.0	16.2	1.02	1.17
February	1,153	185	13	39.8	2.50	2.70
March	723	124	12	23.3	1.47	1.69
April	701.5	150	9.1	23.4	1.47	1.64
May	320.7	38	6.9	10.3	.648	.75
June	286.8	40	5.2	9.56	.601	.67
July	151.6	14	3.5	4.89	.308	.35
August	186.8	51	2.8	6.03	.379	.44
September	115.3	20	2.0	3.84	.242	.27
Water year 1947-48	5,582.3	185	2.0	15.3	.962	13.05

Peak discharge (base, 300 sec.-ft.).- No peak above base.

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 1948.

Average discharge.- 20 years, 35.8 second-feet.

Extremes.- Maximum discharge during year, 590 second-feet Feb. 14 (gage height, 6.70 feet); minimum not determined.
1928-48: Maximum discharge, 8,000 second-feet Sept. 25, 1947 (gage height, 10.64 feet), by contracted-opening method; minimum, 0.2 second-foot Oct. 2, 1930.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Sewage from Greensboro enters just above station affecting low-water flow.

Revisions (water years).- W 972: 1928-33, 1934(M), 1935-37, 1939, 194?(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	12	22	20	a34	23	264	13	14	52	7.6	7.6
2	9.1	12	22	40	a36	56	279	11	10	16	47	6.5
3	8.6	195	21	25	a46	82	71	11	9.5	11	50	6.2
4	7.9	268	20	19	a70	41	44	11	9.3	8.3	91	6.3
5	6.5	48	21	18	a140	32	37	13	8.6	6.9	294	a7
6	6.5	30	20	18	a340	28	36	11	7.3	6.2	96	
7	7.5	24	18	17	a180	229	88	21	12	6.2	17	
8	11	91	18	16	a120	350	78	16	21	5.7	12	
9	31	74	21	16	a75	73	57	11	11	5.4	11	
10	47	31	20	16	a55	104	38	9.9	8.8	5.4	10	
11	21	119	27	13	49	66	35	9.9	8.3	5.0	15	
12	15	403	24	14	120	45	38	11	7.6	5.5	11	
13	a14	135	22	130	440	36	32	30	6.5	11	9.7	
14	a14	41	18	335	530	33	47	34	9.1	7.0	8.8	
15	a14	158	25	77	345	31	371	16	58	56	7.6	a6
16	18	306	84	35	75	33	175	12	236	31	7.8	
17	132	78	37	34	51	74	40	10	76	12	8.8	
18	40	46	28	30	43	43	28	10	18	7.8	9.0	
19	23	250	25	24	38	34	25	8.8	12	9.8	8.3	
20	34	275	22	24	35	32	24	9.0	8.8	16	12	
21	18	64	20	45	32	29	22	8.6	7.9	8.6	9.5	
22	14	40	20	49	49	26	18	8.1	9.0	10	12	
23	12	52	20	34	44	52	17	7.2	50	10	8.4	
24	12	52	18	26	36	121	16	7.9	19	8.8	8.1	
25	12	50	18	20	38	49	15	17	13	6.0	7.9	
26	10	35	20	19	37	34	14	14	9.1	6.0	7.5	
27	a12	29	21	29	33	53	14	16	7.2	6.6	7.0	
28	a26	27	20	a70	30	68	13	13	11	6.3	6.9	a30
29	a18	24	19	a60	27	34	14	16	88	6.8	5.2	a50
30	a14	23	18	a70	-	29	15	16	31	6.6	5.6	a40
31	a13	-	18	a50	-	57	-	20	-	6.2	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	631.1	132	6.5	20.4		
November	2,992	403	12	99.7		
December	727	84	18	23.5		
Calendar year 1947	16,220.1	3,500	2.9	44.4		
January	1,393	335	13	44.9		
February	3,148	530	27	109		
March	1,997	350	23	64.4		
April	1,965	371	13	65.5		
May	422.4	34	7.2	13.6		
June	797.0	236	6.5	26.6		
July	366.1	56	5.0	11.8		
August	823.7	294	5.2	26.6		
September	294.6	50	6	9.82		
Water year 1947-48	15,556.9	530	5.0	42.5		

Peak discharge (base, 650 sec.-ft.).- No peaks above base.

a No gage-height record; discharge computed on basis of recorded range in stage, rainfall records, and records for nearby stations.

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 mouth and 6 miles northeast of Greensboro, Guilford County.

Drainage area.- 36.4 square miles.

Records available.- August 1928 to September 1948.

Average discharge.- 20 years, 44.5 second-feet.

Extremes.- Maximum discharge during year, 1,290 second-feet Apr. 15 (gage height, 9.22 feet); minimum, 5.8 second-feet Sept. 26 (gage height, 1.75 feet).

1928-48: Maximum discharge, 6,000 second-feet Sept. 25, 1947 (gage height, 15.96 feet), from rating curve extended above 2,000 second-feet on basis of contracted-opening determinations at gage heights 14.15 and 15.96 feet; minimum, 1.6 second-feet Aug. 28, 1932.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Diurnal fluctuation at low flow caused by mills above station. Sewage from Greensboro and Proximity Mills enters above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-7)

1.9	12	3.0	129
2.0	18	3.5	221
2.3	42	4.0	321
2.6	74	5.0	521

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	22	27	37	38	31	325	a22	31	45	66	20
2	20	20	29	48	42	109	154		30	27	76	19
3	22	308	28	30	52	74	70		28	20	83	17
4	19	70	30	26	76	51	51		30	14	252	13
5	14	41	35	27	162	41	48		26	12	179	10
6	16	33	30	30	339	36	46		19	17	36	10
7	21	30	25	29	128	429	105	a26	44	19	24	17
8	27	124	27	28	110	112	88		35	19	17	18
9	191	39	27	27	82	71	56		25	18	18	18
10	172	36	31	25	60	116	42		22	17	23	18
11	123	297	36	19	54	66	39		23	13	27	14
12	78	166	31	23	256	53	45	34	19	16	22	11
13	26	53	28	267	321	44	40	69	13	21	22	13
14	24	41	22	100	432	38	242	41	23	20	17	17
15	27	279	50	46	110	39	562	24	120	46	15	17
16	42	92	82	44	74	48	104	19	100	24	20	16
17	134	54	40	40	64	84	58	22	31	19	24	17
18	35	51	38	34	54	46	44	24	24	13	22	13
19	75	326	33	32	47	44	42	24	22	14	22	11
20	64	87	28	36	44	40	40	24	15	18	20	12
21	32	54	24	67	38	33	39	24	19	19	18	16
22	27	44	25	52	66	35	a34	21	64	19	19	17
23	25	58	27	39	48	75		15	96	23	22	16
24	24	58	24	31	45	91		30	29	15	22	15
25	21	48	22	27	49	45		44	27	10	22	13
26	17	40	25	31	47	40	a26	43	20	10	21	9.3
27	20	31	25	50	42	100		31	16	11	19	11
28	44	31	22	61	38	55		31	143	12	16	68
29	35	28	25	50	31	38		49	197	14	12	71
30	25	26	28	64	-	38		30	68	12	16	63
31	24	-	29	54	-	160	-	45	-	11	51	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,441	191	14	46.5		
November	2,587	326	20	86.2		
December	953	82	22	30.7		
Calendar year 1947	18,470.2	2,480	8.8	50.6		
January	1,474	267	19	47.5		
February	2,949	432	31	102		
March	2,282	429	31	73.6		
April	2,506	562	26	83.5		
May	906	69	15	29.2		
June	1,359	197	13	45.3		
July	568	46	10	18.3		
August	1,223	252	12	39.5		
September	600.3	71	9.3	20.0		
Water year 1947-48	18,848.3	562	9.3	51.5		

Peak discharge (base, 920 sec.-ft.).- Apr. 15 (1:30 a.m.) 1,290 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for nearby streams.

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

Location.- Water-stage recorder and modified Parshall flume, lat. 36°00'15", long. 79°58'40", a quarter of a mile upstream from county road 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.

Records available.- June 1923 to September 1926, July 1928 to September 1948.

Average discharge.- 23 years, 31.5 second-feet.

Extremes.- Maximum discharge during year, 692 second-feet Apr. 1 (gage height, 8.99 feet, from high-water mark); minimum not determined, probably occurred during period of no gage-height record.

1923-26, 1928-48: Maximum discharge, 8,450 second-feet Sept. 21, 1947 (gage height, 19.92 feet, from high-water mark), from rating curve extended above 2,000 second-feet on basis of contracted-opening computation at 19.92 feet; minimum, 0.3 second-foot Sept. 1, 1932.

Remarks.- Records good except those for periods of ice effect or fragmentary or no gage-height record, which are poor. Occasional marked diurnal fluctuation caused by gristmill 4 miles above station.

Revisions (water years).- W 922: 1928-29(M), 1933(M), 1936(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.7	7.1	3.2	24	4.3	100	6.0	318
2.8	9.8	3.4	33	4.6	142	6.5	363
2.9	13	3.7	47	5.0	198	7.0	408
3.0	16	4.0	67	5.5	264	7.5	458

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a14	10	19	21	35	22	f453	a16	20	12	6.2	7.4
2	a13	17	18	27	28	80	96	a16	15	7.9	9.8	6.9
3	a12	67	18	18	30	50	47	a15	15	7.4	13	6.4
4	a11	25	18	17	48	35	38	a15	19	7.1	205	6.4
5	a10	18	18	16	126	27	33	a15	19	6.9	96	7.1
6	f8.7	15	17	16	333	26	31	a16	14	6.2	16	7.4
7	9.8	14	16	15	158	284	70	a34	42	5.7	12	7.6
8	12	55	18	*15	141	80	73	a24	28	5.7	11	7.1
9	63	22	17	15	96	53	38	a14	16	5.7	9.3	7.1
10	77	17	20	14	*b46	66	30	a13	13	6.0	34	a7
11	38	199	23	13	42	41	31	13	12	6.4	254	a6.5
12	24	125	20	14	211	34	36	16	12	6.4	26	a6.5
13	19	38	18	198	308	29	28	71	11	7.6	17	a6
14	16	28	17	70	408	28	118	28	16	6.9	14	a6
15	14	238	48	30	96	25	174	17	16	31	13	a7
16	14	80	68	24	55	32	49	14	11	11	10	a7
17	16	39	30	25	44	60	35	14	11	8.7	11	a8
18	19	47	24	23	38	32	29	14	9.8	7.6	9.5	a8
19	18	286	22	18	34	28	27	12	10	13	9.0	a8
20	34	75	20	20	31	27	25	12	8.7	11	14	a7.5
21	16	41	19	46	28	25	a22	11	8.4	6.6	11	a7
22	14	35	18	41	48	24	a20	11	8.7	7.6	9.8	a7
23	12	39	18	28	36	50	a20	10	10	18	8.4	a7
24	12	39	17	18	31	67	a20	20	9.0	7.6	8.2	a7
25	11	31	18	19	35	34	a18	24	9.5	6.4	7.6	a7
26	11	25	19	19	33	29	a18	72	7.4	6.2	7.1	a7
27	11	23	19	30	29	99	a18	21	7.4	6.0	6.9	a7
28	16	21	19	40	27	50	a17	18	15	6.0	7.1	a30
29	15	19	17	33	25	33	a17	18	12	13	6.6	a28
30	12	20	16	54	-	28	a17	41	21	7.1	6.4	a22
31	11	-	16	43	-	120	-	25	-	6.2	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	583.5	77	8.7	18.8	0.586	0.68
November	1,708	286	10	56.9	1.77	1.98
December	665	68	16	21.5	.670	.77
Calendar year 1947	13,647.0	2,000	2.8	37.4	1.17	15.81
January	980	198	13	31.6	.984	1.14
February	2,600	408	25	89.7	2.79	3.01
March	1,620	284	22	52.3	1.63	1.88
April	1,648	453	17	54.9	1.71	1.91
May	660	72	10	21.3	.664	.76
June	426.9	42	7.4	14.2	.442	.49
July	270.9	31	5.7	8.74	.272	.31
August	883.9	254	6.2	28.5	.888	1.02
September	269.9	30	6	9.00	.280	.31
Water year 1947-48	12,316.1	453	5.7	33.7	1.05	14.26

Peak discharge (base, 700 sec.-ft.).- No peaks above base.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for East Fork Deep River near High Point.

b Stage-discharge relation affected by ice.

f Fragmentary gage-height record; discharge computed on basis of partly estimated gage-height record.

Deep River near Randleman, N. C.

Location.- Water-stage recorder, lat. 35°54'10", long. 79°51'15", 500 feet downstream from county bridge at Coltrane's Mill, half a mile south of Guilford County line, 4½ miles above Muddy Creek, and 7 miles north of Randleman, Randolph County. Datum of gage is 638.11 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 124 square miles.

Records available.- October 1928 to September 1948.

Average discharge.- 20 years, 119 second-feet.

Extremes.- Maximum discharge during year, 2,570 second-feet Feb. 14 (gage height, 12.70 feet); minimum, 2.2 second-feet Sept. 16; minimum daily, 7.2 second-feet Sept. 27.
1928-48: Maximum discharge, 20,000 second-feet Sept. 25, 1947 (gage height, 32.2 feet, from high-water mark), by contracted opening method at bridge 1½ miles upstream; minimum, 0.5 second-foot Nov. 28, 1931 (gage height, 1.41 feet); minimum daily, 1.2 second-feet Nov. 12, 1933.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are poor. Large diurnal fluctuation at low flow caused by Coltrane's Mill. Flow slightly regulated by High Point Reservoir.

Revisions (water years).- W 782: 1929-30.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42				149	106	-	31	82	122	23	27
2	51				147	238	-	62	30	54	94	22
3	38				148	211	†201	42	71	30	49	19
4	11				129	155	159	62	32	34	310	19
5	a40			a70	468	130	148	40	34	26	496	20
6	d42				1,270	142	-	107	31	27	101	19
7	d23				592	-	-	46	80	25	49	27
8	d38				401	-	-	42	123	17	23	32
9	d42			34	337	-	-	a80	43	12	44	23
10	d97			31	219	-	-	a85	52	9.2	35	20
11	d97			29	188	-	-	38	46	16	356	18
12	d81			66	744	-	-	34	25	21	112	17
13	d79			678	1,250	-	-	159	21	16	67	16
14	d66			440	1,710	-	-	192	35	21	39	17
15	d64			177	480	-	-	67	23	231	29	19
16	d59			134	255	-	-	49	82	63	21	9.3
17	d45	†191		128	a200	-	-	108	32	29	43	22
18	d41			64	d181	-	-	72	41	33	33	22
19	d48			87	158	-	-	28	38	25	70	12
20	d45			89	150	-	-	23	38	29	48	12
21	d41			81	128	-	76	53	17	28	33	11
22	d42			156	133	-	78	35	87	24	34	11
23	d37			129	160	-	-	21	204	40	27	11
24	d23			106	146	-	-	28	54	38	22	11
25	d20			65	154	-	-	88	32	25	24	19
26	d21			90	88	-	-	90	30	24	30	16
27	d33			68	128	-	35	102	36	19	31	7.2
28	d26			141	129	-	74	58	31	14	28	19
29	d52			156	62	-	49	54	142	22	28	41
30	d37			192	-	-	33	80	79	28	21	90
31	d20	-		234	-	-	-	120	-	22	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,401	97	11	45.2	0.365	0.42
November	6,690	-	-	223	1.80	2.01
December	2,499	-	-	80.6	.650	.75
Calendar year 1947	48,418.6	12,000	2.4	133	1.07	14.52
January	3,935	678	29	127	1.02	1.18
February	10,304	1,710	62	355	2.86	3.09
March	6,541	-	-	211	1.70	1.96
April	5,940	-	-	198	1.60	1.78
May	2,096	192	21	67.6	.545	.63
June	1,671	204	17	55.7	.449	.50
July	1,124.2	231	9.2	36.3	.293	.34
August	2,348	496	21	75.7	.610	.70
September	828.5	90	7.2	21.0	.169	.19
Water year 1947-48	45,177.7	1,710	7.2	123	.992	13.55

Peak discharge (base, 2,600 sec.-ft.).- No peaks above base.
† Result of discharge measurement.
a No gage-height record; discharge computed on basis of other records in basin.
d Computed on basis of doubtful gage heights.
Note.- Monthly mean discharge for November, December, March and April computed on basis of records for other stations in basin.

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. Datum of gage is 419.50 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 346 square miles.

Records available.- November 1922 to September 1948.

Average discharge.- 25 years (1923-48), 348 second-feet.

Extremes.- Maximum discharge during year, 8,260 second-feet Feb. 14 (gage height, 13.60 feet); minimum, 6.5 second-feet May 22, Sept. 10-13 (gage height, 0.40 foot); minimum daily, 7.4 second-feet Sept. 11, 12.

1922-48: Maximum discharge, 43,000 second-feet Sept. 18, 1945 (gage height, 34.04 feet, from high-water mark), by slope-area method; minimum, 0.4 second-foot May 27, Nov. 28, 29, 1941; minimum daily, 0.7 second-foot Nov. 29, 1941.

Remarks.- Records good except those for periods of fragmentary or no gage-height record, which are poor. Large diurnal fluctuation caused by power plants above station. Flow slightly regulated by High Point Reservoir and small power-plant reservoirs.

Revisions (water years).- W 1032: 1923-26, 1927-28(M), 1929, 1930(M), 1932-33, 1934(M), 1935, 1936-37(M), 1944(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	a110	a140	149	509	270	2,110	130	321	241	12	204
2	18	51		106	392	524	1,560	74	257	261	245	124
3	19	1,070		229	389	782	642	208	160	146	1,340	12
4	48	608		125	476	480	455	209	176	38	1,130	13
5	40	261	92	222	1,390	350	398	209	79	77	2,570	13
6	125	197	204	213	4,290	315	343	128	31	36	445	43
7	139	204	60	210	2,290	3,100	707	67	103	26	190	182
8	42	843	204	129	1,200	1,610	968	258	225	68	109	125
9	19	474	195	95	1,050	728	586	68	248	64	184	31
10	145	294	194	196	615	1,170	353	209	178	28	184	28
11	253	1,540	91	46	499	755	322	201	84	23	90	7.4
12	102	2,340	202	130	2,410	535	380	116	12	86	304	7.4
13	231	800	177	2,590	3,990	399	316	83	22	134	205	56
14	181	352	45	2,140	6,130	356	312	420	116	169	165	126
15	99	1,840	338	628	1,980	341	1,450	272	287	463	44	25
16	20	1,480	1,030	382	813	386	634	57	202	494	117	33
17	249	600	453	311	618	930	364	202	112	138	147	22
18	612	372	319	259	590	510	293	212	67	40	75	18
19	289	1,760	258	264	432	395	296	209	121	172	20	14
20	294	1,100	212	243	332	342	283	190	44	201	183	29
21	213	546	106	232	321	300	229	80	92	112	151	121
22	140	350	228	330	488	305	495	10	123	12	271	30
23	22	300	223	311	516	586	283	12	845	13	201	14
24	173	1,000	112	280	392	930	212	128	324	78	208	15
25	a110	a300	99	154	371	542	80	218	228	45	119	15
26			167	247	371	375	239	211	83	150	17	15
27			179	241	369	535	184	262	34	186	18	16
28			174	428	293	914	250	235	105	73	20	47
29			218	434	261	452	185	283	242	13	20	217
30			217	650	-	330	87	272	188	50	63	f170
31		-	210	992	-	356	-	491	-	12	369	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,357	612	18	141	0.408	0.47
November	20,092	2,340	51	670	1.94	2.16
December	6,567	1,030	45	212	.613	.71
Calendar year 1947	118,389	14,400	13	324	.936	12.73
January	12,966	2,590	46	418	1.21	1.39
February	33,777	6,130	261	1,165	3.37	3.63
March	19,903	3,100	270	642	1.86	2.14
April	15,016	2,110	80	501	1.45	1.61
May	5,724	491	10	185	.535	.62
June	5,109	845	12	170	.491	.55
July	3,647	494	12	118	.341	.39
August	9,216	2,570	12	297	.858	.99
September	1,772.8	217	7.4	59.1	.171	.19
Water year 1947-48	138,146.8	6,130	7.4	377	1.09	14.85

Peak discharge (base, 6,000 sec.-ft.).- Feb. 14 (10:15 a.m.) 8,260 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations near Randleman and at Moncure.

f Fragmentary gage-height record; discharge computed on basis of partly estimated gage heights.

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, 2¼ miles downstream from Rocky River, and 4½ miles upstream from confluence with Haw River. Datum of gage is 185.88 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 1,410 square miles.

Records available.- May 1898 to December 1899, July 1930 to September 1948.

Average discharge.- 18 years (1930-48), 1,392 second-feet.

Extremes.- Maximum discharge during year, 24,400 second-feet Feb. 14 (gage height, 9.35 feet); minimum, 55 second-feet Oct. 7 (gage height, 0.89 foot); minimum daily, 64 second-feet Aug. 30, 31, Sept. 24, 25.

1898-99, 1930-48: Maximum discharge, 80,300 second-feet Sept. 18, 1945 (gage height, 17.20 feet); minimum, 9 second-feet Nov. 11, 1941.

Remarks.- Records good above 250 second-feet and fair below. Diurnal fluctuation and considerable regulation for short periods caused by power plants above station.

Revisions (water years).- W 1082: 1930-46 (1943-46 not previously published).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.0	79	1.8	467	3.0	1,800	6.0	9,340
1.2	139	2.0	621	3.5	2,700	7.0	13,200
1.4	224	2.3	900	4.0	3,740	8.0	17,300
1.6	334	2.6	1,230	5.0	6,240	9.0	22,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	297	307	726	605	3,960	1,110	7,960	638	3,210	534	565	1,030
2	336	201	565	573	2,220	2,240	10,800	504	1,360	810	272	716
3	240	1,460	519	830	1,860	7,100	5,260	504	990	754	502	432
4	79	2,900	573	781	2,100	4,180	2,420	504	744	489	1,880	282
5	187	1,660	565	581	4,990	2,400	1,740	664	589	253	4,210	103
6	84	950	526	638	12,800	1,640	1,490	638	589	240	4,300	84
7	68	541	426	647	13,600	8,020	2,120	511	260	136	1,310	84
8	350	467	446	557	9,400	13,200	3,000	519	316	103	830	192
9	162	647	482	549	4,070	9,120	3,630	511	573	191	511	106
10	139	1,260	467	534	3,100	5,160	2,080	489	744	106	250	152
11	1,150	2,510	605	557	2,440	4,780	1,530	467	581	75	271	228
12	655	9,700	530	482	7,530	3,100	1,880	489	412	66	446	95
13	581	6,500	681	2,450	17,800	2,200	1,860	467	541	178	330	188
14	489	2,100	526	10,800	22,200	1,760	1,390	504	235	103	253	101
15	268	3,600	511	7,500	18,700	1,530	3,820	541	101	89	519	79
16	387	8,020	2,040	2,400	15,600	1,420	4,070	638	910	783	348	75
17	581	4,360	3,300	1,420	5,310	1,520	2,220	565	1,640	1,150	151	70
18	960	1,940	1,680	1,190	2,500	2,170	1,460	504	970	716	246	70
19	1,210	1,530	1,110	1,070	2,080	1,660	1,120	317	573	419	348	72
20	920	2,960	920	920	1,760	1,350	1,040	379	489	155	673	72
21	638	2,900	820	1,020	1,520	1,230	1,000	446	467	99	763	72
22	573	1,700	681	1,430	2,070	1,120	1,210	453	309	405	541	68
23	360	1,270	573	1,420	3,200	1,180	2,900	311	1,810	526	453	66
24	372	1,470	573	1,190	2,260	2,360	1,490	129	2,660	534	474	64
25	250	2,010	557	1,020	1,760	2,310	1,060	347	1,090	398	405	64
26	187	1,710	597	870	1,640	1,580	850	347	673	439	288	66
27	178	1,190	557	735	1,540	1,270	655	1,210	426	511	224	66
28	289	990	565	2,430	1,370	1,400	820	1,530	282	372	229	72
29	236	772	597	3,300	1,190	1,880	681	950	129	482	109	288
30	187	647	557	2,700	-	1,300	716	2,200	383	1,060	64	1,660
31	301	-	565	4,900	-	1,160	-	6,730	-	810	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,714	1,210	68	410	0.291	0.34
November	68,272	9,700	201	2,276	1.61	1.80
December	24,040	3,300	446	775	.550	.63
Calendar year 1947	464,943	15,800	52	1,274	.904	12.26
January	56,099	10,800	482	1,810	1.28	1.48
February	170,570	22,200	1,190	5,882	4.17	4.50
March	92,450	13,200	1,110	2,982	2.11	2.44
April	72,272	10,800	655	2,409	1.71	1.91
May	25,006	6,730	129	807	.572	.66
June	24,056	3,210	101	802	.569	.63
July	12,986	1,150	66	419	.297	.34
August	21,829	4,300	64	704	.499	.58
September	6,717	1,660	64	224	.159	.18
Water year 1947-48	587,011	22,200	64	1,604	1.14	15.49

Peak discharge (base 15,000 sec.-ft.).- Feb. 6 (4 p.m.) 15,200 sec.-ft.; Feb. 14 (3 p.m.) 24,400 sec.-ft.

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

Location.- Water-stage recorder, lat. 36°02'15", long. 79°56'45", just above highway bridge 3 miles upstream from High Point Dam and 6 miles northeast of High Point, Guilford County.

Drainage area.- 14.2 square miles.

Records available.- July 1928 to September 1948.

Average discharge.- 20 years, 14.6 second-feet.

Extremes.- Maximum discharge during year, 679 second-feet May 13 (gage height, 2.87 feet); minimum, 3.1 second-feet Sept. 12, 13, 14.

1928-48: Maximum discharge, 6,300 second-feet Sept. 24, 1947 (gage height, 10.87 feet, from high-water mark), by contracted-opening method based on floodmarks at gage heights 14.11 feet on upstream side of bridge and 10.87 feet on downstream side of bridge; minimum, 0.7 second-foot Sept. 22, 1941 (gage height, 0.16 foot).

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	4.8	7.3	10	12	9.3	168	6.8	7.1	5.5	3.9	3.9
2	5.0	7.5	7.1	11	11	39	33	6.6	6.6	4.8	4.6	3.9
3	4.8	29	7.1	7.9	12	20	19	6.3	6.6	4.6	4.6	3.9
4	4.6	8.6	7.1	7.6	22	15	16	6.3	6.3	4.5	86	3.7
5	4.5	6.8	7.1	7.3	49	12	14	6.3	6.0	4.3	11	3.7
6	4.3	6.0	7.1	7.1	163	12	13	6.3	5.8	4.3	5.8	3.9
7	4.6	5.8	7.1	7.1	46	148	27	9.8	9.8	4.1	4.8	3.9
8	5.8	24	7.6	6.3	50	28	26	6.6	7.1	4.1	4.6	3.7
9	13	8.3	7.6	6.6	27	23	16	6.0	6.0	4.1	4.6	3.7
10	15	7.1	9.0	6.3	19	28	12	5.8	5.5	4.1	13	3.6
11	8.6	125	9.3	6.0	17	18	13	5.5	5.5	4.1	9.2	3.6
12	7.1	33	8.3	6.0	122	15	15	7.6	5.3	4.3	5.3	3.6
13	6.3	14	7.6	104	140	13	11	112	5.3	4.3	5.0	3.4
14	5.8	10	7.1	23	183	12	84	18	11	4.5	8.7	3.4
15	5.5	122	22	11	31	12	46	9.6	24	9.2	5.0	3.7
18	5.5	26	24	9.6	21	16	19	8.3	9.3	5.0	4.5	4.1
17	6.0	15	12	9.3	18	22	14	7.3	6.8	4.5	4.5	4.1
18	6.6	21	9.6	8.6	15	14	11	7.1	5.8	4.3	4.5	4.3
19	8.3	143	9.0	7.3	14	12	11	6.6	5.5	4.5	4.3	4.3
20	6.0	24	8.3	8.6	13	12	10	6.0	5.3	4.1	4.5	4.1
21	5.0	17	8.3	20	11	11	9.3	6.0	5.0	4.8	4.5	3.9
22	5.0	14	7.6	17	20	10	8.6	5.5	7.6	22	4.5	3.9
23	4.6	17	7.6	11	14	17	8.3	5.5	7.2	17	4.3	4.3
24	4.8	17	7.3	8.6	13	24	8.3	7.1	6.0	4.6	4.1	4.1
25	4.8	13	7.6	8.3	15	13	7.6	6.8	5.5	4.6	4.1	3.9
26	4.6	11	8.3	8.3	13	12	7.3	13	4.6	4.3	3.9	3.9
27	4.6	9.3	8.3	13	12	55	7.3	6.8	4.6	3.9	3.9	3.9
28	6.6	8.6	8.3	16	11	19	7.1	6.8	6.7	4.5	3.9	8.6
29	5.5	8.3	7.3	14	10	13	7.3	7.3	6.3	4.5	3.7	8.6
30	5.0	7.9	7.1	21	-	12	7.3	15	5.8	4.1	3.6	7.1
31	5.0	-	7.1	16	-	80	-	11	-	3.9	6.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	188.3	15	4.3	6.07	0.427	0.49
November	764.0	143	4.8	25.5	1.80	2.00
December	276.1	24	7.1	8.91	.627	.72
Calendar year 1947	6,388.5	1,670	2.6	17.5	1.23	16.72
January	423.8	104	6.0	13.7	.965	1.11
February	1,104	183	10	38.1	2.68	2.89
March	746.3	148	9.3	24.1	1.70	1.95
April	656.4	168	7.1	21.9	1.54	1.72
May	345.6	112	5.5	11.1	.782	.91
June	209.9	24	4.6	7.00	.493	.55
July	171.4	22	3.9	5.53	.389	.45
August	245.8	86	3.6	7.93	.558	.64
September	128.7	8.6	3.4	4.29	.302	.34
Water year 1947-48	5,260.3	183	3.4	14.4	1.01	13.77

Peak discharge (base, 800 sec.-ft.).- No peak above base.

Bear Creek at Robbins, N. C.

Location.- Water-stage recorder, lat. 35°25'40", long. 79°35'40", just downstream from Cabin Creek and half a mile west of Robbins, Moore County.

Drainage area.- 134 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 6,410 second-feet Feb. 12 (gage height, 15.25 feet); minimum, 5 second-feet Sept. 27.
1939-48: Maximum discharge, 27,000 second-feet Sept. 18, 1945 (gage height, 32.02 feet, from high-water marks in gage shelter), by slope-area method; no flow Oct. 2, 22-27, 1941 (storage of flow in pool after construction of new station control).

Remarks.- Records fair except those for period of fragmentary gage-height record, which are poor. Some diurnal fluctuation caused by mills above station. Diversion from gage pool by town of Robbins for municipal water supply of about 300,000 gallons daily is included in these records.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 17-30, Aug. 5-30, Sept. 1-29)

Oct. 1 to Feb. 14

1.6	7.7	2.6	80	5.0	898
1.8	16	3.0	144	6.0	1,370
2.0	27	3.5	280	7.0	1,850
2.3	49	4.0	450	9.0	2,810

Feb. 14 to Sept. 30

1.6	7.7	2.6	80	5.0	953
1.8	16	3.0	152	6.0	1,430
2.0	27	3.5	304	7.0	1,920
2.3	49	4.0	488	9.0	2,940

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	24	66	58	188	103	2,140	72	124	197	40	43
2	12	30	64	133	156	711	544	65	77	50	43	22
3	13	560	62	80	188	453	256	62	65	29	52	19
4	11	110	60	65	297	237	188	56	66	23	126	22
5	10	65	59	66	554	163	163	61	56	19	721	17
6	8	51	64	53	1,470	140	150	55	47	17	70	16
7	11	45	56	58	404	2,340	163	63	44	16	40	46
8	20	64	56	56	289	534	752	59	160	13	33	42
9	28	71	59	55	247	311	258	47	114	12	29	26
10	51	49	67	54	206	603	160	44	58	12	25	20
11	92	1,090	100	50	193	311	273	41	43	10	23	17
12	47	593	77	49	3,190	240	263	47	39	10	23	16
13	34	137	67	1,110	2,140	192	160	81	36	32	22	15
14	26	93	60	611	2,660	169	183	73	74	22	19	14
15	31	877	126	172	536	152	569	51	56	20	18	12
16	123	314	493	116	324	150	216	40	367	108	21	12
17	105	144	130	106	275	174	158	38	119	42	19	9
18	80	103	93	100	228	137	123	39	67	32	18	f11
19	48	130	81	85	195	121	111	36	53	69	18	f10
20	47	178	74	83	177	121	104	35	45	163	45	7
21	34	119	69	158	150	113	99	30	40	74	30	7
22	27	93	68	178	348	106	340	29	43	38	21	6
23	23	166	66	110	231	274	132	29	82	41	15	6
24	22	247	64	96	169	266	101	29	35	43	15	6
25	21	196	62	80	169	137	90	232	27	59	12	8
26	24	107	74	77	163	111	83	82	24	31	11	7
27	19	88	84	190	144	140	77	171	20	23	10	6
28	50	79	71	452	130	163	71	98	18	43	10	11
29	61	73	65	232	117	104	72	201	20	746	9	75
30	38	69	61	251	-	97	85	1,440	25	117	7	481
31	29	-	58	414	-	140	-	416	-	59	404	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,161	123	8	37.5	0.280	0.32
November	5,965	1,090	24	199	1.49	1.66
December	2,656	493	56	85.7	.640	.74
Calendar year 1947	46,781	3,120	4	128	.955	12.99
January	5,408	1,110	49	174	1.30	1.50
February	15,538	3,190	117	536	4.00	4.31
March	9,013	2,340	97	291	2.17	2.50
April	8,084	2,140	71	269	2.01	2.24
May	3,822	1,440	29	123	.918	1.06
June	2,044	367	18	68.1	.508	.57
July	2,170	746	10	70.0	.522	.60
August	1,949	721	7	62.9	.469	.54
September	1,009	481	6	33.6	.251	.28
Water year 1947-48	58,819	3,190	6	161	1.20	16.32

Peak discharge (base, 3,500 sec.-ft.).- Feb. 12 (7 p.m.) 6,410 sec.-ft.; May 7 (1 p.m.) 4,320 sec.-ft.; Apr. 1 (10 a.m.) 3,900 sec.-ft.; May 30 (5 p.m.) 4,200 sec.-ft.

f Fragmentary gage-height record; discharge computed on basis of partly estimated gage height record.

Lower Little River at Manchester, N. C.

Location.- Water-stage recorder, lat. 35°11'40", long. 78°59'15", at bridge on State Highway 87 at Manchester, Cumberland County, 1¼ miles downstream from Atlantic Coast Line Railroad and 12 miles southwest of Linden. Datum of gage is 127.38 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 348 square miles.

Records available.- November 1938 to September 1948.

Average discharge.- 10 years, 422 second-feet.

Extremes.- Maximum discharge during year, 4,160 second-feet Feb. 14 (gage height, 15.79 feet); minimum, 86 second-feet Sept. 26; minimum daily, 87 second-feet Sept. 25.

1938-48: Maximum discharge not determined, occurred Sept. 18 or 19, 1945, during period of backwater from Cape Fear River (gage height, 29.00 feet, from floodmarks on gage well); minimum, 20 second-feet Sept. 18, 19, 1943; minimum daily, 22 second-feet Sept. 18, 19, 1943.

Remarks.- Records good except those for periods of fragmentary or no gage-height record, which are poor. Large diurnal fluctuation and considerable regulation for short periods caused by power plant above station.

Cooperation.- Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 29 to Dec. 16, July 4-23)

1.0	82	3.5	463	9.0	1,610
1.3	114	4.0	558	10.0	1,910
1.6	151	5.0	752	12.0	2,640
2.0	207	6.0	952	14.0	3,440
2.5	285	7.0	1,160	15.0	3,840
3.0	372	8.0	1,370		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a280	222	558	363	812	692	857	a300	992	408	a400	a110
2	a240	253	539	408	792	773	1,200	a300	744	372	a300	a130
3	a220	1,620	520	417	752	1,010	1,330	a240	463	294	a320	124
4	a220	1,090	501	390	752	1,260	1,030	a240	345	207	a440	115
5	a200	1,010	501	372	832	1,280	799	a240	310	156	a500	119
6	a190	660	501	372	1,070	972	712	a280	285	144	f482	a120
7	a190	482	482	354	1,240	1,160	692	a280	253	132	345	a190
8	a320	a500	463	336	1,370	1,550	692	a280	354	110	245	a180
9	a360	a800	444	319	1,320	2,510	712	a260	328	100	f200	a160
10	a340	a750	482	310	1,140	2,060	f692	a220	261	95	a180	a150
11	a320	a750	558	302	1,050	1,440	a700	f192	230	92	a170	a350
12	a340	f1,370	615	294	1,350	1,280	a750	207	192	93	a150	a240
13	a360	1,480	577	446	2,260	1,120	a750	237	175	92	a140	a160
14	a340	1,300	539	932	3,740	972	a700	302	207	93	a140	a130
15	a320	1,240	463	1,070	3,860	892	a650	294	285	126	a160	a120
16	a460	1,330	558	1,070	2,920	852	a650	222	539	200	a160	a110
17	a550	1,460	692	770	1,820	992	a600	178	615	222	a160	a110
18	a550	1,280	692	634	1,350	852	a500	165	482	249	a150	a100
19	a400	972	596	558	1,180	832	a420	152	310	230	a140	a100
20	a340	1,050	520	539	1,030	767	a380	141	230	285	a340	a95
21	a280	1,050	463	596	992	712	a380	134	178	207	a440	a90
22	a260	1,010	444	634	992	672	a380	126	170	163	a440	a90
23	a240	992	435	634	1,010	653	a460	119	251	163	a260	a90
24	a220	972	417	596	1,050	672	a520	111	354	414	a190	a90
25	a220	952	408	539	972	692	a520	165	214	381	a160	87
26	a200	952	435	482	892	634	a400	354	143	f302	a140	89
27	a200	872	444	520	812	634	a340	463	119	a220	a120	92
28	a240	734	426	734	752	737	a300	612	111	a220	a110	a120
29	a460	634	399	792	752	832	a280	932	116	a900	a100	a360
30	a400	596	372	832	-	742	a300	1,070	296	a650	a95	a600
31	a300	-	363	832	-	615	-	1,200	-	a500	a95	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,560	550	190	308	0.885	1.02
November	28,383	1,620	222	946	2.72	3.03
December	15,407	692	363	497	1.43	1.65
Calendar year 1947	161,527	2,140	66	443	1.27	17.27
January	17,447	1,070	294	563	1.62	1.86
February	38,864	3,860	752	1,340	3.85	4.15
March	30,761	2,510	615	992	2.85	3.29
April	18,696	1,330	280	623	1.79	2.00
May	10,016	1,200	111	323	.928	1.07
June	9,552	992	111	318	.914	1.02
July	7,820	900	92	252	.724	.84
August	7,272	500	95	235	.675	.78
September	4,621	600	87	154	.443	.49
Water year 1947-48	198,399	3,860	87	542	1.56	21.30

Peak discharge (base, 1,600 sec.-ft.).- Nov. 3 (5 a.m.) 2,120 sec.-ft.; Feb. 14 (11 p.m.) 4,160 sec.-ft.; Mar. 9 (4 p.m.) 2,680 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Linden.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Lower Little River at Linden, N. C.

Location.- Water-stage recorder, lat. 35°16'00", long. 78°46'40", at bridge on U. S. Highway 15-A, 1¾ miles west of Linden, Cumberland County, 2 miles upstream from Stewart Creek, and 4½ miles upstream from mouth. Datum of gage is 71.37 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 460 square miles.

Records available.- November 1928 to September 1948.

Average discharge.- 19 years (1929-48), 552 second-feet.

Extremes.- Maximum discharge during year, about 4,500 second-feet Feb. 15 (backwater from Cape Fear River); maximum gage height, 17.14 feet Feb. 15; minimum discharge, 100 second-feet Sept. 25.

1928-48: Maximum discharge not determined, occurred Sept. 18, 1945, during period of backwater from Cape Fear River; maximum gage height, 41.47 feet Sept. 19 or 20, 1945 (from floodmark on gage well); minimum discharge, 26 second-feet Oct. 14, 1940.

Remarks.- Records good except those for periods of backwater from Cape Fear River, which are fair, and those for period of no gage-height record, which are poor. Diurnal fluctuation and some regulation at low flow caused by power plant above station.

Rating table, water year 1947-48, except periods of backwater from Cape Fear River (gage height, in feet, and discharge, in second-feet)

2.5	96	4.0	500	7.0	1,620
2.6	115	4.3	602	8.0	2,010
2.8	158	4.6	712	10.0	2,800
3.0	207	5.0	860	12.0	3,600
3.3	288	5.5	1,050	14.0	4,400
3.6	376	6.0	1,240		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	376	391	a750	468	1,050	934	1,120	376	1,430	452	533	143
2	329	346	a700	516	1,010	996	1,580	361	1,120	422	422	156
3	302	1,960	a700	550	1,010	1,460	1,780	332	712	376	437	140
4	288	d2,130	a650	516	917	1,660	1,500	302	500	274	500	136
5	271	d1,580	a650	484	1,120	1,780	1,080	311	422	207	567	136
6	257	d1,120	a650	484	1,490	1,390	878	352	391	175	584	149
7	260	d749	a650	468	c1,700	1,490	842	364	422	172	452	252
8	358	d712	a600	452	c1,800	2,130	860	358	533	143	337	246
9	488	d971	a600	437	c1,800	2,680	878	337	516	128	282	212
10	437	d934	a650	422	1,620	d2,800	842	280	406	121	252	202
11	406	945	a700	406	1,460	d2,170	842	252	332	117	280	500
12	422	c2,150	a800	391	1,840	1,850	971	249	300	115	204	320
13	437	c2,150	a800	500	c2,800	1,620	971	308	255	115	187	217
14	422	1,930	a700	1,200	c4,000	1,390	860	373	311	113	190	175
15	406	1,780	a650	1,350	c4,400	1,240	823	391	343	146	223	165
16	500	a2,000	a700	1,460	c3,600	1,160	842	323	533	228	225	149
17	600	a1,900	a900	1,050	c2,600	1,200	786	249	712	255	225	138
18	730	a1,900	a900	860	1,970	1,160	656	225	620	252	207	130
19	567	a1,500	a800	749	1,660	1,120	550	204	437	343	192	126
20	452	a1,500	a700	675	1,460	1,050	500	190	326	334	422	123
21	391	a1,400	a650	749	1,390	934	468	175	266	302	500	113
22	346	a1,400	a600	823	1,390	878	500	165	244	220	602	109
23	314	a1,300	a600	823	1,460	842	567	156	268	182	334	107
24	294	a1,300	a550	768	1,460	878	638	145	422	368	249	106
25	294	a1,300	a550	695	1,390	878	675	180	329	437	280	102
26	280	a1,300	a550	638	1,240	823	500	340	215	355	184	102
27	266	a1,200	a600	638	1,120	786	437	602	184	300	165	106
28	322	a1,000	a550	916	1,050	971	391	860	160	297	151	130
29	638	a850	a550	1,010	1,010	1,050	367	1,240	149	1,300	138	379
30	602	a800	a500	1,120	-	1,010	373	1,390	249	934	130	749
31	484	-	468	1,080	-	804	-	1,970	-	695	121	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,519	730	257	404	0.878	1.01
November	40,498	2,150	346	1,350	2.93	3.27
December	20,418	900	468	659	1.43	1.65
Calendar year 1947	213,912	2,930	75	586	1.27	17.30
January	22,698	1,460	391	732	1.59	1.84
February	50,871	4,400	971	1,754	3.81	4.11
March	41,134	2,800	786	1,327	2.88	3.33
April	24,077	1,780	367	803	1.75	1.95
May	13,360	1,970	145	431	.937	1.08
June	13,107	1,430	149	437	.950	1.06
July	9,878	1,300	113	319	.693	.80
August	9,455	602	121	305	.663	.76
September	5,818	749	102	194	.422	.47
Water year 1947-48	263,833	4,400	102	721	1.57	21.33

Peak discharge (base, 2,100 sec.-ft.).- Nov. 3 (1 p.m.) 2,560 sec.-ft.; Nov. 12 (about 10 a.m.) 2,250 sec.-ft.; Nov. 16 (3 a.m.) 2,200 sec.-ft.; Feb. 15 (about 6 a.m.) 4,500 sec.-ft.; Mar. 10 (5 a.m.) 2,920 sec.-ft.; May 31 (10 a.m.) 2,240 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Manchester.

c Backwater from Cape Fear River; discharge computed on basis of discharge measurements and for Lower Little River at Manchester and Cape Fear River at Lillington.

d Computed on basis of doubtful gage-height record.

Rockfish Creek near Hope Mills, N. C.

Location.- Water-stage recorder, lat. 34°58', long. 78°55', at bridge on U. S. Highway 301, just upstream from Little Rockfish Creek, 1¾ miles east of town of Hope Mills, Cumberland County, and 5¾ miles upstream from mouth. Datum of gage is 52.35 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 284 square miles, including that of Little Rockfish Creek.

Records available.- February 1939 to September 1948. October 1902 to May 1903 (gage heights only) and November 1928 to December 1931 at site 4 miles downstream, published as Rockfish Creek near Fayetteville. Records include flow of Little Rockfish Creek.

Average discharge.- 11 years (1929-31, 1939-48), 392 second-feet.

Extremes.- Maximum discharge during year, about 1,700 second-feet Feb. 15, occurred during period of backwater from Cape Fear River; maximum gage height, 15.61 feet Feb. 15; minimum, 18 second-feet Aug. 28, 29; minimum daily, 19 second-feet Aug. 29.

1928-31, 1939-48: Maximum discharge, 8,000 second-feet Sept. 18, 1945 (gage height, 31.75 feet), by computation of flow over dams three-quarters of a mile upstream on Rockfish Creek and 1¾ miles upstream on Little Rockfish Creek; minimum, 2.6 second-feet Oct. 24, Nov. 22, 23, 1941; minimum daily, 2.8 second-feet Nov. 23, 1941.

Remarks.- Records good except those for period of backwater from Cape Fear River, which are fair. Large diurnal fluctuation and considerable regulation caused by mills and reservoirs above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	346	156	549	448	661	621	731	281	897	313	648	310
2	332	226	531	409	661	602	761	310	638	306	482	492
3	295	868	510	304	547	768	772	466	577	252	828	395
4	190	1,370	513	414	555	782	774	428	459	28	512	246
5	28	867	518	584	594	761	634	449	305	150	431	67
6	275	781	385	479	758	614	617	448	271	431	492	432
7	324	699	359	433	807	778	660	610	457	180	301	326
8	317	780	533	464	823	747	762	316	478	306	361	322
9	312	381	511	417	928	913	718	299	578	312	369	400
10	367	633	514	249	903	1,200	602	461	480	120	325	396
11	236	908	598	240	1,000	937	812	391	436	27	316	286
12	140	1,330	566	594	1,020	827	730	365	276	341	208	180
13	474	1,020	538	469	c1,100	710	706	424	256	307	121	541
14	342	1,120	531	734	c1,200	706	655	449	386	296	65	363
15	350	1,140	556	583	c1,500	702	732	305	330	87	26	351
16	369	1,140	644	644	c1,200	669	722	362	280	349	297	281
17	333	848	564	549	c1,000	648	534	505	361	270	308	281
18	162	832	616	480	c850	638	635	459	342	73	316	56
19	205	966	513	579	804	608	606	442	316	440	312	104
20	497	1,100	388	468	761	561	519	328	303	422	200	336
21	300	663	390	473	625	620	409	300	126	497	211	284
22	296	465	631	521	762	665	588	234	374	433	226	193
23	304	1,040	533	560	681	617	610	188	284	435	579	134
24	330	962	295	421	732	590	238	309	396	304	470	126
25	224	666	502	386	646	523	191	332	401	256	385	21
26	21	689	619	499	710	723	572	249	251	456	315	24
27	307	685	370	478	653	447	515	460	244	351	288	296
28	324	671	314	622	531	514	473	532	180	322	107	346
29	364	525	518	644	568	569	464	1,170	170	265	19	295
30	370	516	476	644	-	554	451	567	148	415	298	367
31	473	-	431	442	-	585	-	772	-	316	247	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,207	497	21	297	1.05	1.21
November	24,047	1,370	156	802	2.82	3.15
December	15,516	644	295	501	1.76	2.03
Calendar year 1947	145,834	1,370	13	400	1.41	19.11
January	15,231	734	240	491	1.73	1.99
February	23,580	1,500	531	813	2.86	3.09
March	21,199	1,200	447	684	2.41	2.78
April	18,193	812	191	606	2.13	2.38
May	13,211	1,170	188	426	1.50	1.73
June	11,000	897	126	367	1.29	1.44
July	9,060	497	27	292	1.03	1.19
August	10,083	828	19	325	1.14	1.32
September	8,251	541	21	275	.968	1.08
Water year 1947-48	178,578	1,500	19	488	1.72	23.39

c Backwater from Cape Fear River; discharge computed on basis of hydrograph and discharge measurements.

Northeast Cape Fear River near Chinquapin, N. C.

Location.- Water-stage recorder, lat. 34°49', long. 77°50', 1,000 feet downstream from bridge on State Highway 41, half a mile downstream from Muddy Creek, and 1¼ miles west of Chinquapin, Duplin County. Datum of gage is 17.28 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 600 square miles.

Records available.- July 1940 to September 1948.

Extremes.- Maximum discharge during year, 6,700 second-feet Feb. 16 (gage height, 14.93 feet); minimum, 13 second-feet Sept. 27.

1940-48: Maximum discharge, 11,000 second-feet Oct. 16, 1942 (gage height, 16.74 feet); minimum, 10 second-feet Oct. 25, 1941.

Flood of 1908 reached a stage of 22.6 feet, present datum, at old bridge 1,000 feet upstream from gage. Flood of 1928 was 0.8 foot lower stage, from information furnished by North Carolina Highway and Public Works Commission.

Remarks.- Records fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 17 to June 23, Aug. 19 to Sept. 30)

1.0	30	4.0	480	10.0	2,240
1.3	62	5.0	660	11.0	2,750
1.6	97	6.0	860	12.0	3,420
2.0	152	7.0	1,110	13.0	4,270
2.5	230	8.0	1,420	14.0	5,300
3.0	310	9.0	1,820	15.0	6,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	840	310	1,290	1,170	2,440	1,500	552	222	352	352	302	24
2	534	287	1,170	1,200	2,540	1,380	606	204	378	286	286	28
3	404	1,060	1,040	1,290	2,750	1,460	624	187	386	262	378	37
4	310	1,780	910	1,320	3,000	1,540	606	158	327	238	683	36
5	254	1,740	820	1,230	3,140	1,620	570	146	254	198	910	29
6	222	1,420	740	1,110	3,280	1,580	552	141	230	139	1,010	28
7	208	1,200	700	985	3,660	1,620	534	139	192	105	885	35
8	246	985	642	885	4,000	1,740	552	137	148	87	620	59
9	310	860	624	800	4,180	1,900	552	144	138	75	420	65
10	327	885	606	740	4,180	2,520	534	137	174	69	286	53
11	344	1,040	680	680	4,000	3,420	498	113	156	61	178	58
12	386	1,800	760	624	3,820	3,740	480	101	130	59	130	78
13	429	2,590	840	660	3,910	3,660	463	100	106	55	102	91
14	577	3,140	960	960	4,770	3,350	429	156	100	51	87	66
15	995	3,280	1,040	1,230	5,820	2,870	395	238	89	55	86	47
16	1,800	3,280	1,380	1,350	6,700	2,440	386	278	152	110	278	35
17	2,340	3,210	1,780	1,350	6,500	2,020	395	262	214	270	344	29
18	2,490	3,070	1,940	1,380	5,820	1,780	395	203	230	238	262	27
19	2,640	2,870	1,940	1,380	4,970	1,580	412	182	196	168	200	26
20	2,490	2,540	1,820	1,420	4,090	1,420	412	149	152	174	154	22
21	2,100	2,200	1,580	1,740	3,280	1,290	420	117	139	214	118	19
22	1,580	1,940	1,350	2,100	2,700	1,170	420	96	214	238	98	16
23	1,080	1,860	1,200	2,490	2,390	1,080	412	80	383	208	90	15
24	780	1,820	1,060	2,540	2,240	985	395	71	940	238	67	15
25	606	1,860	960	2,590	2,150	860	361	65	1,260	262	60	14
26	498	1,860	1,230	2,590	2,060	780	327	59	1,230	294	49	14
27	429	1,860	1,500	2,440	1,980	700	302	58	1,060	238	43	14
28	386	1,740	1,620	2,390	1,860	680	270	73	935	142	34	16
29	378	1,620	1,620	2,340	1,700	642	246	139	760	286	31	56
30	352	1,460	1,500	2,340	-	588	230	200	463	278	27	201
31	336	-	1,320	2,340	-	552	-	238	-	294	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	26,671	2,640	208	860	1.43	1.65
Novsmber	55,567	3,280	287	1,852	3.09	3.44
December	36,622	1,940	606	1,181	1.97	2.27
Calendar year 1947	297,286	3,280	40	814	1.36	18.42
January	47,664	2,590	624	1,538	2.56	2.95
February	103,930	6,700	1,700	3,584	5.97	6.44
March	52,467	3,740	552	1,692	2.82	3.25
April	13,300	624	230	443	.738	.82
May	4,593	278	58	148	.247	.28
June	11,488	1,260	89	383	.638	.71
July	5,744	352	51	185	.308	.36
August	8,262	1,010	24	267	.445	.51
September	1,253	201	14	41.8	.070	.08
Water year 1947-48	367,561	6,700	14	1,004	1.67	22.76

Peak discharge (base, 2,400 sec.-ft.).- Oct. 19 (1 p.m.) 2,700 sec.-ft.; Nov. 15 (9 p.m.) 3,280 sec.-ft.; Feb. 16 (10 p.m.) 6,700 sec.-ft.; Mar. 12 (12 p.m.) 3,740 sec.-ft.

Waccamaw River at Freeland, N. C.

Location.- Water-stage recorder, lat. 34°05'45", long. 78°32'50", 150 feet downstream from bridge on State Highway 130, 1 mile southwest of Freeland, Brunswick County, and about 7 miles downstream from mouth of White Marsh. Datum of gage is 15.52 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 667 square miles.

Records available.- July 1939 to September 1948.

Extremes.- Maximum discharge observed during year, 7,500 second-feet Feb. 14 (gage height, 15.92 feet); minimum, 16 second-feet Sept. 27 (gage height, 1.00 foot).
1939-48: Maximum discharge observed, that of Feb. 14, 1948; minimum observed, 0.5 second-foot Nov. 10, 11, 1940.

Remarks.- Records good except those for periods of rapidly changing stage and those for periods of no gage-height record, which are poor. Discharge for periods of changing stage computed by using rate of change in stage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,780	1,010	2,420	2,920	a2,400	1,780	g1,320	400	a1,800	510	52	23
2	3,420	985	2,320	2,860	a2,600	1,680	g1,320	355	a1,700	425	49	26
3	3,120	936	2,190	a2,800	a2,800	1,650	g1,280	325	g1,680	360	60	27
4	2,800	913	2,060	a2,600	a3,000	1,590	g1,280	291	a1,600	303	92	27
5	2,520	891	1,940	a2,600	g3,120	1,530	g1,240	269	a1,500	277	114	27
6	2,230	869	1,780	a2,600	a3,400	1,470	1,240	259	a1,200	a240	119	27
7	1,980	828	1,620	a2,600	a3,600	1,590	1,240	235	a1,100	a200	119	31
6	1,660	788	1,520	g2,520	a3,800	1,740	1,370	220	a950	a180	119	40
9	1,490	731	1,380	a2,400	a4,200	1,930	1,530	199	a850	g152	114	51
10	1,310	677	1,300	a2,200	a4,600	g2,090	1,650	178	g746	a130	104	71
11	1,200	900	1,300	a1,800	a5,000	g2,220	1,680	164	a650	a110	90	99
12	1,060	1,260	1,260	a1,600	g6,170	g2,320	1,680	152	a600	a90	71	109
13	988	1,580	1,300	a1,500	g6,900	g2,370	1,680	146	a550	a75	56	116
14	960	1,980	1,380	a1,400	g7,500	g2,370	1,650	149	a480	a70	58	114
15	1,010	2,460	1,540	g1,340	g7,200	g2,320	1,590	152	a440	a60	78	109
16	1,230	2,630	1,680	a1,300	6,640	g2,270	1,530	146	a400	a50	76	98
17	1,410	2,860	a1,900	a1,300	6,380	g2,320	1,470	137	g355	a46	63	80
18	1,610	2,980	g2,230	a1,300	5,960	g2,420	1,320	132	a320	a44	49	68
19	1,680	3,120	a2,600	a1,300	5,440	g2,480	1,240	129	a280	a40	40	55
20	1,860	3,260	a2,800	a1,300	4,980	g2,480	1,160	122	a240	a38	33	48
21	1,980	3,340	a3,000	a1,400	4,320	g2,480	1,070	112	a220	a34	29	40
22	2,020	3,340	a3,000	g1,420	3,730	g2,370	990	102	282	a30	30	34
23	2,060	3,260	a3,200	a1,500	3,350	g2,320	893	94	459	a30	31	29
24	1,940	3,190	a3,200	a1,600	3,020	g2,270	822	84	462	a30	32	25
25	1,780	3,120	a3,200	a1,600	2,730	g2,180	770	76	418	a65	36	22
26	1,620	2,980	g3,260	a1,800	2,480	g2,050	688	a71	360	g88	42	19
27	1,470	2,860	a3,200	a1,800	2,270	g1,890	637	a800	373	a85	43	17
28	1,380	2,740	a3,200	a1,900	2,140	g1,710	561	a1,400	473	a75	40	19
29	1,260	2,630	a3,200	g2,060	1,970	g1,650	509	a1,700	515	a70	34	43
30	1,190	2,520	a3,200	a2,200	-	g1,470	452	a1,800	522	a65	28	102
31	1,100	-	a3,200	a2,400	-	g1,420	-	a1,800	-	a55	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	55,118	3,780	960	1,778	2.67	3.07
November	61,638	3,340	677	2,055	3.08	3.44
December	71,380	3,260	1,260	2,303	3.45	3.98
Calendar year 1947	437,235	4,440	26	1,198	1.80	24.38
January	59,920	2,920	1,300	1,933	2.90	3.34
February	121,700	7,500	1,970	4,197	6.29	6.79
March	62,430	2,480	1,420	2,014	3.02	3.48
April	35,862	1,680	452	1,195	1.79	2.00
May	12,199	1,800	71	394	.591	.68
June	21,525	1,800	220	718	1.08	1.20
July	4,027	510	30	130	.195	.22
August	1,924	119	23	62.1	.093	.11
September	1,596	116	17	53.2	.080	.09
Water year 1947-48	509,319	7,500	17	1,392	2.09	28.38

a No gage-height record; discharge computed on basis of recorded range in stage and rainfall records.

g Computed from graph based on daily gage readings.

Yadkin River at Patterson, N. C.

Location.- Water-stage recorder, lat. 35°59'30", long. 81°33'32", 200 feet upstream from bridge on State Highway 268, half a mile south of Patterson, Caldwell County, three-quarters of a mile upstream from Warrior Creek, and 2 miles downstream from Walnut Branch.

Drainage area.- 28.8 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 1,380 second-feet Oct. 17 (gage height, 3.73 feet, from floodmark); minimum, 8 second-feet Jan. 28; (gage height, 0.14 foot); minimum daily, 17 second-feet Oct. 1-7, July 7, 8.

1939-48: Maximum discharge, 16,200 second-feet Aug. 13, 1940 (gage height, 12.70 feet), by computation of flow over dam; minimum, 6 second-feet Sept. 7, 1944, May 28, 29, 1947; minimum daily, 9 second-feet June 22, 1941.

Remarks.- Records good except those above 400 second-feet, those for period of ice effect, or fragmentary gage-height record, which are fair, and those for periods of no gage-height record, which are poor. Slight regulation from small mill pond above station acting as a retention reservoir. Prior to 1948 there was some diurnal fluctuation during low flow caused by mills above station. Records of chemical analyses for the water year 1948 are given in Water Supply Paper 1132.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 12 to Aug. 4)

0.2	11	0.6	51	1.5	223
.3	18	.8	80	1.8	295
.4	28	1.0	115	2.1	393
.5	39	1.2	156		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	58	50	40	b40	a40	195	41	37	29	33	22
2	17	118	47	47	38	a44	152	40	32	22	96	21
3	17	350	46	37	37	40	121	40	44	21	97	20
4	17	177	45	36	39	*40	101	43	41	20	165	20
5	17	115	44	34	44	37	88	45	34	18	115	28
6	17	90	43	34	119	38	82	41	32	18	64	120
7	17	77	41	31	92	77	80	47	34	17	51	104
8	63	72	41	31	74	74	102	40	34	17	46	64
9	114	61	40	31	65	58	85	38	32	18	39	68
10	99	55	41	31	58	52	76	37	29	19	41	137
11	65	80	40	a30	49	49	71	36	28	37	40	74
12	47	82	39	a32	108	46	70	37	27	215	38	55
13	39	68	38	a50	143	44	65	43	26	92	34	46
14	36	61	37	a34	182	43	76	37	29	65	31	41
15	33	143	44	a26	127	41	83	34	32	165	30	38
16	47	115	*54	a34	94	55	71	33	28	113	29	36
17	f402	90	41	a34	77	57	65	33	26	72	77	33
18	f163	82	40	a30	65	50	61	31	26	54	39	31
19	127	131	39	a26	58	58	59	31	30	45	34	30
20	83	108	38	a30	a55	84	57	30	24	40	31	29
21	65	92	37	*f32	a50	97	55	30	23	36	34	28
22	54	78	37	31	a50	70	54	29	27	34	31	41
23	47	77	37	30	a48	185	51	29	29	31	30	37
24	57	80	36	b34	a46	141	50	29	24	30	29	31
25	54	76	34	a32	a46	95	49	32	22	28	29	28
26	47	70	34	a36	45	77	47	49	20	28	26	28
27	46	64	33	a34	43	390	45	33	22	26	25	26
28	148	59	33	33	41	214	44	40	37	30	23	68
29	111	55	33	30	a40	137	43	58	26	32	23	117
30	83	54	32	36	-	108	43	61	26	31	22	61
31	68	-	32	b42	-	120	-	46	-	28	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,217	402	17	71.5	2.48	2.86
November	2,838	350	54	94.6	3.28	3.66
December	1,226	54	32	39.5	1.37	1.58
Calendar year 1947	16,814	402	14	46.1	1.60	21.71
January	1,048	50	26	33.8	1.17	1.35
February	1,973	182	37	68.0	2.36	2.55
March	2,661	390	37	85.8	2.98	3.44
April	2,241	195	43	74.7	2.59	2.89
May	1,193	61	29	38.5	1.34	1.54
June	881	.44	20	29.4	1.02	1.14
July	1,431	215	17	46.2	1.60	1.85
August	1,425	165	22	46.0	1.60	1.84
September	1,482	137	20	49.4	1.72	1.91
Water year 1947-48	20,616	402	17	56.3	1.95	26.61

Peak discharge (base, 1,000 sec.-ft.).- Oct. 17 (time unknown) 1,380 sec.-ft.; July 12 (1 p.m.) 1,000 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage, occasional gage readings, weather records, and records for nearby stations.

b Stage-discharge relation affected by ice.

f Fragmentary gage-height record; discharge computed on basis of partly estimated gage heights.

Yadkin River at Wilkesboro, N. C.

Location.- Water-stage recorder, lat. 36°09', long. 81°09', at bridge on U. S. Highway 421 between North Wilkesboro and Wilkesboro, Wilkes County, just downstream from Reddies River. Datum of gage is 942.35 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 493 square miles.

Records available.- October 1928 to September 1948. April 1903 to June 1909, October 1920 to September 1928 at site 1 mile downstream, published as Yadkin River at North Wilkesboro. Revised records for April 1903 to May 1907 are published in Bulletin 34 of North Carolina Department of Conservation and Development.

Average discharge.- 31 years (1903-6, 1920-48), 785 second-feet.

Extremes.- Maximum discharge during year, 8,400 second-feet Oct. 9 (gage height, 13.26 feet); minimum, 226 second-feet Oct. 5 (gage height, 1.86 feet); minimum daily, 277 second-feet Oct. 6.

1903-9, 1920-48: Maximum discharge, 160,000 second-feet Aug. 14, 1940 (gage height, 37.6 feet, from floodmarks), by slope-area method; minimum, 101 second-feet Jan. 20, 1940 (gage height, 1.54 feet), result of low temperatures; minimum daily, 162 second-feet July 21, 24, 1926.

Flood of July 1916 reached a stage of 34.5 feet, from flood reference mark cut in old steel highway bridge (discharge, 116,000 second-feet).

Remarks.- Records good. Slight diurnal fluctuation at low flow caused by power plant on Reddies River 1 mile above station. Records of chemical analyses and water temperatures for the water year 1948 are given in Water Supply Paper 1132.

Revisions (water years).- W 822: Drainage area. W 892: 1930(M). See also Records available.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 17, 18, Jan. 2 to Mar. 7)

2.0	291	6.0	2,940
2.4	503	9.0	5,170
3.0	886	9.4	5,470
4.0	1,560		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	296	852	793	624	760	701	3,560	753	1,090	773	859	457
2	296	1,250	779	812	708	786	2,240	753	766	527	1,520	424
3	291	5,440	760	650	701	779	1,660	746	953	480	2,580	419
4	282	2,520	746	618	734	760	1,390	740	1,150	457	3,010	424
5	282	1,620	740	605	799	701	1,250	819	819	435	2,550	452
6	277	1,290	727	587	2,170	714	1,190	727	740	419	1,150	936
7	282	1,290	708	574	1,830	1,420	1,420	920	812	408	866	1,250
8	659	1,090	720	562	1,320	1,560	2,030	753	779	403	779	786
9	4,050	920	701	568	1,190	1,120	1,590	708	708	419	701	650
10	3,780	839	694	562	1,050	953	1,290	675	637	414	643	1,690
11	1,590	1,150	714	532	920	873	1,220	669	612	509	669	920
12	1,020	1,320	688	550	1,670	806	1,190	669	593	1,070	643	669
13	799	1,050	662	866	2,510	753	1,090	740	581	1,250	630	574
14	656	920	650	773	2,940	720	1,220	675	581	834	587	527
15	593	2,130	694	556	2,030	714	1,490	637	605	2,640	550	515
16	675	1,830	920	675	1,490	986	1,190	637	581	1,540	556	486
17	3,470	1,360	746	656	1,250	1,120	1,090	624	562	1,050	786	469
18	3,240	1,220	701	605	1,120	859	1,020	599	550	799	734	457
19	2,420	2,300	669	532	1,020	886	953	593	593	675	587	452
20	1,360	1,690	656	599	953	1,020	953	581	550	630	562	435
21	1,020	1,390	637	637	879	1,580	920	574	515	556	650	424
22	839	1,190	624	630	886	1,050	886	556	538	527	650	419
23	740	1,190	618	599	832	2,150	859	556	650	492	550	521
24	920	1,250	612	556	786	1,900	852	581	532	480	599	469
25	986	1,150	612	532	819	1,360	852	662	515	435	532	435
26	826	1,050	612	643	799	1,150	819	1,770	486	446	497	430
27	740	986	593	650	779	4,310	793	760	630	463	480	430
28	2,420	920	587	637	766	2,750	779	853	679	574	457	521
29	1,760	866	581	599	727	1,690	786	1,310	908	550	446	1,570
30	1,220	839	568	662	-	1,360	779	1,720	587	550	435	953
31	953	-	568	886	-	2,320	-	1,360	-	587	521	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	38,742	4,050	277	1,250	2.54	2.92
November	42,712	5,440	839	1,424	2.89	3.22
December	21,080	920	568	680	1.38	1.59
Calendar year 1947	274,852	10,300	263	753	1.53	20.73
January	19,537	886	532	630	1.28	1.47
February	34,438	2,940	701	1,188	2.41	2.60
March	39,851	4,310	701	1,286	2.61	3.01
April	37,361	3,560	779	1,245	2.53	2.82
May	24,720	1,770	556	797	1.62	1.86
June	20,302	1,150	486	677	1.37	1.53
July	21,392	2,640	403	690	1.40	1.61
August	26,779	3,010	435	864	1.75	2.02
September	19,164	1,690	419	639	1.30	1.45
Water year 1947-48	346,078	5,440	277	946	1.92	26.10

Peak discharge (base, 8,000 sec.-ft.).- Oct. 9 (12 p.m.) 8,400 sec.-ft.

Yadkin River at Yadkin College, N. C.

Location.- Water-stage recorder, lat. 35°51'25", long. 80°23'25", at bridge on U. S. Highway 64, 1½ miles south of Yadkin College, Davidson County, and 6¼ miles downstream from Reedy Creek. Datum of gage is 638.65 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 2,280 square miles.

Records available.- July 1928 to September 1948.

Average discharge.- 20 years, 2,898 second-feet.

Extremes.- Maximum discharge during year, 20,800 second-feet Apr. 2 (gage height, 17.50 feet); minimum, 958 second-feet Oct. 5 (gage height, 1.12 feet).

1928-48: Maximum discharge, 80,200 second-feet Aug. 15, 1940 (gage height, 33.75 feet); minimum, 395 second-feet Sept. 20, 1932 (gage height, 0.05 foot)

Maximum stage known, 35.0 feet sometime in July 1916, from floodmarks (discharge, 86,600 second-feet), from rating curve extended above 72,000 second-feet.

Remarks.- Records good except those above 10,000 second-feet and those for periods of no gage-height record, which are fair. Slight diurnal fluctuation during low flow caused by small power plant with little storage capacity 10 miles above station.

Revisions (water years).- W 822: Drainage area. W 852: 1935-37(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 12				May 13 to Sept. 30			
1.3	1,120	9.0	9,070	1.3	1,220	6.0	5,940
2.0	1,750	12.0	12,600	2.0	1,820	8.0	8,440
4.0	3,670	15.0	16,500	4.0	3,790	10.0	11,100
6.0	5,770						

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,210	3,070	2,680	1,980	2,780	2,680	16,300	2,870	4,500	2,690	1,550	1,640
2	1,210	2,870	2,680	2,250	2,680	2,870	15,800	2,780	3,590	2,440	2,000	1,500
3	1,210	6,880	2,490	2,490	2,490	3,470	7,420	2,680	2,990	2,090	4,060	1,340
4	1,210	12,000	2,490	2,200	2,580	3,170	5,660	2,680	2,990	1,860	11,700	a1,300
5	1,160	6,540	2,400	2,060	2,970	2,870	4,890	2,680	3,290	1,730	12,100	a1,300
6	1,120	4,570	2,400	2,020	5,960	2,680	4,470	2,780	2,890	1,680	6,330	a1,300
7	1,120	3,770	2,350	1,980	8,300	4,000	5,250	3,170	3,320	1,600	3,490	a1,600
8	1,210	3,670	2,350	1,930	6,100	6,100	8,410	3,270	5,040	1,500	2,790	2,590
9	4,520	3,670	2,400	1,930	5,110	5,220	8,450	2,870	3,090	1,460	2,490	2,290
10	12,000	3,070	2,350	1,930	4,270	4,170	5,770	2,580	2,690	1,500	2,340	1,960
11	13,400	3,550	2,350	1,880	3,670	3,570	4,780	2,490	2,490	1,500	3,290	2,560
12	5,700	6,210	2,350	1,880	4,140	3,270	4,670	2,490	2,290	1,600	2,340	2,490
13	3,870	4,570	2,250	3,040	9,900	3,070	4,470	11,200	2,240	2,140	2,190	1,860
14	3,070	3,570	2,160	6,160	11,900	2,870	4,270	5,150	2,290	2,790	2,090	1,640
15	2,680	5,000	2,160	3,520	10,500	2,780	7,820	3,290	2,690	2,790	2,240	1,500
16	2,400	8,190	2,780	2,490	6,430	2,870	6,040	2,790	2,490	4,310	1,960	1,460
17	2,350	5,620	2,970	2,350	5,000	7,620	4,570	2,790	2,390	3,690	1,820	1,420
18	5,280	4,270	2,580	2,350	4,270	4,900	4,070	2,590	2,240	2,690	2,090	1,340
19	9,600	7,520	2,350	2,110	3,870	3,570	3,770	2,440	2,440	2,540	2,440	1,300
20	5,770	8,470	2,250	2,020	3,470	3,370	3,670	2,340	2,390	2,390	2,190	1,300
21	3,870	5,330	2,200	2,400	3,270	3,670	3,470	2,290	2,090	2,190	2,040	1,260
22	3,070	4,270	2,160	2,680	3,270	3,970	3,370	2,240	2,040	1,860	1,820	1,220
23	2,680	3,870	2,110	2,490	3,270	3,970	3,270	2,190	2,540	1,780	1,960	1,220
24	2,780	3,970	2,110	2,250	3,070	6,500	3,170	2,140	2,590	1,600	1,780	1,300
25	3,370	4,070	2,110	1,800	2,970	5,660	3,170	2,590	2,390	1,500	1,730	1,300
26	3,070	3,770	2,110	1,700	3,070	4,270	3,070	6,040	2,000	1,460	1,680	1,260
27	2,680	3,470	2,110	2,160	3,070	5,980	3,070	7,930	1,860	1,420	1,550	1,220
28	2,680	3,170	2,160	2,490	2,870	12,500	2,870	3,590	2,280	1,420	1,500	1,300
29	7,700	2,970	2,020	2,490	2,780	7,360	2,870	5,000	2,890	1,680	1,420	1,550
30	5,160	2,870	1,980	2,580	-	5,220	2,970	4,390	3,190	1,640	1,380	2,570
31	3,670	-	1,980	3,070	-	5,050	-	5,630	-	1,730	1,400	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	120,820	13,400	1,120	3,897	1.71	1.97
November	144,840	12,000	2,870	4,828	2.12	2.36
December	71,740	2,970	1,980	2,314	1.01	1.17
Calendar year 1947	1,058,670	35,100	1,000	2,900	1.27	17.26
January	74,680	6,160	1,700	2,409	1.06	1.22
February	134,030	11,900	2,490	4,622	2.03	2.19
March	139,270	12,500	2,680	4,493	1.97	2.27
April	161,850	16,300	2,870	5,395	2.37	2.64
May	109,960	11,200	2,140	3,547	1.56	1.79
June	82,210	5,040	1,860	2,740	1.20	1.34
July	63,270	4,310	1,420	2,041	.895	1.03
August	89,760	12,100	1,380	2,895	1.27	1.46
September	47,890	2,590	1,220	1,596	.700	.78
Water year 1947-48	1,240,320	16,300	1,120	3,389	1.49	20.22

Peak discharge (base, 18,000 sec.-ft.).- Oct. 11 (3:30 a.m.) 18,100 sec.-ft.; Apr. 2 (1 to 2 a.m.) 20,800 sec.-ft.

a No gage-height record; discharge computed on basis of 1 gage reading, weather records, and records for Yadkin River at Wilkesboro and Fisher River near Copeland.

Yadkin River at High Rock, N. C.

Location.- Water-stage recorder, lat. 35°35'40", long. 80°13'55", a quarter of a mile downstream from High Rock Dam at High Rock, Davidson County, and $1\frac{3}{4}$ miles upstream from Lick Creek. Datum of gage is 558.68 feet above mean sea level, datum of 1929, and 590.00 feet above Carolina Aluminum Co. datum.

Drainage area.- 3,980 square miles.

Records available.- January 1919 to November 1927, November 1941 to September 1948.

Average discharge.- 13 years (1919-25, 1926-27, 1942-48), 4,886 second-feet (adjusted).

Extremes.- Maximum discharge during year, 39,400 second-feet Apr. 1 (gage height, 11.37 feet); minimum, 31 second-feet Sept. 26 (gage height, 2.12 feet); minimum daily, 34 second-feet Sept. 19.

1919-27, 1941-48: Maximum discharge, 76,600 second-feet July 21, 1919 (gage height, 15.9 feet, present datum from floodmarks as determined by Tallassee Power Co.), from rating curve extended above 53,000 second-feet by velocity-area studies; minimum, 10 second-feet Aug. 10, 1942 (gage height, 1.84 feet); minimum daily, 12 second-feet Aug. 9, 1942.

Maximum stage known, 22.1 feet (present datum) in July 1916, from floodmarks from records by Tallassee Power Co.

Remarks.- Records excellent except those for periods of no gage-height record, which are good, and those below 2,000 second-feet, which are fair. Large diurnal fluctuation caused by High Rock power plant above station. Flow largely regulated by High Rock Reservoir since 1927, which has a usable capacity of 10,230,000,000 cubic feet. Records of chemical analyses and water temperatures for the water year 1948 are given in Water Supply Paper 1132.

Cooperation.- High Rock Reservoir capacity curve and elevations furnished by Carolina Aluminum Co.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.2	42	3.0	390	5.4	5,310
2.3	60	3.3	690	6.0	7,570
2.4	83	3.6	1,080	6.5	9,810
2.5	111	4.0	1,710	7.0	12,400
2.6	146	4.4	2,500	8.0	17,800
2.8	243	4.8	3,480	10.0	29,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a3,800	4,670	5,660	5,960	2,520	5,530	27,000	2,590	6,840	4,400	83	6,480
2	a3,800	6,820	5,010	5,680	5,580	4,980	32,700	3,480	5,510	4,680	3,460	6,520
3	a3,800	21,100	4,930	2,360	4,620	5,270	15,800	5,100	5,530	3,180	3,890	6,400
4	a600	24,700	5,510	3,390	5,690	5,410	9,000	5,010	5,580	1,650	3,630	55
5	a60	14,100	5,380	5,690	5,380	5,550	7,720	4,880	2,180	3,840	4,750	41
6	a4,000	7,820	2,880	4,940	5,510	3,380	7,240	5,460	3,480	4,520	5,600	3,070
7	a4,000	6,560	3,880	4,740	9,630	14,100	9,060	4,750	5,960	5,220	3,810	5,020
8	a4,000	6,780	6,140	4,960	12,000	11,900	17,600	3,450	a7,000	4,550	3,040	5,510
9	a4,000	5,920	5,400	4,810	9,680	9,440	16,100	3,900	a6,000	4,730	5,600	5,730
10	a3,800	6,940	5,030	1,170	8,840	7,840	9,730	5,680	a3,600	2,420	4,870	6,010
11	a1,500	8,000	4,920	46	7,360	6,860	8,120	5,360	a4,400	977	4,840	64
12	a3,200	12,700	5,030	5,250	15,600	7,080	7,450	5,380	a4,000	5,080	4,830	35
13	a4,800	8,880	2,990	4,460	24,700	6,620	7,350	5,910	a3,800	4,570	4,770	5,480
14	4,090	7,010	4,380	4,640	31,000	2,410	7,040	10,300	a5,500	4,460	60	5,230
15	4,110	13,100	6,310	4,720	21,800	5,280	10,900	5,710	a4,400	4,470	1,290	5,240
16	5,500	14,900	4,960	4,350	11,700	5,320	10,200	2,880	a4,400	4,260	5,530	4,940
17	4,230	9,250	4,940	3,430	8,510	12,200	7,530	6,280	a4,800	2,760	5,020	4,560
18	4,150	7,420	4,990	3,760	7,410	7,730	7,290	5,170	a4,400	239	5,120	58
19	5,640	11,300	5,550	5,590	7,130	7,090	6,700	4,120	a3,800	4,180	5,000	34
20	5,910	14,400	3,040	5,480	7,040	6,920	5,540	4,750	a3,800	4,350	4,900	4,120
21	6,220	8,770	3,760	5,160	4,490	5,830	6,550	4,930	a5,500	4,300	1,970	4,980
22	4,870	6,940	6,240	5,260	4,760	5,860	6,840	3,770	a5,000	3,800	1,130	5,170
23	4,150	6,390	5,640	5,330	6,840	9,780	6,140	3,930	a4,800	3,830	5,000	4,970
24	a5,500	7,080	5,050	3,210	6,620	9,960	2,330	5,420	a4,800	3,880	4,930	3,570
25	a6,000	7,000	5,100	3,240	5,590	9,260	3,620	5,010	a4,800	74	5,010	1,440
26	a4,600	5,120	5,210	5,880	4,570	7,040	6,650	4,870	a3,200	2,840	5,090	196
27	a5,000	5,260	2,570	5,870	5,120	10,300	6,270	5,350	a1,600	4,140	5,010	4,400
28	a5,000	4,460	2,700	4,780	4,090	17,800	6,050	5,400	4,530	4,340	170	4,260
29	9,510	3,340	5,670	4,960	3,760	12,100	5,520	3,560	5,040	3,610	44	3,940
30	7,760	4,010	4,960	5,210	-	7,880	5,620	4,050	4,550	4,430	5,670	3,960
31	5,980	-	6,060	1,520	-	10,100	-	7,260	-	1,030	6,000	-

Month	Observed				Change of contents (equivalent, second-feet)†	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	139,580	9,510	60	4,503	+1,529	6,032	1.52	1.75
November	270,740	24,700	3,340	9,025	+18	9,043	2.27	2.53
December	149,890	6,310	2,570	4,835	-898	3,937	.989	1.14
Calendar year 1947	1,618,098	24,700	38	4,433	+205	4,638	1.17	15.82
January	135,846	5,960	46	4,382	0	4,382	1.10	1.27
February	257,540	31,000	2,520	8,881	+866	9,747	2.45	2.64
March	246,820	17,800	2,410	7,962	+90	8,052	2.02	2.33
April	285,660	32,700	2,330	9,522	-458	9,064	2.28	2.54
May	153,710	10,300	2,590	4,958	+249	5,207	1.31	1.51
June	138,800	7,000	1,600	4,627	-775	3,852	.968	1.08
July	110,790	5,200	74	3,574	-827	2,747	.690	.80
August	120,117	6,000	44	3,876	+890	4,766	1.20	1.38
September	111,483	6,520	34	3,716	-1,625	2,091	.525	.59
Water year 1947-48	2,120,976	32,700	34	5,795	-77	5,718	1.44	19.56

† Change in contents in High Rock Reservoir.

a No gage-height record: discharge computed on basis of Carolina Aluminum Co. records at High Rock Reservoir.

Pee Dee River near Rockingham, N. C.

Location.- Water-stage recorder, lat. 34°56'10", long. 79°51'10", at bridge on U. S. Highway 74, 1 mile upstream from Falling Creek, 4 miles downstream from Blewett Falls hydroelectric plant, and 6 miles west of Rockingham, Richmond County. Datum of gage is 120.68 feet above mean sea level, datum of 1929 (levels by Corps of Engineers)

Drainage area.- 6,870 square miles.

Records available.- September 1927 to September 1948. August 1906 to January 1912 at site on Pee Dee River about 4 miles upstream, published as Yadkin River near Pee Dee.

Average discharge.- 21 years (1927-48), 7,959 second-feet (unadjusted).

Extremes.- Maximum discharge during year, 83,000 second-feet Feb. 14 (gage height, 13.95 feet); minimum, 224 second-feet Oct. 6 (gage height, 0.84 foot); minimum daily, 458 second-feet Oct. 5.

1927-48: Maximum discharge, 270,000 second-feet Sept. 18, 1945 (gage height, 30.80 feet), from rating curve extended above 194,000 second-feet; minimum, 143 second-feet Oct. 25, 1943; minimum daily, 152 second-feet July 28, 1940.

Maximum stage known, 31.28 feet in August 1908, from State Highway and Public Works Commission records (discharge, 276,000 second-feet, from rating curve extended above 194,000 second-feet).

Remarks.- Records good. Large diurnal fluctuation caused by power plants above station. Flow largely regulated since 1928 by four reservoirs above station which have a combined usable storage capacity for normal operation of 17,638,000,000 cubic feet. Records of chemical analyses and water temperatures for the water year 1948 are given in Water Supply Paper 1132.

Cooperation.- Capacity curves and elevations for High Rock and Narrows Reservoirs furnished by Carolina Aluminum Co. and those for Tillery and Blewett Reservoirs furnished by Carolina Power & Light Co.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.0	286	2.6	3,070	7.0	25,700
1.2	402	3.0	4,400	8.0	32,500
1.4	580	3.5	6,200	9.0	40,000
1.7	980	4.0	8,300	10.0	48,000
2.0	1,530	5.0	13,300	12.0	65,000
2.3	2,250	6.0	19,200		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June.	July	Aug.	Sept.
1	4,060	8,190	6,800	6,800	16,800	7,640	25,000	7,050	9,900	6,970	1,450	5,130
2	4,000	5,790	6,070	7,220	11,100	8,750	54,000	1,550	9,900	7,220	4,620	5,130
3	3,670	23,900	6,800	8,080	11,600	16,200	36,200	5,720	9,200	6,600	7,010	4,940
4	692	38,500	6,400	7,430	12,200	13,900	19,200	5,630	6,800	1,700	8,750	3,830
5	458	31,800	6,800	7,220	12,200	10,800	17,400	7,430	7,010	1,130	12,700	666
6	3,490	16,800	7,430	5,830	18,000	9,430	13,600	6,800	3,760	4,940	17,400	4,890
7	4,320	10,400	2,520	6,800	30,400	21,600	14,800	7,430	5,990	5,060	13,600	5,220
8	4,170	9,430	6,400	6,050	25,700	46,400	21,200	5,820	8,520	5,100	8,060	5,080
9	4,570	12,400	7,010	6,160	19,200	27,000	23,800	1,190	9,200	4,770	4,060	5,880
10	5,630	11,600	7,010	4,960	18,600	23,800	19,200	4,960	8,750	4,800	3,930	6,150
11	8,750	11,400	7,860	2,780	14,800	21,200	13,900	6,200	8,300	2,190	4,700	4,650
12	4,960	32,200	8,300	5,330	26,800	16,800	16,200	7,220	7,860	5,960	3,870	1,580
13	3,740	23,800	9,200	6,880	72,000	13,600	13,900	7,430	4,300	4,650	4,140	4,170
14	4,120	14,500	6,800	28,600	78,300	9,430	10,400	14,500	4,900	4,610	5,460	4,740
15	4,870	16,300	7,220	21,200	72,000	7,860	10,600	11,100	7,640	4,730	3,840	4,850
16	5,080	34,000	9,200	12,400	34,800	7,860	15,600	7,240	7,220	5,170	4,910	4,780
17	5,770	23,100	13,000	10,600	21,200	10,100	12,200	4,200	6,660	4,490	5,400	4,710
18	5,620	15,000	10,100	8,250	15,600	19,200	8,520	6,600	6,050	1,780	5,650	3,030
19	4,770	13,000	9,430	5,300	12,400	16,800	7,640	6,200	6,940	5,090	5,390	826
20	5,400	15,600	8,520	8,080	11,100	14,200	8,750	7,220	2,440	5,460	5,450	4,810
21	7,780	17,400	7,430	8,520	11,100	9,900	8,750	6,600	4,630	4,770	5,820	5,360
22	7,420	15,600	7,220	8,080	10,600	7,430	8,520	6,600	7,220	4,840	2,940	6,370
23	5,360	10,100	6,360	8,080	12,200	8,080	8,750	2,780	7,010	4,820	5,290	5,480
24	6,990	8,980	7,010	9,200	11,600	12,400	8,520	5,280	6,800	4,760	5,410	5,680
25	8,980	9,660	6,400	7,430	10,600	11,900	7,640	6,540	5,090	2,870	5,700	2,250
26	8,980	10,800	6,600	6,270	9,430	12,400	7,220	8,080	6,200	4,920	5,770	1,850
27	7,640	9,430	7,430	7,010	8,980	11,400	7,430	8,080	4,760	5,960	6,460	4,660
28	6,550	8,980	6,600	11,100	8,750	16,200	7,220	7,860	4,570	4,620	4,630	5,440
29	9,200	8,520	6,800	15,600	8,080	19,200	6,330	7,860	5,890	6,200	1,900	4,980
30	9,200	5,150	6,400	13,000	-	16,200	5,520	8,300	5,980	6,800	5,260	4,650
31	8,980	-	7,640	16,200	-	14,500	-	10,600	-	4,330	5,850	-

Month	Observed				Change in contents (equivalent, second-feet)†	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	175,220	9,200	458	5,652	+1,846	-	-	-
November	472,330	38,500	5,150	15,740	-32	-	-	-
December	228,760	13,000	2,520	7,379	-949	-	-	-
Calendar year 1947	2,719,660	43,900	314	7,451	-300	7,151	1.04	14.12
January	286,460	28,600	2,780	9,241	+135	-	-	-
February	626,140	78,300	8,080	21,590	+461	-	-	-
March	462,180	46,400	7,430	14,910	+166	-	-	-
April	438,010	54,000	5,520	14,600	-377	-	-	-
May	210,070	14,500	1,190	6,776	+446	-	-	-
June	199,490	9,900	2,440	6,650	-939	-	-	-
July	147,310	7,220	1,130	4,752	-857	-	-	-
August	185,420	17,400	1,450	5,981	+817	-	-	-
September	131,782	6,370	666	4,393	-1,679	-	-	-
Water year 1947-48	3,563,172	78,300	458	9,735	-76	9,659	1.41	19.19

† Change in contents of High Rock, Narrows, Tillery, and Blewett Reservoirs.

Pee Dee River at Peedee, S. C.

Location.- Water-stage recorder, lat. 34°12'15", long. 79°32'55", at new bridge on U. S. Highway 76, at Peedee, Marion County, 0.2 mile downstream from Altantic Coast Line Railroad bridge and 8½ miles downstream from Black Creek. Datum of gage is 24.73 feet above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 1, 1947, water-stage recorder at site 1.6 miles downstream. Datum of gage was 23.46 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 8,870 square miles.

Records available.- October 1947 to September 1948. January 1939 to September 1947 at site 1.6 miles downstream, published as Pee Dee River near Mars Bluff, S. C. Gage-height records collected at practically same sites since 1923 are contained in reports of U. S. Weather Bureau.

Extremes.- Maximum discharge during year, 69,300 second-feet Feb. 19 (gage height, 26.23 feet); minimum, 1,460 second-feet Oct. 7 (gage height, 2.55 feet).

1939-48: Maximum discharge, 220,000 second-feet Sept. 22, 1945 (gage height, 33.30 feet, site and datum then in use), from rating curve extended above 48,000 second-feet on basis of discharge measurement of 221,000 second-feet at Cheraw; minimum, 900 second-feet July 30, 1940 (gage height, 1.66 feet, site and datum then in use).

Remarks.- Records good. Flow partly regulated by power plants above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.8	1,560	16.0	12,300	21.5	27,400
5.0	2,900	18.0	15,200	23.0	38,200
9.0	5,820	19.5	18,200	25.0	56,600
13.0	9,100	20.5	22,000	26.1	68,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,920	8,560	12,300	9,280	15,400	14,400	17,200	7,650	9,960	6,290	7,170	5,060
2	4,460	8,470	11,100	9,190	16,200	13,400	17,700	7,730	10,900	7,570	5,290	5,520
3	4,620	7,570	10,100	9,190	16,600	13,200	19,200	6,610	10,800	8,130	3,860	h5,170
4	4,460	10,800	9,560	9,560	16,600	14,500	21,600	5,060	10,500	7,810	6,370	h5,090
5	3,730	15,400	9,190	9,660	16,400	15,500	25,000	6,610	9,660	6,370	8,290	h4,850
6	2,020	17,000	9,010	9,280	16,200	15,900	28,700	7,730	8,650	3,560	6,690	h3,960
7	1,560	18,200	9,100	8,560	16,200	15,900	31,400	8,050	7,250	2,930	12,400	h2,660
8	3,240	19,200	7,810	8,290	17,400	16,200	29,400	8,290	5,970	5,060	13,200	h4,620
9	4,390	19,600	7,010	8,050	19,600	18,200	26,800	8,050	7,330	5,360	12,300	h5,410
10	4,540	18,200	7,970	7,810	22,000	20,700	25,600	6,180	8,560	5,220	9,320	h5,740
11	4,990	17,700	8,560	7,410	24,500	24,500	25,000	4,320	9,010	5,140	6,690	h6,190
12	6,930	17,400	9,560	6,050	26,800	28,700	24,500	6,290	8,830	4,760	5,440	h6,190
13	7,010	18,600	10,300	5,660	28,000	32,100	23,000	7,650	9,380	3,810	5,220	h4,680
14	5,360	19,900	10,900	7,570	28,000	32,100	21,600	8,560	7,570	5,360	4,840	h3,140
15	4,620	22,000	10,800	13,000	30,700	30,000	19,900	10,900	5,440	5,060	4,920	h4,100
16	4,760	24,000	10,400	16,000	35,800	25,000	18,200	12,100	6,930	5,440	5,520	h4,700
17	5,290	24,500	11,000	16,600	48,000	21,100	17,400	11,000	8,050	6,770	5,290	h4,850
18	5,660	26,200	12,400	16,200	65,800	18,600	17,200	8,210	8,050	6,930	5,360	h4,850
19	6,130	28,000	13,200	15,400	68,200	18,000	16,000	7,410	7,570	5,820	5,970	h4,470
20	5,820	28,000	13,000	13,200	60,600	18,600	14,700	7,410	7,330	4,760	5,970	h3,200
21	5,660	26,200	12,500	12,300	50,600	18,800	13,700	7,410	6,690	5,890	5,740	h2,240
22	6,530	24,000	11,900	11,900	41,500	18,600	12,800	7,570	4,390	5,970	5,820	h4,100
23	7,330	23,000	11,300	11,600	32,800	17,000	12,200	7,410	6,290	5,590	5,360	h5,330
24	6,370	21,600	10,800	11,100	26,200	15,900	11,600	6,100	7,330	5,360	4,320	h5,570
25	6,290	19,200	10,500	11,100	22,400	15,500	11,200	4,690	7,570	5,290	5,290	h5,410
26	7,490	17,700	10,200	10,700	19,600	15,500	10,600	6,290	7,010	5,140	5,520	h4,700
27	8,130	16,800	10,100	9,460	17,700	15,500	9,860	7,650	6,530	4,620	5,660	h3,010
28	7,970	16,000	10,200	9,190	16,400	15,500	9,280	8,290	5,370	5,740	5,890	h2,700
29	7,170	15,000	10,200	10,800	15,400	15,700	9,010	8,560	5,060	5,660	5,660	h4,470
30	7,650	14,100	9,660	13,200	-	16,200	8,290	8,920	5,590	6,610	4,460	h5,650
31	8,290	-	9,280	14,500	-	16,800	-	9,280	-	7,890	3,160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	173,390	8,290	1,560	5,593	0.631	0.73
November	562,900	28,000	7,570	18,760	2.11	2.35
December	319,910	13,200	7,010	10,320	1.16	1.34
Calendar year 1947	3,297,930	30,100	1,520	9,035	1.02	13.82
January	331,810	16,600	5,660	10,700	1.21	1.40
February	831,600	68,200	15,400	28,680	3.23	3.48
March	587,600	32,100	13,200	18,950	2.14	2.47
April	548,640	31,400	8,290	18,290	2.06	2.30
May	237,980	12,100	4,320	7,677	.866	1.00
June	229,570	10,900	4,390	7,652	.863	.96
July	175,910	8,130	2,930	5,675	.640	.74
August	196,990	13,200	3,160	6,355	.716	.83
September	137,630	6,190	2,240	4,588	.517	.58
Water year 1947-48	4,333,930	68,200	1,560	11,840	1.33	18.18

Peak discharge (base, 22,000 sec.-ft.).- Nov. 20 (3:30 a.m.) 28,700 sec.-ft.; Feb. 19 (5 a.m.) 69,300 sec.-ft.; Mar. 14 (2 a.m.) 32,800 sec.-ft.; Apr. 7 (12 m.) 31,400 sec.-ft.

h Computed from auxiliary recorder graph at former site, 1.6 miles downstream.

Reddies River at North Wilkesboro, N. C.

Location.- Water-stage recorder, lat. 36°10'25", long. 81°10'10", 1¼ miles northwest of North Wilkesboro, Wilkes County, 1¼ miles upstream from North Wilkesboro municipal dam, and 2 miles upstream from mouth. Datum of gage is 978.62 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 93.9 square miles.

Records available.- December 1939 to September 1948.

Extremes.- Maximum discharge during year, 2,680 second-feet Oct. 17 (gage height, 6.57 feet); minimum, 57 second-feet Oct. 7.
1939-48: Maximum discharge, 27,000 second-feet Aug. 14, 1940 (gage height, 22.02 feet), by computation of flow over dam; minimum, 43 second-feet Jan. 6, 1940, but may have been less at times during periods of ice effect in January and February 1940.

Remarks.- Records good except those for periods of ice effect, which are poor. Records of chemical analyses for the water year 1948 are given in Water Supply Paper 1132.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.0	61	2.2	274	3.5	680
1.4	119	2.6	370	4.0	920
1.8	184	3.0	485	4.5	1,200

Dischsrge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	145	147	122	b120	120	540	147	156	118	161	76
2	62	366	145	316	113	137	334	145	137	94	192	72
3	62	861	142	116	114	130	260	144	161	90	317	72
4	60	358	139	114	120	128	226	145	160	85	518	71
5	60	250	139	112	136	120	211	152	137	82	268	79
6	58	202	136	108	333	124	206	140	132	81	161	133
7	61	182	132	107	238	240	295	168	148	78	134	139
8	116	186	134	107	186	215	422	140	132	76	125	108
9	1,100	161	130	107	173	170	305	136	124	81	118	95
10	582	152	130	104	158	155	245	131	118	81	112	92
11	300	218	131	100	142	147	233	130	114	107	110	85
12	188	202	126	106	303	140	217	131	112	140	119	79
13	153	171	124	150	346	134	200	139	110	113	107	76
14	131	160	122	122	482	131	249	130	112	183	100	75
15	118	374	132	b95	288	130	248	125	120	407	101	75
16	145	274	158	b120	215	147	213	124	112	179	98	72
17	1,060	211	130	b120	188	139	196	122	106	147	110	72
18	827	205	126	104	171	128	184	118	104	116	104	72
19	334	395	124	b90	161	144	177	116	104	106	94	71
20	222	276	122	b110	155	142	175	114	100	100	90	68
21	173	224	122	114	144	134	171	113	96	95	90	67
22	150	198	119	110	148	131	166	112	102	92	92	68
23	137	208	119	107	140	313	163	110	122	86	88	86
24	173	222	116	b105	134	222	160	136	100	85	96	74
25	166	202	116	b100	139	173	160	139	94	82	86	69
26	145	186	116	b120	137	160	155	252	89	82	82	68
27	134	173	113	b110	*131	805	152	137	94	85	79	69
28	346	164	112	*b100	130	346	150	162	128	113	78	85
29	236	158	110	106	125	233	156	190	106	98	76	182
30	182	153	108	122	-	198	150	286	124	94	75	112
31	160	-	*110	128	-	538	-	217	-	126	90	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	7,703	1,100	58	248	2.64	3.05
November	7,237	861	145	241	2.57	2.87
December	3,930	158	108	127	1.35	1.56
Calendar year 1947	47,736	1,870	50	131	1.40	18.91
January	3,472	150	90	112	1.19	1.38
February	5,370	482	113	185	1.97	2.13
March	6,174	805	120	199	2.12	2.45
April	6,719	540	150	224	2.39	2.66
May	4,551	286	110	147	1.57	1.80
June	3,554	161	89	118	1.26	1.41
July	3,502	407	76	113	1.20	1.39
August	4,071	518	75	131	1.40	1.61
September	2,562	182	67	85.4	.909	1.01
Water year 1947-48	58,845	1,100	58	161	1.71	23.32

Peak discharge (base, 2,000 sec.-ft.).- Oct. 9 (6:30 p.m.) 2,370 sec.-ft.; Oct. 17 (11 p.m.) 2,680 sec.-ft.; Mar. 27 (8:30 a.m.) 2,370 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Fisher River near Copeland, N. C.

Location.- Water-stage recorder, lat. 36°19'55", long. 80°40'30", 300 feet upstream from bridge on State Highway 268, half a mile upstream from Cody Creek, and 2 miles west of Copeland, Surry County.

Drainage area.- 121 square miles.

Records available.- October 1931 to September 1948.

Average discharge.- 17 years, 180 second-feet.

Extremes.- Maximum discharge during year, 3,800 second-feet Oct. 9 (gage height, 8.16 feet); minimum, 61 second-feet Sept. 22, 28 (gage height, 2.08 feet).
1931-48: Maximum discharge, 27,300 second-feet Aug. 14, 1940 (gage height, 18.4 feet, from floodmarks), mean of two slope-area determinations; minimum observed, 21 second-feet Sept. 18, 1932 (gage height, 1.70 feet).

Remarks.- Records good except those for periods of ice effect, which are fair. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions.- W 822: Drainage area.

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1-9

2.1	68	2.6	182
2.2	86	2.9	282
2.4	130	3.3	445

Note.- Same as following table above 3.3 feet.

Oct. 10 to Sept. 30

2.1	64	2.7	203	4.0	780
2.3	102	3.0	314	4.5	1,050
2.5	148	3.5	536	5.3	1,540

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	197	169	138	151	161	1,520	188	194	134	90	77
2	82	194	166	188	151	191	499	180	156	111	148	69
3	81	696	164	151	148	191	369	180	183	104	431	68
4	77	365	161	143	148	183	314	174	169	98	403	66
5	77	274	161	141	156	169	286	191	151	92	279	69
6	75	230	158	138	374	166	267	171	148	88	151	88
7	77	210	153	*136	318	337	468	227	210	84	126	129
8	123	230	153	134	244	314	569	186	161	82	190	96
9	1,200	197	151	134	244	234	374	171	148	86	129	96
10	1,110	186	148	134	210	210	306	164	136	84	115	198
11	440	306	153	126	188	197	294	161	129	96	126	109
12	259	278	151	126	377	188	290	161	126	106	120	90
13	203	217	143	307	476	177	278	183	124	102	117	82
14	174	197	143	217	631	169	298	161	131	147	115	78
15	153	493	148	156	365	166	378	151	151	203	104	78
18	153	306	194	174	278	177	290	148	136	196	96	73
17	182	244	161	b155	248	186	267	146	122	141	106	73
18	1,160	230	153	146	*223	166	244	138	171	113	113	71
19	365	483	151	b130	210	169	237	136	187	106	131	69
20	248	282	151	b150	197	188	230	134	126	102	120	66
21	203	241	148	158	188	174	220	131	115	102	98	64
22	180	220	146	153	197	166	213	129	115	90	98	61
23	164	227	143	146	188	325	206	126	129	84	94	69
24	227	248	143	b140	180	282	203	153	120	80	98	69
25	203	230	141	b150	188	223	200	138	117	77	88	66
26	174	210	141	b190	191	203	210	343	102	75	82	64
27	161	197	136	180	183	765	194	169	172	82	78	64
28	697	188	136	b160	180	387	188	153	183	90	75	66
29	369	180	134	b150	169	282	197	169	143	90	73	177
30	263	177	131	146	-	248	200	197	120	106	68	151
31	220	-	131	148	-	841	-	237	-	84	84	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,182	1,200	75	296	2.45	2.82
November	7,933	696	177	264	2.18	2.44
December	4,662	194	131	150	1.24	1.43
Calendar year 1947	73,234	8,920	73	201	1.66	22.52
January	4,845	307	126	156	1.29	1.49
February	7,001	631	148	241	1.99	2.15
March	7,835	841	161	253	2.09	2.41
April	9,809	1,520	188	327	2.70	3.01
May	5,296	343	126	171	1.41	1.63
June	4,375	210	102	146	1.21	1.34
July	3,235	203	75	104	.860	.99
August	4,146	431	68	134	1.11	1.27
September	2,596	198	61	86.5	.715	.80
Water year 1947-48	70,915	1,520	61	194	1.60	21.78

Peak discharge (base, 2,200 sec.-ft.).- Oct. 9 (8:30 p.m.) 3,800 sec.-ft.; Oct. 18 (8 a.m.) 2,300 sec.-ft.; Apr. 1 (1:30 a.m.) 3,350 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Forbush Creek near Yadkinville, N. C.

Location.- Water-stage recorder, lat. 36°08'00", long. 80°32'45", 600 feet upstream from county highway bridge, three-quarters of a mile north of Forbush Church, 4½ miles upstream from mouth, and 6 miles east of Yadkinville, Yadkin County.

Drainage area.- 21.7 square miles.

Records available.- April 1940 to September 1948.

Extremes.- Maximum discharge during year, 611 second-feet Mar. 31 (gage height, 6.22 feet); minimum, 4.4 second-feet Sept. 22 (gage height, 0.58 foot); minimum daily, 5.4 second-feet Sept. 21, 22, 24-27.

1940-48: Maximum discharge, 2,450 second-feet Sept. 30, 1944 (gage height, 11.02 feet), from rating curve extended above 700 second-feet, on basis of velocity-area studies; minimum, 2.1 second-feet Sept. 22, 24, 25, 1941; minimum daily, 2.5 second-feet Sept. 25, 1941.

Remarks.- Records good except those for periods of ice effect, which are fair. Diurnal fluctuation and slight regulation for short periods during low flow caused by small mills above station.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-28, Jan. 14 to Mar. 16, May 26 to Aug. 4)

Oct. 1 to Nov. 18

0.6	5.5	1.2	36
.7	9.0	1.4	50
.8	13	1.7	74
.9	18	2.0	98
1.0	24	2.5	146

Nov. 19 to Sept. 30

0.6	5.0	1.0	22	1.5	56
.7	8.8	1.1	27	2.0	98
.8	13	1.2	33	2.5	146
.9	17	1.3	40	3.0	202

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	14	15	14	21	17	158	18	23	15	7.6	6.9
2	6.8	29	14	15	18	24	53	18	20	12	13	6.5
3	6.5	150	14	13	18	23	35	17	19	12	14	6.1
4	5.8	44	14	13	20	20	29	18	18	11	40	6.5
5	5.8	26	14	13	30	18	26	18	17	11	16	7.2
6	5.8	20	14	13	120	19	25	17	20	10	12	9.6
7	6.5	17	13	12	56	64	47	23	77	10	11	15
8	8.2	26	14	12	46	39	99	18	35	9.6	11	9.2
9	22	18	13	12	39	27	42	17	22	9.6	10	8.0
10	25	16	14	12	28	23	31	16	19	10	11	9.2
11	23	64	14	12	23	21	29	16	18	11	12	8.4
12	13	41	14	12	73	19	34	37	17	21	11	7.6
13	11	25	13	96	141	19	29	82	17	14	10	7.2
14	9.4	21	13	38	127	18	126	42	17	13	14	6.9
15	8.6	106	16	b22	46	17	104	23	16	15	11	6.9
16	10	42	20	b19	32	94	39	20	15	14	10	6.1
17	11	28	16	17	27	82	31	19	14	12	23	6.1
18	9.8	35	*15	16	*23	35	27	17	14	12	12	6.1
19	11	168	14	b15	22	29	26	17	14	16	10	6.1
20	11	39	14	15	20	26	24	17	14	12	10	5.7
21	9.4	27	14	17	19	25	23	16	14	10	10	5.4
22	8.6	23	14	*18	22	23	22	16	14	10	10	5.4
23	8.6	23	14	17	20	26	21	16	14	9.6	9.6	6.1
24	13	25	13	b15	19	28	21	16	14	9.2	8.8	5.4
25	11	22	14	b16	21	24	20	17	13	8.4	8.4	5.4
26	9.8	20	13	15	20	22	20	176	12	8.8	8.0	5.4
27	9.0	18	13	17	19	71	19	31	12	8.4	7.6	5.4
28	91	17	13	17	18	37	19	40	12	8.8	7.2	8.0
29	34	16	13	17	17	27	20	43	12	9.6	6.9	18
30	20	16	12	21	-	24	19	57	17	8.8	6.5	11
31	16	-	12	24	-	195	-	33	-	8.0	6.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	447.4	91	5.8	14.4	0.664	0.77
November	1,136	168	14	37.9	1.75	1.95
December	433	20	12	14.0	.645	.74
Calendar year 1947	7,088.9	355	5.0	19.4	.894	12.16
January	585	96	12	18.9	.871	1.00
February	1,105	141	17	38.1	1.76	1.89
March	1,136	195	17	36.6	1.69	1.95
April	1,218	158	19	40.6	1.87	2.09
May	931	176	16	30.0	1.38	1.60
June	560	77	12	18.7	.862	.96
July	349.8	21	8.0	11.3	.521	.60
August	358.5	40	6.5	11.6	.535	.61
September	226.8	18	5.4	7.56	.348	.39
Water year 1947-48	8,486.5	195	5.4	23.2	1.07	14.55

Peak discharge (base, 550 sec.-ft.).- Mar. 31 (8:30 p.m.) 611 sec.-ft.
* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

South Yadkin River near Mocksville, N. C.

Location.- Water-stage recorder, lat. 35°50'40", long. 80°39'45", at county highway bridge 1 mile upstream from Little Creek, 4½ miles upstream from Hunting Creek, and 5¼ miles southwest of Mocksville, Davie County.

Drainage area.- 313 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 308 second-feet.

Extremes.- Maximum discharge during year, 2,710 second-feet Apr. 1 (gage height, 8.65 feet); minimum, 102 second-feet during period Oct. 1-3 (gage height, 1.73 feet, from recorded range in stage).

1938-48: Maximum discharge, 8,000 second-feet Sept. 19, 1945 (gage height, 16.02 feet); minimum, 68 second-feet Oct. 12, 1941 (gage height, 1.48 feet).

Maximum stage known, 22.6 feet sometime in October 1929, from flood reference mark cut in tree at gage by local resident.

Remarks.- Records good except those above 1,000 second-feet and those for period of ice effect, which are fair, and those for periods of no gage-height record, which are poor.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 21						Mar. 22 to Sept. 30					
1.8	113	2.6	308	5.0	1,030	1.8	114	2.6	314	5.5	1,400
2.0	152	3.0	420	6.0	1,380	2.0	152	3.0	450	7.0	1,980
2.3	224	4.0	710	8.0	2,120	2.3	224	4.0	818	8.5	2,660

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a120	291	a280	a260	507	328	2,660	334	370	238	148	167
2	a120	400	a280	a300	420	392	2,410	321	321	227	211	146
3	a120	1,630	a280	a280	378	434	1,200	317	304	181	407	142
4	a115	1,700	a270	a260	392	a380	780	308	292	172	1,550	140
5	a115	816	a260	a250	478	a360	647	314	282	165	1,690	146
6	a115	507	a260	a240	1,180	a340	573	308	258	159	793	156
7	a115	392	a260	a230	1,310	a600	683	357	288	152	370	170
8	a120	420	a260	a230	864	a650	1,750	350	390	146	282	176
9	a300	392	a260	a230	666	a550	1,510	301	301	144	244	163
10	a550	328	a260	a230	565	a480	856	288	261	148	221	154
11	a600	570	274	a220	478	a420	666	279	241	154	230	181
12	a300	800	258	a220	840	a380	628	387	232	181	214	161
13	a240	536	244	a550	1,560	a360	555	767	227	549	219	144
14	a200	a420	235	a700	1,770	a350	520	401	227	249	193	138
15	a190	a700	258	a440	1,190	a340	970	321	224	238	184	136
16	a200	a830	378	a400	725	a380	780	295	224	249	179	134
17	a260	a550	*333	a360	580	a850	591	285	216	270	201	130
18	a260	449	291	a320	507	a650	520	273	211	304	235	128
19	a340	652	272	*a280	464	a550	468	258	246	246	216	127
20	a300	638	260	272	420	a600	450	249	216	191	441	125
21	a240	507	255	342	406	a1,100	432	244	201	176	222	121
22	a200	434	252	347	420	a1,300	415	238	201	170	219	119
23	186	420	244	314	420	a800	394	230	308	167	184	121
24	a320	434	241	297	378	a700	387	227	203	156	170	125
25	a340	420	238	b240	392	591	387	267	230	152	165	121
26	a300	378	246	b300	392	502	398	442	188	146	159	119
27	a260	a340	a250	333	*378	939	364	826	184	146	154	119
28	a380	a320	a250	378	358	1,360	350	404	186	142	148	127
29	832	a300	a240	339	344	970	347	450	221	150	144	179
30	522	a300	a240	436	-	647	354	625	206	159	148	216
31	353	-	a240	666	-	1,230	-	520	-	146	167	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	8,613	832	115	278	0.888	1.02
November	16,894	1,700	291	563	1.80	2.01
December	8,169	378	235	264	.843	.97
Calendar year 1947	111,351	2,460	102	305	.974	13.23
January	10,264	700	220	331	1.06	1.22
February	18,782	1,770	344	648	2.07	2.23
March	19,533	1,360	328	630	2.01	2.32
April	23,045	2,660	347	768	2.45	2.74
May	11,186	826	227	361	1.15	1.33
June	7,459	390	184	249	.796	.89
July	6,073	549	142	196	.626	.72
August	10,108	1,690	144	326	1.04	1.20
September	4,331	216	119	144	.460	.51
Water year 1947-48	144,457	2,660	115	395	1.26	17.16

Peak discharge (base, 2,700 sec.-ft.).- Apr. 1 (11:30 a.m.) 2,710 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 4 discharge measurements, recorded range in stage, weather records, and records for South Yadkin River at Cooleemee and Rocky River at Turnersburg.

b Stage-discharge relation affected by ice.

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, just upstream from North Carolina State Highway 801, and 2¼ miles downstream from Bear Creek. Datum of gage is 624.57 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 569 square miles.

Records available.- June 1928 to September 1948.

Average discharge.- 18 years (1930-48), 620 second-feet.

Extremes.- Maximum discharge during year, 5,480 second-feet Apr. 2 (gage height, 15.00 feet); minimum, 26 second-feet Sept. 29 (gage height, 0.65 foot); minimum daily, 87 second-feet Oct. 5.

1928-48: Maximum discharge, 24,800 second-feet Oct. 3, 1929 (gage height, 22.25 feet), from rating curve extended above 7,500 second-feet by computation of flow over dam half a mile upstream verified by records of other streams; minimum, 10 second-feet Nov. 25, 1931 (gage height, 0.40 foot); minimum daily, 23 second-feet Oct. 12, 19, 1941.

Flood of July 16, 1916, reached a stage of 27.2 feet.

Remarks.- Records good except those above 1,500 second-feet and those for period of no gage-height record, which are poor. Large diurnal fluctuation and slight regulation during low and medium flow caused by Erwin Cotton Mills above station. Records of chemical analyses and water temperatures for the water year 1948 are given in Water-Supply Paper 1132.

Revisions.- W 822: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 5-20)

Oct. 1 to Nov. 4, Aug. 6 to Sept. 30				Nov. 5 to Aug. 5			
1.0	77	3.0	690	1.8	304	5.0	1,580
1.2	121	5.0	1,440	2.4	511	7.0	2,290
1.5	199	8.0	2,640	3.0	752	10.0	3,440
2.0	350	12.0	4,240	4.0	1,190	14.0	5,060

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	193	498	545	433	971	585	f4,920	620	851	509	304	346
2	177	576	521	551	760	801	5,180	585	556	527	345	235
3	200	f3,600	511	545	691	928	f3,020	585	586	340	558	245
4	220	4,440	501	420	716	752	1,460	566	623	365	2,120	274
5	87	2,720	492	485	1,110	667	1,190	585	501	357	3,440	152
6	261	970	485	436	2,660	625	1,080	585	511	334	1,510	296
7	207	713	452	405	2,960	1,610	1,190	688	529	331	585	394
8	229	794	492	420	1,980	1,620	a3,200	646	709	324	465	258
9	1,170	774	471	425	1,420	1,190	a3,400	566	566	328	415	354
10	1,190	553	473	415	1,190	994	1,830	547	511	328	392	257
11	1,500	1,150	521	389	1,020	840	1,270	529	494	328	398	356
12	735	1,970	495	426	1,700	752	1,190	932	456	362	385	250
13	482	1,060	473	954	f3,360	688	1,080	3,440	460	702	388	346
14	398	736	435	1,520	f4,200	646	972	1,090	458	488	389	220
15	378	1,650	490	822	f3,410	625	1,710	646	476	446	309	269
16	358	2,040	806	602	1,780	655	1,590	585	458	476	359	231
17	473	1,180	656	590	1,180	1,830	1,170	547	441	475	344	240
18	495	810	553	540	1,040	1,460	975	547	444	470	465	196
19	624	1,450	517	523	950	994	913	511	497	444	389	265
20	757	1,650	498	490	774	950	760	494	434	379	624	217
21	527	1,150	471	648	688	1,790	796	518	430	355	372	205
22	425	887	488	681	799	2,220	752	514	432	336	458	233
23	352	768	454	588	818	1,480	709	417	832	338	353	187
24	671	909	439	540	709	1,470	688	441	475	331	331	228
25	754	818	441	405	709	1,160	688	494	460	304	342	220
26	533	719	458	476	752	978	743	652	361	304	309	136
27	459	655	458	577	688	1,630	618	1,570	385	301	278	257
28	523	616	458	733	688	2,440	625	627	397	301	303	260
29	1,600	576	479	652	632	2,060	625	654	450	301	171	308
30	1,010	553	433	876	-	1,230	646	987	446	304	330	365
31	623	-	440	1,620	-	1,740	-	1,670	-	307	264	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	17,611	1,600	87	568	0.998	1.15
November	36,985	4,440	498	1,233	2.17	2.42
December	15,406	806	433	497	.873	1.01
Calendar year 1947	201,050	5,100	67	575	1.01	13.74
January	19,187	1,620	389	619	1.09	1.25
February	40,355	4,200	632	1,392	2.45	2.64
March	37,410	2,440	585	1,207	2.12	2.45
April	44,990	5,180	618	1,476	2.59	2.94
May	23,838	3,440	417	769	1.35	1.56
June	15,229	851	361	508	.893	1.00
July	11,795	702	301	380	.668	.77
August	17,695	3,440	171	571	1.00	1.16
September	7,800	394	136	260	.457	.51
Water year 1947-48	288,301	5,180	87	788	1.38	18.85

Peak discharge (base, 5,000 sec.-ft.).- Apr. 2 (4 a.m.) 5,480 sec.-ft.

a No gage-height record; discharge computed on basis of partial record and records for station near Mocksville.

f Fragmentary gage-height record; discharge computed on basis of partly estimated gage heights.

Rocky River at Turnersburg, N. C.

Location.- Water-stage recorder, lat. 35°54'35", long. 80°48'10", 500 feet downstream from bridge on U. S. Highway 21 at Turnersburg, Iredell County, and 1 mile downstream from Mud Creek. Datum of gage is 724.10 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 85.5 square miles.

Records available.- April 1940 to September 1948.

Extremes.- Maximum discharge during year, 1,860 second-feet Mar. 21 (gage height, 6.07 feet); minimum recorded, 38 second-feet Oct. 4-6 (gage height, 1.69 feet); minimum daily, 44 second-feet Oct. 5, Sept. 26.

1940-48: Maximum discharge, 6,080 second-feet Sept. 18, 1945 (gage height, 12.08 feet); minimum, 1 second-foot Oct. 18, 1940, Oct. 26, 1941; minimum daily, 22 second feet Oct. 26, 1941.

A stage of 18.0 feet was reached by a flood sometime during years 1936 to 1938, from reference mark witnessed by local resident.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Considerable diurnal fluctuation at low flow caused by mills above station.

Rating tables, water year 1947-48, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 2

1.7	39	2.5	159
1.8	49	2.8	225
2.0	72	3.2	324
2.2	102		

Nov. 3 to Sept. 30

1.7	42	2.2	104	3.6	550
1.8	51	2.5	166	4.0	750
1.9	61	2.8	240	4.7	1,110
2.0	74	3.2	380		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a46	102	102	85	155	117	1,080	125	131	108	55	53
2	a46	139	99	106	138	140	416	121	117	80	84	52
3	a46	1,000	98	91	129	148	270	119	114	70	196	50
4	46	380	96	88	134	134	221	117	110	68	383	50
5	44	213	94	85	162	*123	203	121	106	64	355	55
6	45	159	93	84	568	121	191	115	98	62	134	62
7	46	136	91	82	376	208	230	142	129	61	98	64
8	59	155	91	82	258	224	815	119	138	60	87	70
9	114	129	91	82	224	182	397	112	108	61	80	59
10	232	114	91	82	194	162	252	106	98	61	74	61
11	174	240	96	78	166	146	221	104	91	66	81	74
12	115	246	91	78	400	138	213	131	90	240	75	57
13	91	171	88	236	630	129	196	212	87	185	86	53
14	78	144	85	213	560	123	230	127	88	93	68	51
15	70	326	93	140	308	119	373	110	87	106	65	51
16	83	252	134	b115	226	148	224	106	84	99	64	49
17	113	180	108	117	194	302	199	102	82	104	109	48
18	100	159	*99	108	171	206	178	99	90	88	88	47
19	146	280	98	98	159	180	171	94	91	78	84	47
20	126	224	93	99	148	248	164	93	81	73	78	47
21	92	178	91	114	140	1,090	157	91	77	69	70	45
22	79	153	90	114	157	356	151	90	98	68	70	45
23	72	153	87	*106	146	280	146	87	87	65	65	48
24	121	159	85	b90	134	258	144	90	90	61	62	46
25	130	148	87	b85	140	213	153	112	81	58	60	45
26	102	136	87	b100	138	189	144	471	74	58	58	44
27	89	125	87	b110	129	542	134	233	77	57	56	45
28	300	117	85	121	127	408	134	155	84	57	54	49
29	252	110	84	110	121	249	131	187	99	60	53	82
30	153	106	82	142	-	203	134	168	75	64	57	77
31	120	-	82	203	-	584	-	180	-	56	58	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,330	300	44	107	1.25	1.45
November	6,134	1,000	102	204	2.39	2.67
December	2,878	134	82	92.8	1.09	1.25
Calendar year 1947	40,910	1,220	39	112	1.31	17.81
January	3,444	236	78	111	1.30	1.50
February	6,532	630	121	225	2.63	2.84
March	7,670	1,090	117	247	2.89	3.34
April	7,672	1,080	131	256	2.99	3.34
May	4,239	471	87	137	1.60	1.84
June	2,862	138	74	95.4	1.12	1.24
July	2,500	240	56	80.6	.943	1.09
August	3,007	383	53	97.0	1.13	1.31
September	1,626	82	44	54.2	.634	.71
Water year 1947-48	51,894	1,090	44	142	1.66	22.58

Peak discharge (base, 1,800 sec.-ft.).- Mar. 21 (6:45 a.m.) 1,860 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 1 discharge measurement, partial record, and records for stations on nearby streams.

b Stage-discharge relation affected by ice.

Third Creek at Cleveland, N. C.

Location.- Water-stage recorder, lat. 35°44'40", long. 80°40'55", at county road three-quarters of a mile north of Cleveland, Rowan County, and 7 miles upstream from Fourth Creek. Datum of gage is 684.47 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 87.4 square miles.

Records available.- April 1940 to September 1948.

Extremes.- Maximum discharge during year, 1,080 second-feet Apr. 1 (gage height, 9.70 feet); minimum, 28 second-feet Sept. 22, 24-26; minimum gage height, 0.86 foot Oct. 6, 7.

1940-48: Maximum discharge, 3,080 second-feet (revised) about Sept. 19, 1945 (gage height, 15.76 feet, from high-water mark), from rating curve extended above 900 second-feet by logarithmic plotting; minimum, 19 second-feet Oct. 9, 24, 1941.

Maximum stage known, 22.5 feet sometime in July 1916, from reference mark as witnessed by local resident. Creek channel has been improved considerably by dredging since 1916.

Revisions.- Figures of maximum and minimum discharge for the water years 1944-46 are given in the following table. Figures of maximum discharge have been revised, superseding those published in previous water-supply papers.

Water year	Maximum			Minimum		
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)	Gage height (feet)
1943-44	Sept. 30	2,890	15.31	Sept. 8	27	0.95
1944-45	Sept. 19	3,080	†15.76	Sept. 4	28	.91
1945-46	Feb. 11	1,650	11.10	(‡)	26	‡.89

† From high-water mark.
‡ From recorded range in stage sometime during period Sept. 15-30.

Remarks.- Records fair except those above 1,000 second-feet and those for periods of ice effect or no gage-height record, which are poor.

Revisions.- Revised figures of discharge for high-water periods in the water years 1944-46 are given herein. They supersede those published in Water-Supply Papers 1002, 1032, and 1052.

Discharge, in second-feet, 1943-46, 1947-48

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	a36	38	49	54	79	175	81	54	34	111	38
2	34	a34	38	47	54	71	138	79	154	104	90	36
3	34	a34	37	a300	54	70	119	76	88	49	57	32
4	34	a34	46	a200	54	70	107	74	83	39	44	30
5	33	34	42	a140	52	67	a100	71	57	36	41	32
6	32	34	39	a100	53	69	a95	262	58	36	39	30
7	33	34	41	a75	52	418	a90	133	75	42	56	30
8	33	63	39	a65	52	144	a85	94	52	46	47	28
9	32	82	39	a65	108	98	a80	82	52	203	40	28
10	32	44	38	a65	103	82	a80	77	84	61	38	28
11	32	41	39	a60	179	76	a240	73	61	55	37	30
12	34	39	38	57	160	255	a700	70	52	44	39	40
13	a34	38	38	63	86	257	a240	68	50	41	36	118
14	a34	38	38	61	109	138	a180	67	49	262	35	47
15	a34	37	38	543	235	107	a200	67	49	145	35	37
16	a34	38	b34	286	195	94	a440	64	46	60	36	34
17	a34	38	b30	150	398	88	a220	91	43	47	36	32
18	a34	38	b30	111	693	78	a170	90	42	106	38	344
19	a34	38	b30	94	229	265	a150	70	41	85	34	472
20	33	38	b32	84	152	823	a130	80	46	105	31	128
21	34	38	b34	77	122	297	a120	68	40	83	31	564
22	a34	38	35	63	106	169	a110	63	39	46	30	115
23	a34	38	34	69	121	251	a100	60	39	41	32	70
24	a34	38	b32	64	96	182	a160	57	37	38	31	58
25	a34	38	38	62	84	136	a130	59	35	36	28	52
26	a34	38	154	61	119	115	a110	95	34	34	26	46
27	a40	38	108	61	117	154	a130	64	34	33	36	43
28	a65	38	64	61	100	163	a100	58	35	33	41	39
29	a50	38	92	60	91	955	a90	56	34	107	39	68
30	a44	38	68	56	-	744	86	53	34	43	37	1,860
31	a40	-	55	55	-	256	-	51	-	44	36	-

Peak discharge (base, 1,050 sec.-ft.).- Mar. 30 (1 a.m.) 1,070 sec.-ft.; Sept. 30 (12 p.m.) 2,890 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby streams.
b Stage-discharge relation affected by ice.

Discharge, in second-feet, of Third Creek at Cleveland, N. C., 1943-46, 1947-48--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,380	58	140	374	a65	108	91	79	58	39	a70	31
2	566	58	108	a220	a65	100	93	76	55	36	a50	35
3	159	58	91	a150	67	96	92	78	54	34	a44	33
4	111	58	83	a120	68	126	85	80	51	37	a40	29
5	89	58	78	a100	73	122	81	74	49	109	a40	33
6	80	56	76	a90	76	117	74	71	49	50	a46	61
7	95	55	76	a100	75	105	73	68	52	43	a70	101
8	150	56	179	a180	74	96	74	68	57	82	a50	46
9	74	56	122	a130	70	91	73	65	59	41	a40	40
10	63	58	97	a110	69	88	72	65	58	38	a34	66
11	58	57	408	a100	69	86	71	65	54	38	a32	113
12	54	56	296	a95	68	85	71	66	48	36	a30	39
13	73	55	154	a95	352	84	71	73	47	a30	a30	134
14	74	56	119	a90	231	83	70	70	45	a30	a30	1,090
15	57	57	100	a90	140	82	69	66	45	a150	a30	480
16	51	59	91	a100	114	83	68	140	48	a80	a30	586
17	50	57	86	a95	370	81	110	148	42	a55	a30	a1,200
18	48	55	81	a90	535	86	104	185	42	a46	a30	a2,000
19	48	56	80	a90	224	93	76	93	43	a40	a70	a2,500
20	677	81	74	a85	155	84	72	78	55	a40	a50	a700
21	656	68	73	a85	150	96	72	72	45	a40	a46	a300
22	179	59	75	a85	280	96	69	67	42	a44	42	a180
23	121	58	73	a80	467	84	79	64	40	a60	38	a140
24	98	58	72	a80	199	81	133	60	38	a70	71	a120
25	86	57	72	a80	150	79	205	58	38	a55	58	a100
26	77	58	72	a80	129	82	130	69	38	a50	40	a90
27	70	313	70	a80	121	438	94	96	36	a70	37	a85
28	66	621	71	a75	120	166	86	71	35	a600	36	a80
29	64	186	88	a75	-	125	98	81	35	a200	34	75
30	61	258	105	a70	-	109	88	68	35	a130	32	69
31	59	-	88	a65	-	99	-	59	-	a100	31	-

Peak discharge (base, 1,050 sec.-ft.).- About July 28 (time and discharge unknown); Sept. 14 (5 p.m.) 1,440 sec.-ft. about Sept. 19 (time unknown) 3,080 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for nearby streams.

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	57	92	268	249	96	92	82	75	48	91	35
2	69	57	84	170	155	96	90	97	86	68	63	34
3	66	58	79	140	130	92	88	237	75	71	52	34
4	63	58	189	126	118	91	86	a160	76	54	78	34
5	63	56	780	117	116	90	83	a120	70	52	104	32
6	120	56	303	143	115	90	a80	a100	67	52	63	31
7	94	55	176	799	116	90	a80	a95	66	58	68	34
8	74	56	135	1,070	104	97	a90	a110	63	52	52	38
9	66	56	115	520	113	97	a90	a85	62	49	45	34
10	61	57	106	225	910	88	a95	a80	59	50	42	32
11	60	57	95	170	1,490	86	a100	78	59	50	40	30
12	59	58	88	155	694	86	a90	86	58	49	38	29
13	58	59	87	135	214	86	a85	123	61	58	35	28
14	57	67	91	120	170	90	a85	101	58	48	36	29
15	59	74	98	117	140	178	a80	110	56	48	35	a30
16	58	62	93	116	125	125	a75	113	56	48	37	a28
17	56	60	83	122	117	121	a95	110	60	45	35	a28
18	55	59	86	135	109	194	a90	124	56	43	34	a28
19	54	79	90	127	159	214	a80	99	53	41	32	a28
20	53	94	85	120	187	145	a80	99	63	40	31	a30
21	53	77	b80	115	130	123	a75	176	68	38	29	a42
22	53	196	85	109	121	112	a75	118	78	52	33	a36
23	94	103	86	101	114	105	a75	95	55	55	58	a50
24	82	84	83	96	109	101	a75	86	52	45	49	a80
25	65	76	481	97	103	99	a90	83	51	41	70	a60
26	63	72	640	96	99	97	a120	266	48	62	44	a48
27	58	69	358	102	107	95	a95	197	48	85	43	a44
28	58	328	310	92	104	95	a80	123	51	56	41	a40
29	58	150	899	90	-	116	a80	96	51	46	40	a38
30	57	111	376	97	-	112	a110	86	48	43	40	a36
31	58	-	542	424	-	98	-	79	-	46	37	-

Peak discharge (base, 1,050 sec.-ft.).- Jan. 8 (8 p.m.) 1,130 sec.-ft.; Feb. 11 (8 p.m.) 1,650 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records and records for nearby streams.

b Stage-discharge relation affected by ice.

Discharge, in second-feet, of Third Creek at Cleveland, N. C., 1943-46, 1947-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	62	66	69	169	86	1,030	74	86	60	36	44
2	33	142	65	98	133	143	394	78	81	48	57	37
3	32	950	63	74	128	134	194	85	95	44	224	37
4	31	414	63	70	139	109	149	75	84	42	567	36
5	30	169	64	68	208	96	133	74	72	39	559	42
6	30	117	64	65	629	93	123	72	66	39	164	44
7	30	90	62	63	325	388	144	130	106	36	108	46
8	52	129	63	62	204	235	379	80	102	34	87	42
9	218	90	63	62	164	159	208	73	74	35	73	48
10	189	73	81	62	144	144	149	70	66	35	66	37
11	116	260	89	59	125	125	133	68	62	40	60	37
12	77	234	75	59	507	112	131	222	59	59	55	36
13	62	134	70	194	801	102	116	233	63	106	53	34
14	53	105	66	167	590	96	113	111	72	52	49	33
15	47	380	80	104	268	93	144	85	62	85	51	34
16	54	230	149	89	*184	118	113	76	58	76	48	32
17	81	149	95	83	154	276	105	100	55	55	54	32
18	89	114	83	79	133	159	96	78	54	58	51	32
19	193	159	76	*70	119	134	93	68	62	51	46	30
20	85	130	72	70	110	127	90	65	54	44	50	30
21	66	108	69	113	102	118	90	63	51	41	52	29
22	57	96	67	107	123	110	86	61	51	39	53	28
23	51	102	66	90	107	180	84	58	79	37	46	30
24	295	112	63	83	98	139	85	59	54	36	44	28
25	149	98	65	74	108	114	83	80	50	33	44	28
26	93	85	68	b65	106	106	83	159	48	32	42	28
27	74	78	69	90	99	226	80	104	47	32	41	29
28	103	74	67	129	97	182	77	77	46	74	39	34
29	129	71	66	108	91	128	76	107	46	62	38	69
30	85	69	64	210	-	113	78	145	59	41	36	51
31	70	-	63	338	-	413	-	152	-	38	59	-

Peak discharge (base, 1,050 sec.-ft.).- Apr. 1 (7:30 p.m.) 1,080 sec.-ft.
* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Monthly discharge, in second-feet, 1943-46, 1947-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1943	1,111	65	32	35.8	0.410	0.47
November	1,192	82	34	39.7	.454	.51
December	1,458	154	30	47.0	.538	.82
Calendar year 1943	34,417	1,040	30	94.3	1.08	14.65
January 1944	3,304	543	47	107	1.22	1.41
February	4,028	693	52	139	1.59	1.71
March	6,771	955	67	218	2.49	2.88
April	4,875	700	80	162	1.85	2.07
May	2,453	262	51	79.1	.905	1.04
June	1,597	154	34	53.2	.609	.68
July	2,138	262	33	69.0	.789	.91
August	1,283	111	28	41.4	.474	.55
September	4,507	1,860	28	150	1.72	1.92
Water year 1943-44	34,717	1,860	28	94.9	1.09	14.77
October 1944	6,494	2,380	48	209	2.39	2.76
November	2,896	621	55	96.5	1.10	1.23
December	3,398	408	70	110	1.26	1.45
Calendar year 1944	43,744	2,380	28	120	1.37	18.61
January 1945	3,359	374	65	108	1.24	1.43
February	4,576	535	65	163	1.86	1.95
March	3,351	438	79	108	1.24	1.43
April	2,644	205	68	88.1	1.01	1.13
May	2,473	185	58	79.8	.913	1.05
June	1,393	59	35	46.4	.531	.59
July	2,473	600	30	79.8	.913	1.05
August	1,311	71	30	42.3	.484	.56
September	10,556	2,500	29	352	4.03	4.49
Water year 1944-45	44,924	2,500	29	123	1.41	19.12

Monthly discharge, in second-feet, of Third Creek at Cleveland, N. C., 1943-46, 1947-48--Continued

Month	**Second-foot-days**	**Maximum**	**Minimum**	**Mean**	**Per square mile**	**Runoff in inches**
October 1945	2,012	120	53	64.9	0.743	0.86
November	2,501	328	55	83.4	.954	1.06
December	6,895	899	79	222	2.54	2.93
Calendar year 1945	43,544	2,500	29	119	1.36	18.53
January 1946	6,314	1,070	90	204	2.33	2.69
February	6,418	1,490	99	229	2.62	2.73
March	3,405	214	86	110	1.26	1.45
April	2,609	120	75	87.0	.995	1.11
May	3,614	266	78	117	1.34	1.54
June	1,829	86	48	61.0	.698	.78
July	1,593	85	38	51.4	.588	.68
August	1,495	104	29	48.2	.551	.64
September	1,100	80	28	36.7	.420	.47
Water year 1945-46	39,785	1,490	28	109	1.25	16.94
October 1947	2,708	295	30	87.4	1.00	1.15
November	5,024	950	62	167	1.91	2.14
December	2,236	149	62	72.1	.825	.95
Calendar year 1947	29,200	950	23	80.0	.915	12.42
January 1948	3,074	338	59	99.2	1.14	1.31
February	6,165	801	91	213	2.44	2.62
March	4,758	413	86	153	1.75	2.02
April	4,859	1,030	76	162	1.85	2.07
May	2,982	233	58	96.2	1.10	1.27
June	1,964	106	46	65.5	.749	.84
July	1,503	106	32	48.5	.555	.64
August	2,952	567	36	95.2	1.09	1.26
September	1,097	69	28	36.6	.419	.47
Water year 1947-48	39,322	1,030	28	107	1.22	16.74

Abbotts Creek at Lexington, N. C.

Location.- Water-stage recorder, lat. 35°48'30", long. 80°14'10", about 1,000 feet upstream from county highway bridge, about 2,000 feet downstream from bridge on U. S. Highway 64, 1½ miles southeast of Lexington, Davidson County, and 3 miles downstream from Rich Creek.

Drainage area.- 174 square miles (including small unnamed tributary between gage and bridge).

Records available.- March 1940 to September 1948.

Extremes.- Maximum discharge during year, 2,410 second-feet Feb. 14 (gage height, 10.74 feet); minimum, 9 second-feet Sept. 26, 27 (gage height, 1.57 feet).

1940-48: Maximum discharge, 14,800 second-feet Sept. 25, 1947 (gage height, 22.12 feet, from high-water mark); minimum, 1.8 second-feet Oct. 22, 1941.

Remarks.- Records good except those for periods of no gage-height record, which are poor. City of Lexington diverts an average of 2 second-feet above station for water supply. The city of Thomasville diverts its water supply from, and returns its sewage to stream above station. Records of chemical analyses and water temperatures for the water year 1948 are given in Water-Supply Paper 1132.

**Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 12 to Dec. 15, Feb. 6 to Mar. 7)**

1.6	10	2.0	34	2.8	123	5.0	710
1.7	15	2.2	50	3.0	161	6.0	1,000
1.8	21	2.4	69	3.5	289	8.0	1,600
1.9	27	2.6	93	4.0	427	10.0	2,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a60	51	85	88	371	132	1,350	65	58	267	34	76
2	a55	122	79	143	286	245	1,400	64	45	168	149	31
3	a50	671	76	115	257	a360	418	62	40	47	161	26
4	a46	360	73	93	313	273	246	56	43	33	329	24
5	a44	174	72	90	600	196	196	58	42	28	567	26
6	a42	118	72	81	1,560	168	172	54	40	24	369	29
7	a42	94	68	78	1,640	1,060	a450	138	40	22	79	34
8	a90	258	68	76	736	1,250	613	98	95	18	57	30
9	a150	235	73	74	497	413	385	62	65	19	48	28
10	a200	137	73	74	321	427	224	53	44	17	40	27
11	a170	448	110	66	313	330	181	49	36	17	109	25
12	a140	1,150	97	65	856	243	188	55	33	16	436	23
13	a120	699	79	543	2,050	193	155	103	30	52	99	20
14	a100	246	72	942	2,290	168	153	84	35	29	54	19
16	a85	703	118	445	1,600	151	413	58	74	108	46	19
16	a110	971	497	208	519	159	431	49	90	162	41	17
17	a130	484	343	176	346	a380	200	50	48	70	39	15
18	a130	240	190	165	284	273	147	104	37	56	42	15
19	a150	606	151	123	240	188	123	55	31	121	98	15
20	a110	913	128	110	213	172	115	44	29	64	82	12
21	a85	381	115	208	190	155	106	40	27	36	63	12
22	a70	230	107	276	238	137	103	38	56	29	50	14
23	a55	219	100	208	259	311	93	35	144	27	42	13
24	51	232	94	141	200	365	86	33	47	30	34	12
25	48	219	92	113	198	251	83	58	36	20	32	10
26	48	165	99	121	208	174	78	84	30	14	29	10
27	47	130	106	141	186	246	72	90	23	14	25	10
28	59	113	101	311	170	371	67	55	22	12	23	22
29	99	99	97	300	155	211	65	54	42	23	22	58
30	77	92	88	403	-	159	72	64	116	24	72	54
31	57	-	85	642	-	256	-	93	-	17	91	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,720	200	42	87.7	0.504	0.58
November	10,560	1,150	51	352	2.02	2.26
December	3,608	497	68	116	.667	.77
Calendar year 1947	68,644.7	12,000	2.9	188	1.08	14.66
January	6,619	942	65	214	1.23	1.41
February	17,096	2,290	155	590	3.39	3.65
March	9,417	1,250	132	304	1.75	2.01
April	8,385	1,400	65	280	1.61	1.79
May	2,005	138	33	64.7	.372	.43
June	1,498	144	22	49.9	.287	.32
July	1,584	267	12	51.1	.294	.34
August	3,362	567	22	108	.621	.72
September	726	76	10	24.2	.139	.16
Water year 1947-48	67,580	2,290	10	185	1.06	14.44

Peak discharge (base, 2,400 sec.-ft.).- Feb. 14 (4 p.m.) 2,410 sec.-ft.

a No gage-height record; discharge computed on basis of partial record, recorded range in stage 1 discharge measurement, weather records and records for nearby streams.

Uwharrie River near Eldorado, N. C.

Location.- Water-stage recorder, lat. 35°25'25", long. 80°00'40", 300 feet below State Highway 109, 1 mile upstream from McLeans Creek, and 3 miles south of Eldorado, Montgomery County.

Drainage area.- 347 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 322 second-feet

Extremes.- Maximum discharge during year, 7,570 second-feet Feb. 12 (gage height, 12.47 feet); minimum, 7.7 second-feet Sept. 27, 28 (gage height, 0.78 foot); minimum daily, 11 second-feet Sept. 27.

1938-48: Maximum discharge, 23,300 second-feet Sept. 18, 1945 (gage height, 26.22 feet, from floodmark), from rating curve extended above 13,000 second-feet by logarithmic plotting; minimum, 0.5 second-foot Sept. 21, Oct. 13, 14, 1941; minimum daily, 0.5 second-foot Oct. 13, 1941.

Flood of August 1928 reached a stage of 22.2 feet, from floodmark established by local resident.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Marked diurnal fluctuation and some regulation for short periods at low flow caused by gristmill above station. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 892: 1939.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.8	8.2	1.6	86	2.6	368	6.0	2,360
1.0	16	1.8	128	3.0	524	8.0	3,770
1.2	29	2.0	178	4.0	1,050	10.0	5,320
1.4	53	2.3	269	5.0	1,680	12.0	7,100

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	74	170	156	783	272	1,340	176	390	185	39	290
2	74	83	158	269	507	448	1,460	160	202	138	415	106
3	64	1,260	150	288	470	930	708	217	153	86	295	67
4	61	624	146	208	563	533	482	187	133	67	199	56
5	55	295	146	190	1,130	390	408	160	121	64	2,140	49
6	52	202	146	184	3,740	327	368	153	113	47	574	55
7	49	158	140	166	3,230	3,020	497	158	144	49	168	105
8	52	808	136	158	1,040	2,710	2,020	254	450	47	106	102
9	69	1,020	140	148	734	842	892	163	205	43	86	72
10	189	314	140	148	567	1,080	511	136	133	39	79	58
11	368	840	176	136	499	871	438	124	110	38	76	52
12	196	2,800	187	126	3,740	590	450	124	92	38	138	46
13	124	757	160	1,610	5,320	462	375	163	84	37	84	42
14	100	379	146	3,990	5,840	400	334	199	108	50	66	39
15	94	1,350	160	913	3,980	368	1,570	170	150	46	56	35
18	193	1,980	900	438	960	351	740	126	163	332	52	37
17	170	612	524	348	659	1,250	450	113	108	126	50	36
18	365	386	314	311	541	708	358	163	96	72	49	24
19	400	541	257	263	454	466	311	124	81	128	50	31
20	327	937	220	226	404	412	288	102	71	64	903	25
21	193	490	199	241	361	365	269	92	79	53	281	28
22	126	358	184	301	532	331	374	86	76	50	472	33
23	100	327	173	285	590	493	337	81	1,260	66	106	24
24	84	382	163	250	419	1,050	254	a85	330	134	81	24
25	81	423	158	202	382	567	232	a340	140	256	72	18
26	66	324	163	190	379	412	214	a240	96	78	58	23
27	66	260	173	226	358	393	199	a800	81	50	55	11
28	67	220	178	604	327	1,190	184	a700	69	43	47	23
29	89	199	173	567	304	507	173	a700	323	52	45	37
30	130	184	160	567	-	379	187	546	175	52	43	63
31	90	-	148	1,880	-	351	-	590	-	47	945	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,180	400	49	135	0.389	0.45
November	18,587	2,800	74	620	1.79	1.99
December	6,388	900	136	206	.594	.68
Calendar year 1947	118,071	7,520	9.0	323	.931	12.65
January	15,589	3,990	126	503	1.45	1.67
February	38,813	5,840	304	1,338	3.86	4.16
March	22,468	3,020	272	725	2.09	2.41
April	16,423	2,020	173	547	1.58	1.76
May	7,432	800	81	240	.692	.80
June	5,736	1,260	69	191	.550	.61
July	2,577	332	37	83.1	.239	.28
August	7,830	2,140	39	253	.729	.84
September	1,611	290	11	53.7	.155	.17
Water year 1947-48	147,634	5,840	11	403	1.16	15.82

Peak discharge (base, 4,600 sec.-ft.).- Feb. 12 (3:30 p.m.) 7,570 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for Rocky River near Norwood.

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, Stanly County. Datum of gage is 212.91 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 1,370 square miles.

Records available.- October 1929 to September 1948.

Average discharge.- 19 years, 1,286 second-feet.

Extremes.- Maximum discharge during year, 34,000 second-feet Feb. 13 (gage height, 22.90 feet); minimum, 68 second-feet Sept. 28 (gage height, 0.33 foot).

1929-48: Maximum discharge, 155,000 second-feet Sept. 18, 1945 (gage height, 46.37 feet), from rating curve extended above 70,000 second-feet by slope-area method; minimum, 19 second-feet Oct. 28, 1931, Nov. 13, 1933.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair, and those for period of no gage-height record, which are poor. Slight diurnal fluctuation during low flow. Records of chemical analyses and water temperatures for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 1052: 1908(M), 1936(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 1 to Sept. 30)

0.3	69	1.4	466	6.0	5,300
.4	88	1.7	645	8.0	8,200
.5	111	2.0	875	11.0	12,700
.6	140	2.5	1,290	14.0	17,600
.8	204	3.0	1,780	17.0	22,700
1.0	280	4.0	2,860	20.0	28,200
1.2	368	5.0	4,050	23.0	34,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	204	472	668	742	4,660	d971	15,100	346	1,090	a400	159	218
2	178	724	612	1,880	2,970	2,360	12,100	323	586	a440	2,710	165
3	162	13,800	574	1,530	3,210	5,380	3,140	293	504	a320	4,140	117
4	146	12,400	545	1,020	2,750	d2,140	1,880	280	392	a240	3,750	95
5	143	6,760	521	875	2,860	d1,430	1,530	280	336	a200	7,880	90
6	128	1,430	514	772	8,600	d1,160	1,340	293	293	a180	5,670	93
7	123	995	504	690	8,720	17,900	4,770	297	310	123	1,160	269
8	134	3,850	472	626	4,650	14,700	3,930	504	1,230	111	568	608
9	184	3,600	472	593	3,930	3,810	2,480	416	1,080	100	421	345
10	1,800	1,290	580	574	2,700	5,580	1,530	293	562	93	297	293
11	2,200	5,130	1,780	521	2,420	3,430	1,880	255	328	88	243	181
12	1,020	12,400	1,380	472	13,400	d2,260	2,750	260	260	86	211	128
13	482	3,750	1,090	5,730	30,600	d1,680	1,630	5,150	225	123	232	106
14	350	1,580	835	14,600	28,600	d1,380	1,200	4,460	247	188	268	93
15	284	8,800	819	3,990	15,200	d1,250	1,160	1,320	332	194	178	86
16	247	9,630	5,420	1,680	4,220	d1,160	1,030	683	268	562	247	86
17	310	2,920	2,770	1,340	d2,640	3,300	867	527	232	513	197	84
18	1,290	1,680	1,480	1,250	d2,040	d3,020	742	411	208	251	156	84
19	1,120	1,480	1,160	1,090	d1,680	d1,530	638	350	184	898	152	80
20	803	2,090	1,000	923	d1,480	d1,290	593	297	171	185	146	77
21	574	1,580	883	1,160	d1,290	d1,160	574	264	887	143	149	75
22	382	1,250	835	1,680	d2,250	d1,040	545	239	889	117	188	69
23	310	1,200	811	1,290	d2,760	1,920	533	225	366	100	314	69
24	1,740	2,970	735	1,040	d1,580	4,340	482	204	485	123	255	69
25	4,220	3,090	698	843	d1,480	d2,040	461	2,570	197	392	152	71
26	1,150	1,730	1,380	765	d1,530	d1,290	441	915	331	236	126	71
27	619	1,250	1,530	1,430	d1,340	d1,290	406	971	222	140	117	69
28	477	1,000	1,200	7,350	d1,160	d2,860	373	550	152	104	106	84
29	1,900	851	1,070	4,460	d1,200	d1,530	350	2,260	818	558	100	544
30	1,480	750	931	3,440	-	d1,120	346	2,110	416	323	93	835
31	698	-	788	9,520	-	1,060	-	2,660	-	271	121	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	24,858	4,220	123	802	0.585	0.67
November	110,452	13,800	472	3,682	2.69	3.00
December	34,059	5,420	472	1,099	.802	.92
Calendar year 1947	497,691	24,900	73	1,364	.996	13.51
January	73,876	14,600	472	2,383	1.74	2.01
February	161,920	30,600	1,160	5,583	4.08	4.40
March	95,381	17,900	971	3,077	2.25	2.59
April	64,801	15,100	346	2,160	1.58	1.76
May	30,005	5,150	204	968	.707	.81
June	13,601	1,230	152	453	.331	.37
July	7,802	898	86	252	.184	.21
August	30,506	7,880	93	984	.718	.83
September	5,254	835	69	175	.128	.14
Water year 1947-48	652,515	30,600	69	1,783	1.30	17.71

Peak discharge (base, 16,000 sec.-ft.).- Nov. 3 (7 a.m.) 17,100 sec.-ft.; Nov. 12 (12:30 a.m.) 16,800 sec.-ft.; Jan. 14 (1 a.m.) 18,800 sec.-ft.; Feb. 13 (2 a.m.) 34,000 sec.-ft.; Mar. 7 (4:30 p.m.) 27,100 sec.-ft.; Apr. 1 (8 p.m.) 20,300 sec.-ft.

a No gage-height record; discharge computed on basis of records for Uwharrie River near Eldorado.

d Computed on basis of doubtful gage heights.

Brown Creek near Polkton, N. C.

Location.- Water-stage recorder and concrete control, lat. 35°02'15", long. 80°08'45", at site of Medley's mill, just downstream from bridge on State Highway 742, 3½ miles downstream from Little Brown Creek, and 4 miles northeast of Polkton, Anson County.

Drainage area.- 110 square miles.

Records available.- October 1937 to September 1948.

Average discharge.- 11 years, 81.8 second-feet.

Extremes.- Maximum discharge during year, 1,790 second-feet Feb. 14 (gage height, 10.50 feet); no flow Sept. 13-30.

1937-48: Maximum discharge, 17,300 second-feet Sept. 18, 1945 (gage height, 17.68 feet, from high-water mark), from rating curve extended above 3,000 second-feet; no flow during several days of most years.

Flood of August 1908 reached a stage of 16.4 feet, from floodmark witnessed by land owner.

Remarks.- Records good above 5 second-feet and fair below.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.8	0	1.4	5.4	2.5	108	7.0	582
.9	.42	1.6	9.9	3.0	168	8.0	741
1.0	1.14	1.8	20	4.0	268	9.0	1,030
1.1	2.0	2.0	37	5.0	365	10.0	1,470
1.2	3.0	2.2	63	6.0	470		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.30	0.16	26	42	448	66	424	7.0	9.9	2.3	22	0.07
2	.83	22	22	104	448	283	503	6.5	5.9	1.92	9.9	.07
3	.62	121	19	92	426	566	470	5.9	4.0	1.06	27	.07
4	.42	37	17	76	317	576	410	5.1	7.5	1.56	14	.04
5	.26	23	17	59	253	562	175	5.0	5.0	1.56	7.5	.04
6	.21	13	15	47	382	304	108	4.8	4.0	.98	7.2	.01
7	.26	8.8	14	39	405	947	329	5.2	3.5	.62	5.2	.01
8	.55	56	14	33	375	1,420	301	5.4	4.3	.36	3.2	.01
9	.83	39	14	31	385	1,270	162	4.4	2.9	.26	1.92	.01
10	.62	30	53	28	326	898	113	3.9	2.5	.26	1.22	.01
11	.42	200	126	24	317	539	128	3.6	6.8	.26	.83	.01
12	.36	357	131	21	492	307	178	3.9	3.7	.26	.36	.01
13	.31	140	131	317	1,030	298	157	8.6	2.0	.26	.26	0
14	.31	94	96	637	1,620	152	109	23	1.47	.26	.16	0
15	.36	390	120	514	1,370	116	76	12	1.83	11	.16	0
16	.42	431	405	536	898	102	60	6.8	1.14	6.0	.16	0
17	.42	278	317	332	540	246	47	5.0	.76	15	.16	0
18	.42	238	297	124	282	238	35	3.6	2.4	19	.16	0
19	.42	114	218	82	152	297	28	2.9	2.4	11	.16	0
20	.48	116	104	70	117	206	25	2.0	8.2	6.8	.16	0
21	.48	111	80	162	98	114	22	1.47	80	3.5	.16	0
22	.42	82	70	178	154	93	19	1.30	5.0	1.83	.16	0
23	.76	93	69	173	157	96	16	.98	7.1	1.22	.16	0
24	1.06	183	57	136	152	157	15	3.1	4.3	1.92	.11	0
25	.98	193	53	88	124	131	13	17	1.06	1.38	.11	0
26	.69	146	86	74	113	96	12	6.1	3.1	32	.11	0
27	.48	104	98	194	102	88	11	3.3	21	46	.11	0
28	.31	63	93	470	93	100	9.6	6.4	12	14	.11	0
29	.26	43	68	415	78	88	8.3	37	12	14	.11	0
30	.21	32	52	481	-	66	7.7	10	2.2	34	.11	0
31	.16	-	42	582	-	59	-	12	-	50	.07	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15.63	1.30	0.16	0.504	0.0046	0.005
November	3,757.96	431	.16	125	1.14	1.27
December	2,924	405	14	94.3	.857	.99
Calendar year 1947	31,900.18	1,840	.04	87.4	.795	10.79
January	6,161	637	21	199	1.81	2.08
February	11,654	1,620	78	402	3.65	3.94
March	10,481	1,420	59	338	3.07	3.54
April	3,971.6	503	7.7	132	1.20	1.34
May	223.25	37	.98	7.20	.065	.08
June	227.96	80	.76	7.60	.069	.08
July	280.57	50	.26	9.05	.082	.09
August	103.03	27	.07	3.32	.030	.03
September	0.36	0.07	0	.012	.00011	.0001
Water year 1947-48	39,800.36	1,620	0	109	.991	13.45

Peak discharge (base, 810 sec.-ft.).- Feb. 14 (6 p.m.) 1,790 sec.-ft.; Mar. (7 p.m.) 1,650 sec.-ft.

Juniper Creek near Cheraw, S. C.

Location.- Water-stage recorder at spillway of Eureka Lake Dam, lat. 34°39', long. 79°54', 1½ miles upstream from mouth and 3½ miles south of Cheraw, Chesterfield County.

Drainage area.- 64 square miles.

Records available.- May 1940 to September 1948.

Extremes.- Maximum discharge during year, 430 second-feet Feb. 15 (gage height, 1.41 feet); minimum, 16.2 second-feet Sept. 25.
1940-48: Maximum discharge, 3,910 second-feet Sept. 18, 1945 (gage height, 5.71 feet), from rating curve extended above 280 second-feet by logarithmic plotting and computation of flow over dam; no flow May 29, 30, 1945 (water below spillway crest and gates closed).

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	33	108	102	198	128	160	69	170	58	58	18.2
2	35	60	102	102	194	153	216	66	141	69	60	20.9
3	33	204	102	102	177	198	235	60	119	74	81	21.6
4	33	365	99	108	157	220	205	58	108	58	99	23.1
5	32	284	99	108	137	205	174	69	92	41	111	32
6	32	177	97	102	137	177	150	71	86	45	108	45
7	36	128	94	97	137	228	147	76	73	71	86	60
8	45	125	94	92	147	320	150	76	56	89	60	70
9	54	119	92	92	195	316	144	79	58	75	46	75
10	55	131	102	86	266	299	137	70	63	48	41	71
11	51	187	119	86	282	282	147	55	68	41	34	63
12	50	347	134	84	274	243	163	67	55	42	32	56
13	48	401	144	103	325	213	163	97	45	46	29.5	49
14	46	299	137	137	401	188	163	142	49	44	29.5	39
15	46	251	137	166	411	170	157	163	78	81	34	33
16	51	258	137	170	329	163	150	122	92	114	44	30
17	59	243	141	157	258	198	144	88	92	122	47	27.8
18	62	209	144	131	213	231	131	62	81	105	43	26.2
19	62	188	137	114	188	228	119	51	62	69	41	23.8
20	49	188	125	108	170	198	108	46	47	53	37	23.1
21	41	191	119	114	160	170	97	45	40	52	35	20.9
22	36	184	125	119	170	153	94	40	39	47	43	18.2
23	33	170	128	122	177	150	97	38	43	37	48	17.5
24	33	163	128	125	184	150	97	37	49	31	43	17.5
25	34	153	131	116	177	150	92	44	46	53	35	16.8
26	35	147	134	108	166	150	86	55	40	81	27.8	17.5
27	35	141	128	108	153	147	79	67	45	84	26.2	18.8
28	39	131	128	122	144	144	69	92	52	54	23.1	35
29	39	122	125	134	137	144	67	111	45	58	21.6	77
30	38	114	119	144	-	141	67	150	41	68	20.2	108
31	35	-	108	180	-	137	-	174	-	73	19.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,314	62	32	42.4	-	-
November	5,713	401	33	190	-	-
December	3,717	144	92	120	-	-
Calendar year 1947	31,784.4	401	14.3	87.1	1.36	18.45
January	3,639	180	84	117	-	-
February	6,064	411	137	209	-	-
March	5,994	320	128	193	-	-
April	4,008	235	67	134	-	-
May	2,440	174	37	78.7	-	-
June	2,075	170	39	69.2	-	-
July	1,983	122	31	64.0	-	-
August	1,463.4	111	19.5	47.2	-	-
September	1,154.9	108	16.8	38.5	-	-
Water year 1947-48	39,565.3	411	16.8	108	1.69	22.98

Peak discharge (base, 250 sec.-ft.).- Nov. 4 (3 p.m.) 378 sec.-ft.; Nov. 13 (10 a.m.) 411 sec.-ft.; Feb. 15 (5 a.m.) 430 sec.-ft.; Mar. 8 (10 p.m.) 338 sec.-ft.

Lynches River near Bishopville, S. C.

Location.- Wire-weight gage, lat. 34°15', long. 80°13', at bridge on U. S. Highway 15, 1 mile upstream from Seaboard Air Line Railroad bridge, 2.9 miles northeast of Bishopville, Lee County, and 3.3 miles downstream from Bells Branch.

Drainage area.- 675 square miles.

Records available.- May 1942 to September 1948.

Extremes.- Maximum discharge during year, 7,480 second-feet Mar 10 (gage height, 15.47 feet, from graph based on gage readings); minimum, 203 second-feet Sept. 26.
1942-48: Maximum discharge, 29,400 second-feet Sept. 19, 1945 (gage height, 22.35 feet, from floodmark), from rating curve extended above 12,000 second-feet by velocity-area studies; minimum, 138 second-feet June 20, 25, July 4, 1945.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair. Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-25, Nov. 13, 14, May 12 to June 26, July 18-30, Sept. 9-30)

Oct. 1 to Nov. 14

6.3	244	11.0	1,180
7.0	337	11.5	1,380
8.0	505	12.0	1,650
10.0	913		

Nov. 15 to Sept. 30

5.4	203	10.0	993	12.7	2,590
6.3	308	11.0	1,270	13.7	4,020
7.0	411	11.5	1,870	15.0	6,400
8.0	581	12.0	1,870		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	308	337	839	819	1,200	1,090	1,350	510	1,040	380	476	350
2	268	448	759	819	1,570	1,270	1,400	493	1,090	d600	350	459
3	268	825	679	861	2,150	1,350	1,710	510	799	d550	350	476
4	268	959	639	905	2,250	1,450	3,150	493	639	d460	443	365
5	268	1,080	619	883	2,050	1,790	3,250	476	563	443	839	350
6	281	1,210	599	819	2,050	2,470	2,470	510	510	411	1,310	493
7	268	1,050	581	739	2,050	2,250	1,690	545	476	411	1,120	679
8	281	741	599	679	1,790	2,050	1,310	563	510	411	503	739
9	294	741	699	639	1,790	2,870	1,270	581	545	365	380	639
10	322	1,010	799	619	2,250	6,400	1,200	545	476	245	350	527
11	308	1,140	971	639	2,840	4,350	1,140	527	459	269	322	476
12	294	1,250	1,090	659	3,400	3,550	1,140	563	427	336	308	427
13	294	1,430	1,140	779	3,700	3,250	1,200	679	380	380	308	245
14	294	1,650	1,200	905	4,350	2,470	1,400	971	380	459	295	295
15	294	2,050	1,200	1,090	5,050	2,150	1,510	993	395	510	322	282
16	322	1,870	1,140	1,620	5,420	1,870	1,270	839	493	545	459	269
17	384	1,710	1,120	2,710	5,230	1,710	1,040	779	619	599	459	269
18	451	1,870	1,270	2,360	3,400	1,790	971	699	779	545	427	257
19	469	2,250	1,400	1,370	2,470	1,960	905	619	659	443	395	245
20	451	1,760	1,230	1,040	1,870	2,590	819	581	619	336	350	245
21	337	1,510	1,140	883	1,570	2,970	759	510	619	322	336	245
22	294	1,450	1,060	861	1,350	2,710	739	459	599	322	336	234
23	281	1,510	1,140	905	1,270	2,200	719	459	639	395	322	223
24	268	1,120	1,200	905	1,350	1,400	639	581	779	380	322	223
25	256	1,090	1,120	861	1,450	1,450	619	699	581	295	322	213
26	244	1,120	1,060	839	1,350	1,570	659	739	493	308	365	203
27	256	1,090	1,090	819	1,310	1,450	619	699	322	d295	411	213
28	268	1,020	1,230	905	1,230	1,350	581	739	322	d269	380	269
29	281	861	1,230	1,040	1,140	1,400	545	799	427	350	269	411
30	308	861	1,040	1,090	-	1,400	527	883	395	411	257	839
31	294	-	905	1,140	-	1,350	-	949	-	545	257	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,474	469	244	306	0.453	0.52
November	37,013	2,250	337	1,234	1.83	2.04
December	30,788	1,400	581	993	1.47	1.70
Calendar year 1947	277,695	4,300	221	761	1.13	15.32
January	31,202	2,710	619	1,007	1.49	1.72
February	68,900	5,420	1,140	2,376	3.52	3.80
March	67,930	6,400	1,090	2,191	3.25	3.75
April	36,601	3,250	527	1,220	1.81	2.02
May	19,992	993	459	645	.956	1.10
June	17,034	1,090	322	568	.841	.94
July	21,590	600	245	406	.601	.69
August	13,343	1,310	257	430	.637	.73
September	11,160	839	203	372	.551	.61
Water year 1947-48	356,027	6,400	203	973	1.44	19.62

Peak discharge (base, 3,000 sec.-ft.).- Feb. 17 (3 a.m.) 5,610 sec.-ft.; Mar. 10 (2:30 a.m.) 7,480 sec.-ft.; Apr. 4 (7 p.m.) 3,860 sec.-ft.

d Doubtful gage-height redord; discharge computed from graph based on record for preceding and following days and weather records.

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. Datum of gage is 58.49 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,030 square miles.

Records available.- August 1929 to September 1948. Gage-height records collected at same site since 1891 are contained in reports of U. S. Weather Bureau.

Average discharge.- 19 years, 968 second-feet.

Extremes.- Maximum discharge during year, 6,180 second-feet Feb. 16 (gage height, 14.67 feet); minimum, 222 second-feet Sept. 27, 28.

1929-48: Maximum discharge, 25,000 second-feet Sept. 22, 1945 (gage height, 21.21 feet), from rating curve extended above 17,000 second-feet by logarithmic plotting; minimum, 116 second-feet July 1, 1935.

Remarks.- Records good.

Cooperation.- Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions.- W 952: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 6

3.1	355	10.5	2,370
4.0	505	11.5	2,910
5.5	781	12.5	3,660
6.5	1,040	14.0	5,160
8.0	1,490	14.7	6,180

June 7 to Sept. 30

2.4	222	5.5	768
3.5	379	6.5	1,040
4.5	552	7.8	1,420

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,060	401	1,880	g1,800	1,980	2,020	2,410	741	868	673	284	242
2	1,120	401	1,800	g1,840	2,080	2,020	2,560	685	1,040	1,300	403	235
3	1,060	666	1,740	1,880	2,190	2,120	2,500	667	1,100	1,420	514	263
4	657	1,340	1,630	1,840	2,330	2,080	2,410	649	1,060	1,120	533	305
5	469	1,660	1,460	1,700	g2,410	2,020	2,330	667	1,100	768	411	379
6	417	1,840	1,300	1,520	g2,410	1,940	2,220	649	1,100	592	387	411
7	385	1,910	1,180	1,420	2,410	2,120	2,400	649	1,000	461	444	364
8	378	1,910	1,120	1,400	g2,610	2,460	3,260	631	676	379	533	372
9	362	1,940	1,100	1,420	g3,040	2,720	3,190	631	533	326	654	444
10	370	1,940	1,100	1,360	g3,840	3,420	2,640	631	478	291	744	533
11	523	2,050	1,240	1,280	g4,100	3,580	2,260	649	444	270	744	612
12	487	2,660	1,360	1,180	g4,300	3,500	2,020	903	427	263	490	654
13	469	2,910	1,490	1,120	g4,700	4,860	1,840	1,000	427	270	349	633
14	451	3,040	1,740	1,120	g5,290	5,570	1,740	868	403	291	319	514
15	505	3,340	1,880	1,120	g5,870	4,600	1,770	801	379	326	298	461
16	722	3,580	2,020	1,180	g6,180	3,920	1,800	761	356	364	284	387
17	741	3,500	2,120	1,280	g5,570	4,400	1,840	801	349	411	284	334
18	741	3,260	2,120	1,360	g4,920	4,600	2,050	894	372	427	326	305
19	703	3,190	2,190	1,460	g5,290	4,300	2,160	921	461	461	427	298
20	685	3,190	2,160	1,560	g5,720	3,750	1,980	814	572	533	461	284
21	667	3,040	2,120	1,800	5,040	3,120	1,800	613	654	592	427	270
22	685	2,840	2,330	2,260	4,200	2,720	1,630	523	721	514	379	256
23	667	2,720	2,370	2,370	3,500	2,560	1,460	469	592	411	334	249
24	577	2,780	2,410	2,190	2,910	2,840	1,280	451	461	349	312	242
25	505	2,780	2,410	1,910	2,560	3,040	1,120	434	427	305	291	235
26	451	2,660	2,330	1,660	g2,330	2,780	1,000	417	461	277	291	228
27	434	2,460	2,220	1,520	2,190	2,500	948	451	496	263	284	222
28	434	2,300	2,120	1,560	2,080	2,560	894	523	444	249	270	228
29	434	2,120	2,020	1,600	2,050	2,500	844	613	364	263	256	256
30	434	1,980	1,980	1,560	-	2,410	781	667	319	270	242	284
31	401	-	1,880	1,770	-	2,370	-	761	-	249	242	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	17,994	1,120	362	580	0.563	0.65
November	70,408	3,580	401	2,347	2.28	2.54
December	56,820	2,410	1,100	1,833	1.78	2.05
Calendar year 1947	415,584	4,600	250	1,139	1.11	15.00
January	49,040	2,370	1,120	1,582	1.54	1.78
February	104,100	6,180	1,980	3,590	3.49	3.76
March	95,400	5,570	1,940	3,077	2.99	3.45
April	57,137	3,260	781	1,905	1.85	2.06
May	20,934	1,000	417	675	.655	.76
June	18,084	1,100	319	603	.585	.65
July	14,688	1,420	249	474	.460	.53
August	12,217	744	242	394	.383	.44
September	10,500	654	222	350	.340	.38
Water year 1947-48	527,322	6,180	222	1,441	1.40	19.05

Peak discharge (base, 2,300 sec.-ft.).- Nov. 16 (2 p.m.) 3,580 sec.-ft.; Dec. 24 (3 p.m.) 2,410 sec.-ft.; Jan. 23 (6 a.m.) 2,410 sec.-ft.; Feb. 16 (about 12 m.) 6,180 sec.-ft.; Mar. 14 (4:30 a.m.) 5,720 sec.-ft.; Apr. 8 (8 p.m.) 3,420 sec.-ft.

g Computed from graph based on recorded range in stage and daily gage readings by U. S. Weather Bureau.

Little Pee Dee River near Dillon, S. C.

Location.- Wire-weight gage, lat. 34°24', long.79°20', at bridge on State Highway 9, 1.1 miles east of Dillon, Dillon County, and 3 miles upstream from Maple Swamp.

Drainage area.- 524 square miles.

Records available.- March 1939 to September 1948.

Extremes.- Maximum discharge during year, 3,750 second-feet Feb. 15 (gage height, 10.79 feet, from graph based on gage readings), from rating curve extended above 2,800 second-feet by velocity-area studies and logarithmic plotting; minimum, 142 second-feet Sept. 28 (gage height, 5.36 feet).

1939-48: Maximum discharge, 9,810 second-feet Sept. 20, 1945 (gage height, 14.64 feet), from rating curve extended above 2,800 second-feet by velocity-area studies and logarithmic plotting; minimum, 54 second-feet June 10, 1941 (gage height, 3.73 feet).

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

5.4	145	7.0	327	9.0	1,510
5.7	166	7.3	423	9.7	2,250
6.3	215	7.7	605	10.7	3,610
6.7	266	8.3	965		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	555	303	1,340	965	1,340	1,180	835	371	355	226	775	251
2	580	303	1,180	965	1,340	1,100	900	355	355	266	835	238
3	555	366	1,180	900	1,420	1,100	965	355	423	274	900	238
4	507	660	1,100	900	1,510	1,260	965	355	463	283	1,100	258
5	463	835	965	835	1,420	1,420	1,040	341	463	303	1,180	274
6	387	900	900	835	1,510	1,420	1,100	327	405	355	1,180	303
7	315	965	900	835	1,510	1,420	1,180	327	387	443	1,040	315
8	293	965	900	835	1,510	1,510	1,180	327	355	605	965	315
9	283	1,040	835	835	1,700	1,700	1,180	341	327	715	900	303
10	293	1,180	835	775	1,910	1,910	1,180	327	266	715	835	293
11	283	1,340	900	775	2,130	1,910	1,180	327	251	378	745	293
12	491	1,800	965	745	2,370	1,910	1,180	327	232	274	660	327
13	632	2,500	1,040	715	2,770	1,910	1,180	341	238	196	507	355
14	715	2,630	1,100	715	3,470	1,910	1,180	355	238	176	405	387
15	605	2,770	1,180	775	3,610	1,700	1,340	355	251	170	327	371
16	605	3,190	1,260	835	3,610	1,600	1,260	341	251	176	315	341
17	688	3,300	1,340	900	3,330	1,600	1,180	355	266	192	327	293
18	688	3,330	1,340	965	2,910	1,600	1,100	355	327	205	341	232
19	660	3,050	1,260	965	2,630	1,600	1,040	327	355	283	371	210
20	632	2,500	1,180	965	2,370	1,510	965	303	355	485	371	200
21	605	2,130	1,180	965	2,020	1,510	835	274	355	965	341	188
22	555	2,020	1,180	965	1,700	1,420	745	251	341	935	327	176
23	531	1,910	1,180	965	1,600	1,260	660	238	303	900	303	162
24	507	1,800	1,260	900	1,600	1,260	605	220	315	688	293	159
25	485	1,910	1,260	900	1,510	1,180	580	200	283	555	266	156
26	443	1,910	1,340	835	1,340	1,100	531	192	251	507	274	152
27	387	1,800	1,340	835	1,260	1,040	485	184	238	507	303	148
28	371	1,800	1,260	835	1,260	1,040	463	184	215	632	315	148
29	327	1,510	1,260	900	1,180	900	443	251	205	745	341	227
30	315	1,420	1,100	1,040	-	835	405	387	200	745	315	601
31	315	-	1,040	1,180	-	775	-	371	-	715	274	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15,071	715	283	486	0.927	1.07
November	52,167	3,330	303	1,739	3.32	3.70
December	35,100	1,340	835	1,132	2.16	2.49
Calendar year 1947	250,386	3,330	89	686	1.31	17.78
January	27,355	1,180	715	882	1.68	1.94
February	57,840	3,610	1,180	1,994	3.81	4.11
March	43,590	1,910	775	1,406	2.68	3.09
April	27,882	1,340	405	929	1.77	1.98
May	9,564	387	184	309	.590	.68
June	9,269	463	200	309	.590	.66
July	14,614	965	170	471	.899	1.04
August	17,431	1,180	266	562	1.07	1.23
September	7,914	601	148	264	.504	.56
Water year 1947-48	317,797	3,610	148	868	1.66	22.55

Peak discharge (base, 1,300 sec.-ft.).- Nov. 18 (5:30 a.m.) 3,470 sec.-ft.; Dec. 27 (5 a.m.) 1,340 sec.-ft.; Feb. 15 (3 a.m.) 3,750 sec.-ft.; Mar. 12 (2 a.m.) 1,910 sec.-ft.; Apr. 15 (12 m.) 1,340 sec.-ft.

Little Pee Dee River at Galivants Ferry, S. C.

Location.- Wire-weight gage, lat. 34°03', long. 79°15', at bridge on U. S. Highway 501, at Galivants Ferry, Horry County, 3 miles upstream from Back Swamp. Datum of gage is 23.95 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,790 square miles.

Records available.- January 1942 to September 1948.

Extremes.- Maximum discharge during year, 17,600 second-feet Feb. 16-19; maximum gage height, 11.24 feet Feb. 18; minimum discharge, 622 second-feet Sept. 27.

1942-48: Maximum discharge, 26,800 second-feet Sept. 23, 1945 (gage height, 13.23 feet, from graph based on gage readings); minimum, 452 second-feet Oct. 26, 27, Oct. 30 to Nov. 2, 1943.

Maximum stage known, 16.0 feet in September 1928, from floodmark set by local resident.

Remarks.- Records good. Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-13, Apr. 10 to June 20, Sept. 2-30)

Oct. 1 to Feb. 18				Feb. 19 to Sept. 30					
7.1	2,570	8.4	5,410	3.8	622	7.1	2,370	8.4	5,210
7.5	3,270	9.0	7,510	6.0	1,390	7.5	3,010	9.0	7,510
7.9	4,130	11.2	17,600	6.6	1,800	7.9	3,810	11.2	17,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,710	2,900	12,000	8,370	6,370	9,270	7,510	2,830	1,240	1,640	1,800	1,210
2	5,710	2,730	11,100	7,930	6,730	8,810	7,510	2,670	1,280	1,640	2,110	1,180
3	5,410	2,730	10,600	7,510	7,110	8,370	7,930	2,510	1,320	1,640	2,230	1,070
4	5,130	2,900	10,200	7,510	7,510	7,930	8,370	2,370	1,280	1,640	2,370	1,000
5	4,610	3,270	9,270	7,110	8,370	7,930	8,370	2,110	1,280	1,570	2,370	965
6	4,370	3,470	8,810	6,730	8,810	7,510	8,370	1,990	1,320	1,440	2,510	965
7	3,900	3,680	7,930	6,370	9,270	7,510	8,370	1,890	1,320	1,390	2,510	1,070
8	3,680	3,900	7,510	6,030	9,730	7,930	8,370	1,800	1,390	1,350	2,510	1,100
9	3,470	4,130	7,110	5,710	10,200	8,370	8,370	1,720	1,500	1,320	2,670	1,180
10	3,270	4,610	6,730	5,710	11,600	8,810	7,930	1,570	1,440	1,320	2,670	1,210
11	3,080	5,410	6,370	5,410	13,000	9,270	7,930	1,500	1,500	1,350	2,510	1,240
12	2,900	6,370	6,370	5,130	14,800	9,730	7,510	1,440	1,500	1,350	2,510	1,180
13	2,730	7,110	6,370	5,130	15,700	9,730	7,510	1,440	1,440	1,320	2,370	1,100
14	2,570	8,370	6,730	4,870	16,600	10,200	7,510	1,500	1,390	1,210	2,230	1,070
16	2,730	10,200	6,730	4,870	17,100	10,200	7,090	1,440	1,350	1,070	2,230	1,040
16	3,080	11,600	7,110	4,610	17,600	9,730	7,090	1,440	1,350	1,000	1,990	1,040
17	3,270	13,400	7,510	4,610	17,600	10,200	6,690	1,390	1,350	930	1,800	1,070
18	3,680	14,800	7,930	4,370	17,600	10,200	6,690	1,390	1,390	895	1,640	1,070
19	3,900	15,700	7,930	4,370	17,600	10,600	6,690	1,350	1,350	860	1,390	1,040
20	4,130	15,700	8,370	4,370	17,100	10,600	6,290	1,350	1,350	1,000	1,280	1,000
21	4,130	16,200	8,370	4,370	15,700	10,200	5,910	1,350	1,390	1,040	1,210	965
22	4,370	16,200	8,810	4,370	14,800	10,200	5,910	1,320	1,640	1,040	1,180	895
23	4,370	15,700	9,270	4,610	13,900	10,200	5,550	1,280	1,800	1,070	1,180	826
24	4,370	15,700	9,730	4,610	13,400	9,730	4,890	1,210	1,890	1,140	1,140	758
26	4,370	14,800	9,270	4,870	12,500	9,270	4,590	1,180	1,800	1,280	1,100	690
26	4,370	14,300	9,730	4,870	11,600	8,810	4,310	1,100	1,890	1,440	1,070	656
27	4,130	13,900	9,730	4,870	11,100	8,370	4,050	1,100	1,990	1,720	1,040	622
28	4,130	13,400	9,730	5,130	10,600	7,930	3,590	1,070	1,800	1,800	1,040	690
29	3,680	13,000	9,270	5,410	10,200	7,510	3,390	1,100	1,800	1,720	1,040	758
30	3,470	12,500	9,270	5,410	-	7,090	3,190	1,100	1,640	1,640	1,040	965
31	3,080	-	8,810	6,030	-	7,090	-	1,210	-	1,720	1,070	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	121,800	5,710	2,570	3,929	1.41	1.63
November	288,680	16,200	2,730	9,623	3.45	3.85
December	264,670	12,000	6,370	8,538	3.06	3.53
Calendar year 1947	1,466,848	16,200	697	4,019	1.44	19.57
January	171,270	8,370	4,370	5,525	1.98	2.28
February	364,200	17,600	6,370	12,560	4.50	4.85
March	279,300	10,600	7,090	9,010	3.23	3.72
April	197,480	8,370	3,190	6,583	2.36	2.63
May	48,720	2,830	1,070	1,572	.563	.65
June	44,980	1,900	1,240	1,499	.537	.60
July	41,545	1,800	860	1,340	.480	.55
August	55,810	2,670	1,040	1,800	.645	.74
September	29,625	1,240	622	988	.354	.40
Water year 1947-48	1,908,080	17,600	622	5,213	1.87	25.43

Peak discharge (base, 5,500 sec.-ft.).- Oct. 1 (8 a.m.) 5,710 sec.-ft.; Nov. 21 (8 p.m.) 16,200 sec.-ft.; Dec. 26 (12 m.) 10,200 sec.-ft.; Feb. 18 (6 p.m.) 17,600 sec.-ft.; Mar. 19 (1 p.m.) 10,600 sec.-ft.

Drowning Creek near Hoffman, N. C.

Location.- Water-stage recorder, lat. 35°03'35", long. 79°29'35", at bridge on U. S. Highway 1, three-quarters of a mile downstream from Deep Creek, 1 mile upstream from Seaboard Airline Railway bridge, and 4 miles northeast of Hoffman, Richmond County.

Drainage area.- 178 square miles.

Records available.- October 1939 to September 1948.

Extremes.- Maximum discharge during year, 1,280 second-feet Feb. 14 (gage height, 6.49 feet); minimum, 74 second-feet July 11 (gage height, 2.19 feet).
1939-48: Maximum discharge, 10,900 second-feet Sept. 18, 1945 (gage height, 10.29 feet); minimum, 28 second-feet Aug. 4, 1940 (gage height, 1.32 feet).

Remarks.- Records good. Records of water analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water year).- W 972: 1941(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.2	75	4.5	275
2.6	107	5.0	369
3.0	139	5.5	550
3.5	179	6.0	850
4.0	223	6.5	1,290

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	107	147	289	214	419	357	403	275	419	151	550	155
2	98	163	282	228	397	369	501	253	357	233	473	151
3	97	302	275	258	369	454	541	218	263	181	419	111
4	95	451	269	258	357	560	532	205	233	111	397	103
5	94	477	263	233	383	611	447	228	258	95	383	123
6	91	433	258	228	443	489	383	243	243	88	383	143
7	96	314	258	218	505	514	458	223	183	85	345	147
8	139	269	253	210	541	754	697	233	228	80	269	167
9	159	334	248	205	550	968	673	210	305	77	205	183
10	159	345	263	200	518	728	585	183	282	77	183	139
11	252	323	305	196	485	611	546	171	183	78	179	123
12	357	461	369	192	518	575	497	175	151	80	171	111
13	306	595	369	256	715	528	477	210	143	85	155	103
14	171	644	323	423	1,170	473	477	289	196	93	143	97
15	155	580	282	518	1,080	443	451	323	275	123	143	99
16	214	546	305	536	910	429	426	269	269	187	151	99
17	297	570	369	458	691	447	413	179	228	218	147	93
18	345	585	383	357	560	461	410	171	233	179	143	91
19	383	501	357	297	510	458	369	163	183	233	139	89
20	334	447	289	275	477	426	334	147	147	550	187	86
21	253	429	263	297	447	397	323	139	139	673	183	81
22	228	433	258	345	447	383	334	131	139	477	147	79
23	167	423	253	357	458	369	369	127	147	239	131	82
24	151	423	243	323	458	369	383	123	131	233	127	84
25	147	447	238	275	451	383	357	187	111	456	115	80
28	147	461	253	253	419	403	305	297	103	872	107	81
27	139	443	269	262	397	383	275	369	111	595	103	84
28	151	397	263	345	383	436	258	426	99	397	97	111
29	218	345	243	423	369	436	243	383	93	400	93	205
30	253	314	223	440	-	397	253	465	95	465	89	305
31	175	-	218	443	-	357	-	497	-	555	103	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,978	383	91	193	1.08	1.25
November	12,602	644	147	420	2.36	2.63
December	8,733	383	218	282	1.58	1.82
Calendar year 1947	91,990	1,040	73	252	1.42	19.23
January	9,524	536	192	307	1.72	1.99
February	15,427	1,170	357	532	2.99	3.22
March	14,968	968	357	483	2.71	3.13
April	12,720	697	243	424	2.38	2.66
May	7,512	497	123	242	1.36	1.57
June	5,947	419	93	198	1.11	1.24
July	8,366	872	77	270	1.52	1.75
August	6,460	550	89	208	1.17	1.35
September	3,605	305	79	120	.674	.75
Water year 1947-48	111,842	1,170	77	306	1.72	23.36

Peak discharge (base, 500 sec.-ft.).- Nov. 14 (5 a.m.) 667 sec.-ft.; Jan. 16 (1 p.m.) 541 sec.-ft.; Feb. 14 (6 p.m.) 1,280 sec.-ft.; Mar. 9 (4 a.m.) 1,010 sec.-ft.; Apr. 4 (1 a.m.) 555 sec.-ft.; Apr. 8 (7 p.m.) 748 sec.-ft.; May 31 (1 p.m.) 518 sec.-ft.; July 20 (10 p.m.) 741 sec.-ft.; July 26 (8 p.m.) 1,010 sec.-ft.; July 31 (8 p.m.) 565 sec.-ft.

Lumber River at Boardman, N. C.

Location.- Water-stage recorder, lat. 34°26'40", long. 78°56'35", at U. S. Highway 74 1 mile downstream from Atlantic Coast Line Railroad bridge at Boardman, Columbus County, and 1½ miles downstream from Big Swamp. Datum of gage is 72.05 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 1,220 square miles.

Records available.- September 1929 to September 1948.

Average discharge.- 19 years, 1,256 second-feet.

Extremes.- Maximum discharge during year, 7,070 second-feet Feb. 17 (gage height, 9.17 feet); minimum, 280 second-feet Sept. 27 (gage height, 1.64 feet).

1929-48: Maximum discharge, 13,400 second-feet Sept. 24, 1945 (gage height, 10.64 feet); minimum, 132 second-feet (estimated) Oct. 12, 1930.

Maximum stage known, 11.8 feet sometime in August 1928, from floodmark as witnessed by local resident (discharge, 25,000 second-feet, estimated).

Remarks.- Records good. Discharge for days of considerable change in stage computed by using rate of change of stage as a factor. Records of water analyses for the water year 1948 are given in Water-Supply Paper 1132.

Rating table, water year 1947-48, except days computed using rate of change of stage as a factor (gage height, in feet, and discharge, in second-feet)

1.6	273	5.0	990	7.5	3,480
2.0	328	5.5	1,220	8.0	4,420
3.0	485	6.0	1,560	8.5	5,500
4.0	684	6.5	2,030	9.0	6,680
4.5	820	7.0	2,670		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,930	1,220	4,020	2,390	2,750	3,150	2,330	1,280	790	709	1,120	469
2	1,880	1,170	3,750	2,390	2,990	3,070	2,460	1,220	850	709	1,220	453
3	1,780	1,140	3,570	2,270	3,070	3,070	2,600	1,140	915	734	1,350	509
4	1,740	1,120	3,310	2,210	3,070	2,999	2,670	1,070	990	790	1.420	585
5	1,650	1,530	3,070	2,150	3,150	2,910	2,670	1,010	1,120	820	1,420	618
6	1,490	2,050	2,910	2,090	3,310	2,910	2,600	932	1,200	850	1.420	640
7	1,320	2,270	2,670	2,030	3,480	2,990	2,670	880	1,200	820	1,350	662
6	1,220	2,390	2,460	1,930	3,660	3,070	2,670	850	1,200	734	1,320	662
9	1,140	2,390	2,270	1,880	4,020	3,230	2,750	820	1,070	684	1,320	618
10	1,100	2,390	2,210	1,830	4,520	3,480	2,910	820	950	602	1,250	618
11	1,220	2,760	2,150	1,780	4,950	3,750	2,990	820	880	500	1,170	618
12	1,320	3,230	2,150	1,700	5,170	3,930	3,070	820	820	430	1,070	618
13	1,350	4,170	2,210	1,650	5,610	4,020	2,990	820	734	405	950	618
14	1,320	5,080	2,270	1,600	6,200	4,020	2,910	850	734	381	850	618
15	1,350	5,610	2,330	1,560	6,680	4,020	3,070	880	734	373	790	640
16	1,490	5,960	2,460	1,600	6,940	4,120	3,230	932	734	373	650	618
17	1,560	6,200	2,530	1,600	7,070	4,220	3,150	970	760	389	587	596
18	1,700	6,440	2,600	1,650	7,070	4,120	3,070	970	790	421	538	557
19	1,880	6,560	2,750	1,650	6,940	4,020	2,830	915	820	509	502	456
20	1,930	6,560	2,750	1,700	6,680	3,840	2,600	850	790	538	557	400
21	1,880	5,320	2,830	1,780	6,440	3,750	2,390	790	790	576	538	381
22	1,830	6,080	2,910	1,880	6,080	3,570	2,270	790	820	596	520	350
23	1,780	5,840	2,910	2,030	5,610	3,400	2,090	760	820	618	538	328
24	1,740	5,720	2,910	2,210	5,170	3,150	1,980	709	850	640	557	307
25	1,600	5,500	2,910	2,270	4,730	2,990	1,830	662	915	684	576	300
26	1,520	5,280	2,910	2,270	4,320	2,830	1,700	641	880	760	596	286
27	1,420	5,170	2,910	2,210	3,930	2,670	1,600	684	880	942	640	280
28	1,380	4,950	2,910	2,210	3,660	2,530	1,520	684	820	1,130	709	286
29	1,280	4,730	2,750	2,210	3,400	2,330	1,460	684	760	1,250	684	300
30	1,220	4,420	2,670	2,270	-	2,210	1,380	709	709	1,250	548	353
31	1,250	-	2,530	2,530	-	2,150	-	734	-	1,140	451	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	47,270	1,930	1,100	1,525	1.25	1.44
November	124,250	6,560	1,120	4,142	3.40	3.79
December	85,590	4,020	2,150	2,761	2.26	2.61
Calendar year 1947	580,725	6,560	280	1,591	1.30	17.70
January	61,530	2,530	1,560	1,985	1.63	1.88
February	140,670	7,070	2,750	4,851	3.98	4.29
March	102,510	4,220	2,150	3,307	2.71	3.12
April	74,460	3,230	1,380	2,482	2.03	2.27
May	26,696	1,280	641	861	.706	.81
June	26,325	1,200	709	878	.720	.80
July	21,357	1,250	373	689	.565	.65
August	27,211	1,420	451	878	.720	.83
September	14,744	662	280	491	.402	.45
Water year 1947-48	752,613	7,070	280	2,056	1.69	22.94

Peak discharge (base, 2,200 sec.-ft.).- Nov. 19 (6 a.m.) 6,680 sec.-ft.; Dec. 26 (1 a.m.) 2,910 sec.-ft.; Jan. 25 (7 p.m.) 2,270 sec.-ft.; Feb. 17 (8 p.m.) 7,070 sec.-ft.; Mar. 17 (8 a.m.) 4,220 sec.-ft.; Apr. 16 (12 m.) 3,230 sec.-ft.

Black River at Kingstree, S. C.

Location.- Water-stage recorder, lat. 33°40', long. 79°50', at bridge on U. S. Highway 52 at Kingstree, Williamsburg County, a quarter of a mile downstream from Broad Swamp. Datum of gage is 25.66 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,260 square miles.

Records available.- August 1929 to September 1948. Gage-height records collected at same site since 1893 are contained in reports of U. S. Weather Bureau.

Average discharge.- 19 years, 802 second-feet.

Extremes.- Maximum discharge during year, 10,400 second-feet Feb. 14, 15; maximum gage height, 12.81 feet Feb. 14; minimum discharge, 35 second-feet Sept. 6.

1929-48: Maximum discharge, 29,100 second-feet Sept. 20, 1945 (gage height, 16.07 feet); minimum, 4 second-feet June 30, July 1, 4, 5, 1935, Sept. 5, 6, Oct. 15-19, 1944.

Maximum stage known, 18.0 feet Sept. 21, 1928 (discharge, 41,600 second-feet, from rating curve extended above 27,000 second-feet).

Remarks.- Records good.

Cooperation.- Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions (water year).- W 1032: 1928(M), drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 5 to Sept. 30)

Oct. 1 to Feb. 14

2.7	168
3.5	256
4.5	387
5.5	548
6.7	818

Note.- Same as following table above 6.7 feet.

Feb. 15 to Sept. 30

1.3	32	4.5	365	9.9	2,620
1.6	48	5.5	542	10.5	3,470
2.0	74	6.7	818	11.2	4,760
2.4	106	7.7	1,120	11.9	6,680
2.7	134	8.5	1,480	12.4	8,580
3.5	223	9.2	1,940	12.8	10,400

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	606	306	3,160	3,630	2,020	2,510	3,470	694	671	104	126	52
2	606	306	2,870	3,310	2,400	2,510	5,000	604	671	106	149	48
3	586	373	2,620	3,010	2,620	2,510	6,060	522	671	103	187	42
4	548	512	2,400	2,740	3,010	2,620	6,360	466	742	98	230	40
5	512	627	2,200	2,510	3,160	2,740	6,060	448	818	93	217	37
6	462	767	2,020	2,400	3,310	2,740	5,240	414	818	92	154	36
7	401	959	1,860	2,300	3,310	3,160	4,760	406	767	84	110	42
8	373	1,420	1,720	2,300	3,310	3,630	4,150	397	718	87	87	50
9	319	2,030	1,600	2,110	3,630	4,150	3,630	373	671	94	80	70
10	280	2,510	1,600	2,020	4,540	4,760	3,160	349	648	103	85	73
11	238	2,870	1,790	1,940	6,360	5,240	2,740	326	583	107	92	71
12	210	3,160	2,020	1,860	8,580	5,500	2,400	381	484	122	94	75
13	183	3,160	2,300	1,790	9,940	5,500	2,110	522	381	139	93	90
14	168	3,470	2,740	1,660	10,400	5,240	1,940	604	297	134	84	98
15	178	4,150	3,560	1,600	10,400	4,760	1,860	694	236	106	72	106
16	221	4,760	4,540	1,540	9,480	4,540	1,720	742	193	97	62	118
17	250	5,500	5,240	1,540	8,580	4,340	1,720	767	160	105	58	134
18	262	5,500	5,240	1,480	7,760	4,340	1,660	767	132	116	57	149
19	268	5,780	5,000	1,430	6,680	5,240	1,600	694	111	139	56	154
20	286	5,780	4,760	1,380	5,500	6,680	1,540	626	98	199	52	154
21	293	5,500	4,540	1,430	4,760	6,360	1,540	562	95	176	52	144
22	300	5,240	4,760	1,480	4,340	6,060	1,600	522	103	160	83	132
23	306	5,000	5,240	1,540	3,970	5,500	1,660	466	122	134	95	117
24	319	4,760	5,500	1,660	3,630	5,240	1,600	414	149	139	85	96
25	326	4,540	5,780	1,660	3,470	4,540	1,480	357	160	187	79	76
26	332	4,150	6,060	1,720	3,160	4,150	1,330	342	144	223	74	59
27	332	3,970	5,780	1,660	3,010	3,970	1,160	334	131	182	66	48
28	338	3,630	5,240	1,660	2,870	3,800	1,050	349	122	134	58	49
29	332	3,470	4,760	1,660	2,740	3,630	927	397	107	134	55	61
30	326	3,310	4,340	1,660	-	3,470	818	448	98	131	54	113
31	312	-	3,970	1,860	-	3,160	-	604	-	123	53	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,473	606	168	338	0.268	0.31
November	97,510	5,780	306	3,250	2.58	2.88
December	115,210	6,060	1,600	3,716	2.95	3.40
Calendar year 1947	478,481	7,760	56	1,311	1.04	14.13
January	60,540	3,630	1,380	1,953	1.55	1.79
February	146,940	10,400	2,020	5,067	4.02	4.34
March	132,590	6,680	2,510	4.277	3.39	3.91
April	80,345	6,360	818	2,678	2.13	2.38
May	15,591	767	326	503	.399	.46
June	11,101	818	95	370	.294	.33
July	3,951	223	84	127	.101	.12
August	2,899	230	52	93.5	.074	.09
September	2,534	154	36	84.5	.067	.07
Water year 1947-48	679,684	10,400	36	1,857	1.47	20.08

Peak discharge (base, 2,000 sec.-ft.).- Nov. 19 (7 a.m.) 5,780 sec.-ft.; Dec. 25 (12 p.m.) 6,060 sec.-ft.; Feb. 14 (1 p.m.) 10,400 sec.-ft.; Mar. 20 (7:30 p.m.) 6,680 sec.-ft.; Apr. 4 (9 a.m.) 6,360 sec.-ft.

Catawba River near Marion, N. C.

Location.- Water-stage recorder, lat. 35°42'20", long. 82°02'10", at bridge on U. S. Highway 221, a quarter of a mile downstream from Tom Creek and 2¼ miles northwest of Marion, McDowell County.

Drainage area.- 171 square miles (including area of first tributary below bridge, which enters above control).

Records available.- October 1941 to September 1948.

Extremes.- Maximum discharge during year, 6,790 second-feet Sept. 6 (gage height, 10.44 feet); minimum, 85 second-feet Oct. 6, 7 (gage height, 1.03 feet); minimum daily, 87 second-feet Oct. 5.

1941-48: Maximum discharge, 8,210 second-feet Sept. 18, 1945 (gage height, 11.38 feet), from rating curve extended above 4,500 second-feet by logarithmic plotting; minimum, 69 second-feet Dec. 17, 1943, Sept. 8-11, 1944; minimum daily, 69 second-feet Sept. 10, 1944.

Maximum stage known, 19.34 feet Aug. 13, 1940 (discharge, 71,400 second-feet), by contracted-opening method.

Remarks.- Records good. Some diurnal fluctuation and slight regulation for short periods at low flow caused by power plants above station.

Revisions (water years).- W 1032: 1942, 1943(P).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 12

1.0	80	2.3	495
1.1	97	2.9	770
1.3	140	3.5	1,080
1.6	225	4.5	1,770
1.9	324	6.0	2,920

Feb. 13 to Sept. 30

1.1	98	2.0	380
1.2	119	2.5	595
1.4	172	3.1	870
1.7	270		

Note.- Same as preceding table above 3.1 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	364	278	213	332	288	708	236	256	155	405	203
2	101	2,430	275	285	320	324	618	226	220	139	912	194
3	122	2,930	265	243	324	309	524	229	223	155	1,660	220
4	97	1,200	249	231	310	284	471	229	263	115	1,400	213
5	87	820	258	234	317	291	445	233	226	132	775	313
6	103	652	249	219	735	298	428	206	200	106	554	3,100
7	99	585	240	216	608	640	420	229	200	129	445	1,510
8	307	526	243	198	518	519	462	220	200	100	392	895
9	426	446	234	213	464	424	420	203	213	113	369	685
10	913	393	252	210	419	380	369	200	181	144	346	618
11	486	538	243	201	364	342	369	166	161	1,060	280	502
12	340	513	243	201	1,170	338	357	223	181	f1,860	298	428
13	278	428	237	243	1,180	312	338	280	158	895	280	380
14	240	406	228	225	1,200	305	346	223	191	929	263	357
15	213	704	310	183	846	298	335	210	164	975	256	335
16	249	608	410	207	662	305	309	194	191	730	250	305
17	1,790	504	317	210	572	316	316	194	152	564	270	305
18	823	454	281	175	493	277	291	188	155	449	260	288
19	526	500	278	192	437	305	288	188	194	408	253	277
20	398	437	262	175	428	298	270	164	150	422	229	270
21	324	415	252	204	388	284	288	164	161	446	236	267
22	278	381	246	195	392	277	270	178	498	309	536	270
23	246	381	243	183	357	479	253	155	260	298	372	256
24	649	385	234	201	335	408	274	155	203	260	462	263
25	795	368	207	204	346	338	256	181	172	239	350	256
26	554	352	243	201	327	338	253	226	178	226	274	250
27	459	306	231	225	335	1,660	233	197	134	243	267	246
28	1,010	328	225	237	324	870	253	374	175	223	246	468
29	698	302	219	216	302	618	236	400	166	236	250	546
30	518	288	213	326	-	515	239	357	172	284	253	361
31	432	-	213	450	-	696	-	309	-	280	229	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	13,680	1,790	87	441	2.58	2.98
November	18,944	2,930	288	631	3.69	4.12
December	7,878	410	207	254	1.49	1.71
Calendar year 1947	101,558	2,930	74	278	1.63	22.08
January	6,916	450	175	223	1.30	1.50
February	14,805	1,200	302	511	2.99	3.22
March	13,336	1,660	277	430	2.51	2.90
April	10,639	708	233	355	2.08	2.31
May	6,937	400	155	224	1.31	1.51
June	5,998	498	134	200	1.17	1.30
July	12,624	1,860	100	407	2.38	2.75
August	13,372	1,660	229	431	2.52	2.91
September	14,581	3,100	194	486	2.84	3.17
Water year 1947-48	139,710	3,100	87	382	2.23	30.38

Peak discharge.- Oct. 17 (12 m.) 3,630 sec.-ft.; Nov. 2 (11 p.m.) 6,080 sec.-ft.; Mar. 27 (10:30 a.m.) 3,000 sec.-ft.; July 12 (1 a.m.) 4,900 sec.-ft.; Sept. 6 (4:30 p.m.) 6,790 sec.-ft.

f Computed from partly estimated gage heights.

Catawba River at Catawba, N. C.

Location.- Water-stage recorder, lat. 35°42'50", long. 81°04'10", at bridge on U. S. Highway 70, half a mile upstream from Lyle Creek, five-eighths of a mile upstream from Southern Railway bridge, and 1 mile northeast of Catawba, Catawba County. Datum of gage is 746.74 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,535 square miles, including that of Lyle Creek.

Records available.- July 1896 to April 1902, November 1934 to September 1948.

Average discharge.- 16 years (1896-99, 1935-48), 2,382 second-feet (unadjusted).

Extremes.- Maximum discharge during year, 31,200 second-feet Aug. 3 (gage height, 18.28 feet); minimum, 118 second-feet Oct. 5, 6 (gage height, 2.20 feet).

1896-1902, 1934-48: Maximum discharge, 177,000 second-feet Aug. 14, 1940 (gage height, 36.8 feet, from floodmarks), by computation of flow at Lookout Shoals power plant by Duke Power Co.; minimum, 107 second-feet Nov. 9, 1941.

Maximum stage known, 44.1 feet July 16, 1916, affected by failure of earth dike at Lookout Shoals Dam, 4 miles above station (from levels by State Highway and Public Works Commission).

Remarks.- Records good except those below 1,000 second-feet, which are fair. Records include discharge of Lyle Creek. Flow regulated by four reservoirs above station which have a combined usable capacity of 14,975,000,000 cubic feet.

Cooperation.- Reservoir capacity curves and elevations furnished by Duke Power Co. Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions (water years).- W 892: 1936-38: W 952: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.2	118	3.0	620	5.0	3,080
2.3	158	3.3	890	6.0	4,610
2.4	205	3.6	1,210	8.0	7,910
2.6	320	4.0	1,680	10.0	11,300
2.8	465	4.5	2,360	12.0	15,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,270	1,260	2,490	2,210	250	2,400	9,860	1,440	1,980	2,330	218	2,450
2	2,510	1,690	2,240	2,560	2,590	2,520	5,940	370	2,230	1,490	2,120	2,400
3	2,090	14,400	2,900	1,160	2,440	3,160	5,000	2,530	2,430	615	13,500	2,540
4	750	10,500	2,680	332	2,950	3,160	3,620	3,230	1,750	138	8,230	831
5	130	6,920	2,770	2,320	2,720	2,200	3,780	3,230	986	447	9,360	158
6	1,880	5,350	1,230	2,230	3,140	1,130	3,780	3,230	208	158	4,590	1,900
7	2,880	4,610	167	3,420	1,290	836	3,490	3,300	2,070	150	1,090	4,450
8	2,220	3,210	3,040	3,360	1,800	4,180	3,560	1,160	2,870	138	742	4,610
9	1,890	274	3,020	2,760	3,740	4,290	4,020	218	2,290	146	2,870	4,450
10	2,400	3,830	2,980	1,480	3,300	3,580	3,470	2,460	2,280	146	3,540	4,450
11	882	4,780	2,940	251	3,230	3,300	2,430	2,980	2,150	142	2,410	3,700
12	186	3,590	2,320	2,820	4,290	3,550	3,380	2,300	1,410	2,080	2,970	1,670
13	1,600	3,340	1,770	3,330	7,720	2,260	3,380	2,990	232	2,140	2,160	2,420
14	1,760	3,460	236	3,210	6,670	605	3,380	2,570	2,110	2,330	839	2,410
15	1,760	4,330	2,590	2,500	4,750	2,690	3,380	978	2,300	2,720	210	2,710
16	1,820	3,420	2,260	2,390	6,340	3,300	3,380	234	2,320	2,330	2,080	2,540
17	1,990	3,910	2,240	1,130	5,140	3,380	3,150	2,440	2,300	848	2,410	1,490
18	884	4,010	2,560	158	3,570	3,230	1,280	3,440	2,320	172	2,220	630
19	660	4,080	2,570	2,180	3,230	2,520	3,230	3,090	1,010	2,580	2,150	232
20	2,450	3,810	1,030	2,530	3,230	1,240	2,540	2,530	280	3,440	1,840	2,560
21	2,830	4,000	326	3,160	3,230	1,120	3,160	2,380	2,290	3,110	708	2,340
22	2,540	2,770	1,860	3,160	3,230	3,160	2,980	930	2,240	2,890	196	2,690
23	2,430	370	1,850	2,580	3,230	3,300	2,970	242	2,190	2,550	2,870	2,770
24	2,390	4,070	660	2,130	3,230	3,490	934	2,200	2,270	749	2,280	2,560
25	1,020	4,500	182	374	3,230	3,380	236	2,200	2,070	146	2,390	714
26	216	3,380	544	2,140	3,160	3,340	2,490	2,250	812	2,660	2,410	492
27	2,070	1,540	270	2,360	3,230	6,410	3,120	2,170	254	3,120	2,310	2,500
28	4,070	2,650	167	2,920	1,860	7,490	2,800	2,390	2,240	3,140	780	3,120
29	7,550	1,670	2,570	2,400	357	5,970	2,400	878	3,140	3,410	226	2,730
30	3,480	252	3,190	2,880	-	5,220	3,160	216	2,420	2,780	2,130	2,620
31	2,880	-	2,410	1,400	-	7,010	-	2,350	-	846	2,470	-

Month	Observed				Change in contents (equivalent, second-feet)†	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	64,488	7,550	130	2,080	†1,319	-	-	-
November	115,976	14,400	252	3,866	†332	-	-	-
December	58,062	3,190	167	1,873	-162	-	-	-
Calendar year 1947	724,339	18,000	118	1,984	†171	2,155	1.40	19.00
January	67,835	3,420	158	2,188	-466	-	-	-
February	97,147	7,720	250	3,350	†645	-	-	-
March	103,421	7,490	605	3,336	†178	-	-	-
April	100,300	9,860	236	3,343	-297	-	-	-
May	62,926	3,440	216	2,030	-179	-	-	-
June	55,432	3,140	208	1,848	-156	-	-	-
July	49,941	3,440	138	1,611	-79	-	-	-
August	84,319	13,500	196	2,720	†392	-	-	-
September	71,137	4,610	158	2,371	-20	-	-	-
Water year 1947-48	930,984	14,400	130	2,544	†125	2,669	1.74	23.68

† Change in contents of Bridgewater, Rhodiss, Oxford, and Lookout Shoals Reservoirs.

Catawba River near Rock Hill, S. C.

Location.- Water-stage recorder, lat. 34°59', long. 80°58', at bridge on U. S. Highway 21, 3½ miles downstream from Catawba Dam, 5 miles northeast of Rock Hill, York County, and 7½ miles upstream from Sugar Creek.

Drainage area.- 3,050 square miles.

Records available.- April 1942 to September 1948. September 1895 to July 1903 at site 2 miles downstream (revised records for this period published in North Carolina Department of Conservation and Development Bulletin 34 and South Carolina Research, Planning and Development Board Bulletin 17).

Average discharge.- 13 years (1895-1902, 1942-48), 5,005 second-feet.

Extremes.- Maximum discharge during year, 39,300 second-feet Mar. 31 (gage height, 13.63 feet); minimum, 656 second-feet July 25 (gage height, 3.14 feet); minimum daily, 906 second-feet July 4.

1895-1903, 1942-48: Maximum discharge, 151,000 second-feet May 23, 1901 (gage height, 24.15 feet) at site 2 miles downstream; minimum, 42 second-feet Apr. 25, 1943 (gage height, 2.59 feet); minimum daily, 815 second-feet Sept. 2, 1945.

Remarks.- Records good. Flow regulated by Catawba Reservoir (usable capacity, 6,542,000,000 cubic feet) and by other power plants above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.3	890	6.0	7,910
3.8	1,730	8.0	15,300
4.3	2,780	10.0	23,400
5.0	4,670	11.4	29,400

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,730	2,760	4,930	4,870	2,070	4,720	27,100	2,810	3,950	2,410	1,470	4,200
2	3,520	4,250	4,810	5,240	5,590	5,420	15,100	1,550	3,730	2,270	1,940	4,230
3	3,270	25,700	5,610	3,060	5,900	5,940	12,300	5,700	4,010	1,170	8,650	4,050
4	1,620	20,900	5,630	1,230	6,230	5,710	5,910	6,500	3,660	906	17,600	1,280
5	1,140	15,400	4,800	6,280	5,830	6,000	8,680	6,460	1,860	954	24,600	1,010
6	3,030	13,700	2,180	6,520	8,390	1,530	7,710	6,420	1,170	922	15,000	1,340
7	4,270	9,100	1,240	6,060	9,480	13,000	6,390	5,800	4,300	1,110	8,730	3,040
8	3,840	7,190	4,340	5,290	5,190	8,270	7,240	2,230	5,500	1,190	1,080	3,680
9	5,480	1,720	5,150	5,040	10,000	8,710	6,840	1,090	3,880	1,040	3,690	2,890
10	11,000	7,990	5,610	2,520	6,720	7,910	4,880	5,880	3,870	1,130	4,860	2,950
11	11,600	12,800	4,790	1,440	8,810	7,320	6,030	5,220	4,480	1,000	5,080	3,180
12	4,010	9,500	3,910	5,380	18,800	7,500	6,620	3,490	2,010	2,520	4,090	4,130
13	3,940	6,740	2,550	5,090	29,200	2,070	6,350	3,040	1,160	2,620	4,460	4,020
14	3,620	7,100	1,240	3,280	24,500	2.280	6,410	3,820	3,690	2,770	1,360	3,920
15	4,600	11,200	4,900	4,990	11,800	7,380	6,130	2,140	4,490	3,340	954	3,750
16	4,090	10,300	3,700	4,890	13,400	6,360	5,570	1,140	4,240	2,420	4,060	3,400
17	5,650	8,510	3,980	3,510	11,800	9,110	2,920	5,220	3,700	1,750	3,460	2,670
18	1,620	7,730	4,880	1,040	7,580	6,490	3,280	5,800	3,870	1,030	2,940	1,090
19	1,030	7,560	4,470	4,650	8,420	6,400	5,430	5,090	1,350	2,940	3,600	1,250
20	4,190	7,280	1,830	7,040	6,990	4,340	5,400	3,950	1,050	3,810	3,220	3,380
21	3,630	7,880	1,400	6,560	3,720	2,190	5,480	4,070	3,900	3,860	1,220	3,790
22	5,150	3,870	5,430	6,250	3,030	6,660	7,210	1,420	5,290	3,620	954	3,620
23	6,030	1,650	5,110	6,120	9.840	7,360	6,140	1,030	4,490	3,460	3,940	3,610
24	7,250	7,790	1,300	2,660	6,320	7,460	3,290	3,490	5,000	2,170	4,860	2,970
25	6,100	8,170	1,280	1,590	6,510	5,890	1,020	4,300	2,430	959	3,820	1,310
26	3,540	6,680	1,110	5,700	6,120	6,240	4,880	3,050	1,220	4,630	3,270	1,250
27	5,350	4,230	1,110	7,320	5,440	8,500	5,780	2,800	968	4,520	2,810	3,710
28	7,950	7,100	1,130	4,310	1,360	11,100	6,010	2,790	3,830	4,350	1,410	4,390
29	11,300	2,570	4,120	4,330	1,110	11,200	6,510	1,310	4,100	4,330	1,050	3,520
30	7,030	1,360	4,910	5,680	-	9,950	5,740	1,440	2,680	1,880	5,220	3,430
31	6,790	-	4,570	7,030	-	16,400	-	2,760	-	1,230	4,780	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	155,370	11,600	1,030	5,012	-	-
November	248,730	25,700	1,360	8,291	-	-
December	112,020	5,630	1,110	3,614	-	-
Calendar year 1947	1,456,546	31,200	986	3,991	1.31	17.75
January	144,970	7,320	1,040	4,676	-	-
February	252,250	29,200	1,110	8,698	-	-
March	219,410	16,400	1,530	7,078	-	-
April	208,350	27,100	1,020	6,945	-	-
May	111,810	6,500	1,030	3,607	-	-
June	99,878	5,500	968	3,329	-	-
July	72,311	4,630	906	2,333	-	-
August	154,178	24,600	954	4,973	-	-
September	91,060	4,390	1,010	3,035	-	-
Water year 1947-48	1,870,337	29,200	906	5,110	1.68	22.79

Wateree River near Camden, S. C.

Location.- Water-stage recorder, lat. 34°14'40", long. 80°39'15", at bridge on U. S. Highway 1, 1,500 feet downstrean from Twentyfivemile Creek, 4,000 feet upstream from Seaboard Air Line Railroad bridge, 2.2 miles west of Camden, Kershaw County, and 7.4 miles downstream from Wateree Dam. Datum of gage is 119.36 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 5,070 square miles.

Records available.- January to December 1903 (gage heights only), September 1904 to June 1910, October 1929 to September 1948. Gage-height records collected at site 1½ miles downstream, 1891-1934, and at site 1,000 feet upstream, January 1935 to September 1942, are contained in reports of U. S. Weather Bureau.

Average discharge.- 19 years (1929-48), 5,888 second feet.

Extremes.- Maximum discharge during year, 59,500 second-feet Apr. 2 (gage height, 27.96 feet); minimum daily, 243 second-feet July 11.

1904-10, 1929-48: Maximum discharge occurred Aug. 26, 1908 (gage height, 39.7 feet at site 1½ miles downstream, from records of U. S. Weather Bureau), discharge uncertain; minimum daily, 170 second-feet June 3, 1941.

Maximum stage known, 40.4 feet July 18, 1916, at site 1½ miles downstream from records of U. S. Weather Bureau (discharge uncertain).

Remarks.- Records fair. Flow regulated by power plant at Wateree Reservoir (capacity, 7,626,000,000 cubic feet) and by other power plants above station. Records of water analysis for the water year 1948 are given in Water-Supply Paper 1132.

Cooperation.- Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions (water years).- W 802: 1930. W 952: Drainage area. W 1082: 1934(m).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.4	220	5.0	3,550	25.0	36,100
1.7	349	9.0	8,050	26.0	41,000
2.0	514	14.0	13,600	27.4	53,500
2.4	800	19.0	20,200		
3.1	1,480	21.0	24,500		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,280	7,110	5,370	7,560	12,300	6,320	23,800	6,760	2,440	4,540	748	6,050
2	3,700	3,100	6,560	7,350	13,100	9,240	53,500	1,880	2,340	3,780	3,490	5,940
3	3,360	8,540	6,070	5,960	12,800	9,680	34,500	5,550	2,180	2,270	7,020	4,880
4	2,510	25,700	7,060	1,730	9,820	10,200	18,700	8,130	2,850	664	11,000	1,810
5	627	30,800	8,280	5,680	9,050	10,100	16,200	8,690	2,770	1,640	11,100	870
6	3,730	22,800	5,140	7,850	10,600	9,310	15,300	7,610	758	2,080	17,700	4,340
7	4,880	18,700	1,150	7,970	12,800	9,390	14,300	7,060	3,100	1,910	17,700	4,810
8	4,320	16,200	4,620	8,450	7,470	26,400	13,500	5,810	5,800	2,110	12,200	4,970
9	3,600	13,000	6,090	8,300	15,500	27,600	13,600	1,200	6,360	1,710	5,910	3,720
10	6,250	12,100	7,570	6,570	21,100	21,900	13,000	5,400	6,040	606	7,250	3,250
11	10,000	13,700	7,320	1,720	19,200	18,700	4,230	7,590	6,680	243	6,090	1,380
12	2,450	17,300	7,240	6,260	17,500	16,500	10,400	7,850	4,110	3,080	6,210	514
13	3,770	19,800	6,210	9,210	27,800	13,400	13,200	7,700	820	3,180	4,830	3,590
14	4,720	16,800	2,010	10,300	51,500	3,450	13,400	6,950	4,550	3,790	3,470	4,520
15	6,370	15,300	6,620	13,200	43,200	10,700	11,200	4,510	5,240	5,170	780	4,440
16	5,380	13,700	9,250	12,800	31,000	12,200	9,150	1,160	5,340	6,130	4,230	4,300
17	5,360	19,700	9,780	7,670	22,600	11,300	4,230	6,120	5,440	3,190	3,900	3,430
18	4,000	17,400	11,100	2,080	18,700	14,200	1,040	7,790	5,120	563	4,410	1,830
19	890	15,200	9,810	6,320	16,000	14,000	6,380	6,080	4,430	4,170	4,850	568
20	3,890	13,800	7,160	9,030	14,200	12,700	9,540	6,340	1,040	5,200	4,890	3,770
21	4,180	13,200	2,490	9,050	13,400	3,050	9,120	5,420	4,990	5,120	2,220	5,250
22	5,240	13,100	6,600	8,990	7,540	5,340	8,700	2,840	5,920	4,840	410	5,890
23	6,280	7,360	9,000	12,900	8,360	9,590	7,430	934	6,790	5,170	3,210	4,820
24	6,390	6,900	5,560	9,260	11,100	13,600	5,390	3,940	5,700	2,680	3,780	4,350
25	12,400	8,880	1,800	2,060	10,200	13,700	1,280	4,800	5,050	670	4,040	1,400
26	5,370	9,620	5,800	6,380	10,900	13,200	5,780	4,110	2,980	4,060	4,280	440
27	5,560	8,500	7,500	8,800	9,820	11,900	7,400	4,470	714	5,790	4,100	3,520
28	7,570	8,120	2,580	9,240	6,590	3,120	7,120	3,990	4,090	5,200	1,960	4,710
29	10,500	8,620	6,410	10,000	1,560	9,710	7,360	2,950	5,930	4,710	642	4,890
30	10,500	2,760	10,900	9,970	-	14,700	7,940	985	5,570	3,960	3,250	6,760
31	9,890	-	8,760	12,700	-	14,000	-	2,600	-	2,390	4,710	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	167,967	12,400	627	5,418	-	-
November	407,810	30,800	2,760	13,590	-	-
December	201,810	11,100	1,150	6,510	-	-
Calendar year 1947	2,252,118	50,200	274	6,170	1.22	16.52
January	245,360	13,200	1,720	7,915	-	-
February	465,710	51,500	1,560	16,060	-	-
March	379,200	27,600	3,050	12,230	-	-
April	366,690	53,500	1,040	12,220	-	-
May	157,219	8,690	934	5,072	-	-
June	125,142	6,790	714	4,171	-	-
July	100,616	6,130	243	3,246	-	-
August	170,380	17,700	410	5,496	-	-
September	111,012	6,760	440	3,700	-	-
Water year 1947-48	2,898,916	53,500	243	7,921	1.56	21.25

Lake Marion near Pineville, S. C.

Location.- Water-stage recorder, lat. 33°27'00", long. 80°09'50", at right upstream end of spillway, 2¾ miles upstream from old Santee Canal, 5 3/8 miles upstream from Dead River, and 8 miles west of Pineville, Berkeley County. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Harza Engineering Co.).

Drainage area.- 14,700 square miles.

Records available.- January 1942 to September 1948.

Extremes.- Maximum elevation during year, 76.88 feet Mar. 23; minimum, 68.46 feet Oct. 8. 1942-48: Maximum elevation, that of Mar. 23, 1948; minimum elevation observed, 63.75 feet Jan. 1, 1942.

Remarks.- Lake is formed by earth dam. Storage began in November 1941; dam completed in 1941. Usable capacity, 39,640,000,000 cubic feet between elevations 60.0 feet (limit of draw-down) and 75.0 feet (maximum normal lake elevation). Dead storage, about 15,250,000,000 cubic feet. Figures given herein represent usable contents. Elevation of spillway crest, 63.0 feet; top of spillway gates, 76.8 feet. Water is diverted from Lake Marion through canal to Lake Moultrie (see p. 204) for generation of power and for navigation.

Elevation at 12 p.m., in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Juue	July	Aug.	Sept.
1	68.56	71.28	76.16	76.47	75.27	76.33	h76.68	75.14	74.78	73.63	71.28	71.89
2	68.59	71.79	76.11	76.33	75.38	76.31	76.33	75.10	74.82	73.57	71.20	71.87
3	68.57	72.01	76.08	76.28	75.51	76.27	75.91	75.04	74.85	73.51	71.15	71.83
4	68.61	72.16	76.07	76.28	75.66	76.20	75.70	74.99	74.81	73.45	71.13	71.88
5	68.62	72.39	76.07	76.18	75.76	76.14	75.93	74.90	74.80	73.38	71.18	71.87
6	68.53	72.58	76.04	76.10	75.87	76.20	76.23	74.87	74.81	73.25	71.28	71.89
7	68.49	72.90	76.03	76.02	75.98	76.41	76.38	74.84	74.85	73.12	71.42	71.89
8	68.52	73.30	76.00	75.97	76.05	76.47	76.40	74.79	74.77	73.00	71.62	72.02
9	68.59	73.59	75.88	75.90	76.35	76.46	76.39	74.81	74.70	72.90	71.83	72.16
10	68.63	73.97	76.08	75.80	76.46	76.18	76.38	74.79	74.69	72.82	72.02	72.31
11	68.78	74.49	76.09	75.72	76.52	76.01	76.49	74.71	74.66	72.72	72.18	72.40
12	68.99	74.78	76.14	75.60	76.60	76.15	76.53	74.79	74.61	72.63	72.29	72.45
13	69.18	75.07	76.25	76.60	76.50	76.46	76.54	74.84	74.61	72.50	72.34	72.40
14	69.19	75.34	76.31	75.45	76.17	76.72	76.59	74.82	74.60	72.41	72.48	72.31
15	69.29	75.62	76.49	75.34	75.80	76.72	76.52	74.87	74.52	72.39	72.52	72.25
18	69.42	75.72	76.38	75.37	75.51	76.77	76.51	74.92	74.41	72.39	72.49	72.18
17	69.53	75.76	76.37	75.48	75.35	76.66	76.35	74.90	74.37	72.37	72.39	72.11
18	69.60	75.88	76.37	75.53	75.66	76.48	76.33	74.81	74.32	72.36	72.33	72.10
19	69.64	75.91	76.38	75.59	75.90	76.35	76.31	74.80	74.30	72.33	72.31	72.04
20	69.67	75.83	76.40	75.59	75.77	76.31	76.20	74.79	74.24	72.24	72.36	71.92
21	69.64	75.77	76.67	75.51	75.76	76.40	76.09	74.74	74.18	72.16	72.37	71.80
22	69.67	75.74	76.70	75.43	75.94	76.54	75.98	74.62	74.08	72.10	72.36	71.74
23	69.73	75.72	76.70	75.34	76.21	76.88	75.93	74.62	74.05	72.00	72.35	71.72
24	69.82	75.87	76.70	75.42	76.36	76.69	75.89	74.60	74.03	71.91	72.18	71.68
25	69.92	75.85	76.76	75.36	76.40	76.65	75.82	74.60	73.95	71.84	72.18	71.62
26	70.10	75.89	76.73	75.30	76.44	76.60	75.64	74.59	73.92	71.70	72.18	71.60
27	70.35	76.00	76.69	75.19	76.46	76.64	75.47	74.57	73.89	71.52	72.17	71.50
28	70.59	76.08	76.63	75.10	76.44	76.53	75.33	74.60	73.78	71.49	72.17	71.64
29	70.84	76.12	76.61	75.08	76.43	76.44	75.26	74.61	73.68	71.48	72.14	71.69
30	71.00	76.15	76.53	75.10	-	h76.35	75.20	74.69	73.63	71.42	72.10	71.88
31	71.15	-	76.46	75.24	-	76.51	-	74.75	-	71.34	71.93	-

h Obtained from power-plant log sheet.

Monthly elevation and contents, water year October 1947 to September 1948

Date	Elevation (feet)†	Contents (billions of cubic feet)	Change in contents during month (equivalent, second-feet)
Sept.30....................	68.55	17.01	-
Oct. 31....................	71.15	24.82	+2,920
Nov. 30....................	76.15	44.84	+7,720
Dec. 31....................	76.46	46.31	+549
Calendar year 1947.......	-	-	+954
Jan. 31....................	75.24	40.72	-2,090
Feb. 29....................	76.43	46.17	+2,180
Mar. 31....................	76.51	46.55	+142
Apr. 30....................	75.20	40.54	-2,320
May 31....................	74.75	38.58	-732
June 30....................	73.63	33.95	-1,790
July 31....................	71.34	25.48	-3,160
Aug. 31....................	71.93	27.51	+758
Sept.30....................	71.88	27.34	-66
Water year 1947-48.......	-	-	+327

† Elevation at 12 p.m.

Santee River near Pineville, S. C.

Location.- Water-stage recorder, lat. 33°27'15", long. 80°09'25", 3.0 miles upstream from Dead River, 3.3 miles downstream from Lake Marion Dam, and 6.7 miles west of Pineville, Berkeley County. Datum of gage is 23.00 feet above mean sea level (levels by South Carolina Public Service Authority).

Drainage area.- 14,700 square miles.

Records available.- April 1942 to September 1948.

Extremes.- Maximum discharge during year, 73,800 second-feet Feb. 17 (gage height, 26.35 feet), from rating curve extended above 13,000 second-feet by computation of flow over spillway at Lake Marion and logarithmic plotting; minimum daily, 207 second-feet Apr. 27.

1942-48: Maximum discharge, 155,000 second-feet Sept. 23, 1945 (gage height, 31.1 feet, from floodmarks), from rating curve extended above 13,000 second-feet by computations of flow over spillway at Lake Marion and logarithmic plotting; minimum daily, 9 second-feet Feb. 23, 1947.

Remarks.- Records good. Flow completely regulated by Lake Marion (see p. 169). Water is diverted above station from Lake Marion through canal (see p. 203) into Lake Moultrie (see p. 204) for generation of power and for navigation, then discharged into Cooper River Basin.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	510	528	563	581	617	617	7,910	671	599	563	545	510
2	510	528	545	1,900	545	599	26,600	653	581	497	528	492
3	510	545	510	568	545	528	37,400	689	581	545	528	475
4	510	528	510	528	545	492	39,300	671	581	581	510	510
5	510	510	510	563	545	474	39,300	671	581	599	492	492
6	510	492	581	545	563	599	40,300	689	563	581	528	528
7	510	510	528	563	563	545	36,500	782	545	563	545	635
8	510	492	545	545	581	468	26,600	689	528	581	563	617
9	510	458	545	545	653	5,050	19,300	763	563	528	563	599
10	510	492	545	528	2,710	20,000	16,100	653	545	563	563	581
11	528	492	528	528	7,020	38,500	13,200	635	545	581	545	581
12	528	492	510	528	10,300	26,600	12,300	744	545	581	528	581
13	545	528	528	528	21,200	21,300	12,000	708	545	581	510	581
14	545	528	528	545	43,100	13,800	12,000	708	528	563	528	545
15	545	3,950	528	528	52,200	15,800	11,900	581	545	545	528	563
16	545	11,700	853	510	54,600	14,500	11,900	528	510	475	528	563
17	563	16,400	510	510	72,300	14,000	10,300	528	545	545	528	581
18	563	17,500	528	510	63,700	16,900	8,520	458	599	528	528	599
19	563	20,400	510	510	49,800	17,200	5,410	563	599	510	528	599
20	563	25,400	492	510	49,800	15,200	524	545	581	510	563	617
21	510	26,000	581	510	39,200	11,100	295	545	581	510	545	599
22	510	24,000	800	545	21,200	6,390	277	545	563	510	545	581
23	510	19,100	689	510	5,580	1,230	260	545	475	443	545	563
24	510	14,000	635	510	1,990	6,290	234	528	498	528	510	563
25	528	8,160	942	510	989	5,570	220	451	563	545	492	563
26	528	5,060	1,500	492	837	7,250	215	563	581	545	492	563
27	528	1,510	1,010	510	726	10,400	207	563	581	528	510	545
28	545	763	682	563	763	10,800	237	416	581	510	510	545
29	528	671	563	563	617	11,200	545	545	508	510	510	563
30	510	617	528	545	-	10,300	635	617	517	475	510	545
31	510	-	528	581	-	1,800	-	635	-	545	510	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,305	563	510	526		
November	202,354	26,000	458	6,745		
December	19,355	1,500	492	624		
Calendar year 1947	566,736	89,000	9	1,553		
January	17,912	1,900	492	578		
February	503,789	72,300	545	17,370		
March	305,502	38,500	468	9,855		
April	390,489	40,300	207	13,020		
May	18,882	782	416	609		
June	16,657	599	475	555		
July	16,669	599	443	538		
August	16,358	563	492	528		
September	16,879	635	475	563		
Water year 1947-48	1,541,151	72,300	207	4,211		

Linville River at Branch, N. C.

Location.- Water-stage recorder, lat. 35°47'50", long. 81°53'20", at bridge on State Highway 126 at Branch, Burke County, a quarter of a mile upstream from Lake James.

Drainage area.- 65 square miles.

Records available.- June 1922 to September 1948.

Average discharge.- 26 years, 139 second-feet.

Extremes.- Maximum discharge during year, 4,040 second-feet Nov. 2 (gage height, 5.87 feet); minimum, 22 second-feet Sept. 3, 4 (gage height, 1.48 feet); minimum daily, 29 second-feet July 10.

1922-48: Maximum discharge, 39,500 second-feet Aug. 13, 1940 (gage height, 11.4 feet), by slope-area method; minimum, 3 second-feet Jan. 2, 1940, result of low temperature; minimum daily, 8 second-feet Sept. 7-9, 1925.

Flood of July 1916 reached a stage slightly lower than that of Aug. 13, 1940.

Remarks.- Records good except those for periods of ice effect, which are fair, and those for periods of no gage-height record, which are poor. Small diurnal fluctuation caused by mill above station.

Revisions (water years).- W 892: 1928-29, 1935, 1937.

Rating tables, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 27, Sept. 7-30

1.7	44	2.3	181	3.6	1,060
1.8	58	2.4	222	4.0	1,450
1.9	75	2.6	319	4.5	2,020
2.0	95	2.8	435	5.0	2,720
2.1	118	3.0	560		
2.2	146	3.3	785		

Mar. 28 to Sept. 6

1.5	24	2.0	104	2.6	305
1.6	33	2.1	126	2.8	420
1.7	46	2.2	150	3.0	555
1.8	63	2.3	179	3.3	785
1.9	83	2.4	214		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	250	110	89	89	111	340	91	94	94	71	42
2	50	1,260	110	111	91	118	280	89	73	67	252	43
3	48	2,520	110	95	88	121	240	87	75	54	397	31
4	46	942	105	95	104	118	220	85	91	46	440	41
5	42	581	105	77	116	109	200	106	98	42	290	44
6	44	429	100	81	360	111	200	94	69	37	173	1,440
7	54	340	95	72	341	283	220	91	69	36	136	1,010
8	248	280	100	75	259	393	280	91	79	40	119	453
9	750	240	100	79	231	254	220	89	87	43	102	330
10	1,040	200	105	81	193	218	200	71	63	29	98	283
11	453	320	105	73	164	189	190	71	58	76	85	210
12	309	280	100	70	511	167	180	75	49	484	87	160
13	245	240	95	81	769	150	170	75	53	244	87	132
14	189	220	90	77	1,020	138	170	75	51	196	75	113
15	164	500	120	b70	554	132	167	67	60	261	71	104
18	331	360	160	b75	393	146	145	60	56	261	61	93
17	2,190	280	130	87	309	193	138	56	54	248	65	81
18	924	240	116	64	268	146	131	54	53	159	75	79
19	521	320	111	58	*231	146	122	49	49	126	61	73
20	358	260	111	72	206	150	119	42	48	106	58	66
21	259	220	100	77	181	138	119	51	43	98	56	68
22	202	200	93	*73	170	129	111	43	216	77	63	57
23	170	200	97	63	153	230	108	42	117	73	98	97
24	274	200	93	b55	138	268	104	43	79	69	69	75
25	441	180	89	b50	140	210	104	51	61	58	79	60
26	299	160	85	b60	140	181	104	60	54	58	54	58
27	259	140	72	b70	146	700	94	67	49	46	49	58
28	1,020	130	87	77	132	750	89	77	67	56	43	160
29	581	120	85	72	121	300	91	117	58	63	34	441
30	405	120	*79	79	-	240	96	124	69	63	42	236
31	304	-	73	116	-	320	-	128	-	87	34	-

Month	Secnd-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,275	2,190	42	396	6.09	7.02
November	11,732	2,520	120	391	6.02	6.71
December	3,131	160	72	101	1.55	1.79
Calendar year 1947	57,474	2,520	26	157	2.42	32.89
January	2,374	116	50	76.6	1.18	1.36
February	7,618	1,020	88	263	4.05	4.36
March	6,859	750	109	221	3.40	3.92
April	4,952	340	89	165	2.54	2.83
May	2,321	128	42	74.9	1.15	1.33
June	2,142	216	43	71.4	1.10	1.23
July	3,397	484	29	110	1.69	1.94
August	3,424	440	34	110	1.69	1.96
September	6,138	1,440	31	205	3.15	3.51
Water year 1947-48	66,363	2,520	29	181	2.78	37.96

Peak discharge (base, 1,600 sec.-ft.).- Oct. 10 (3 a.m.) 1,720 sec.-ft.; Oct. 17 (12:30 p.m.) 3,800 sec.-ft.; Nov. 2 (11 p.m.) 4,040 sec.-ft.; Sept. 6 (6:30 p.m.) 2,800 sec.-ft.

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.- No gage-height record Oct. 1-6, Nov. 7 to Dec. 17, Mar. 27 to Apr. 14; discharge computed on basis of recorded range in stage, weather records, and records for nearby streams.

Henry Fork near Henry River, N. C.

Location.- Water-stage recorder, lat. 35°41'05", long. 81°24'05", 400 feet downstream from bridge on county highway at Old Link Ford, 1¼ miles downstream from Catawba-Burke county line, and 2 miles downstream from village of Henry River, Burke County.

Drainage area.- 80 square miles.

Records available.- July 1925 to November 1931, December 1941 to September 1948.

Average discharge.- 12 years (1925-31, 1942-48), 124 second-feet.

Extremes.- Maximum discharge during year, 10,500 second-feet Aug. 3 (gage height, 14.47 feet from high-water mark); minimum, 6 second-feet Oct. 1, 5, 6; minimum daily, 9 second-feet July 25.

1925-31, 1941-48: Maximum discharge, 15,300 second-feet Oct. 2, 1929 (gage height, 18.40 feet, site then in use); minimum, 3 second-feet Dec. 20, 1942; minimum daily, 4 second-feet Nov. 15, Dec. 20, 1942.

Maximum discharge known, 31,300 second-feet Aug. 13, 1940 (gage height, 29.2 feet, at site 400 feet upstream, from floodmarks), by computation of flow over dam at Henry River.

Remarks.- Records good except those below 40 second-feet, which are fair, and those for periods of ice effect or no gage-height record, which are poor. Considerable diurnal fluctuation and some regulation caused by mill above station. About 5 second-feet daily is diverted from water supply by city of Morganton and Morganton State Hospital and wasted into Catawba River.

Revisions (water years).- W 952: 1928, 1930.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.6	7	1.4	101	3.0	670
.7	12	1.6	141	4.0	1,190
.8	20	1.8	187	5.0	1,740
.9	29	2.0	245	6.0	2,360
1.0	40	2.3	360	7.0	3,100
1.2	67	2.6	485		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	103	a120	103	209	148	714	127	199	76	11	94
2	44	887	121	133	177	*170	388	127	135	93	133	94
3	40	1,380	117	111	163	163	266	137	125	51	f3,520	75
4	51	428	117	109	161	154	226	129	121	44	1,180	65
5	36	264	117	111	182	143	214	127	105	90	858	61
6	46	200	113	105	630	145	200	123	103	83	252	222
7	41	177	109	103	419	477	217	135	107	76	165	165
8	37	190	117	105	284	462	226	119	105	63	137	124
9	208	161	111	107	252	256	206	113	105	64	125	107
10	1,080	150	117	81	214	211	185	117	101	32	109	103
11	226	234	115	73	177	187	180	111	101	27	103	62
12	141	259	111	107	946	175	182	129	70	95	102	84
13	125	a200	109	173	898	159	168	163	87	102	92	86
14	111	a170	97	203	749	156	192	129	119	88	74	73
15	96	a300	127	b130	412	156	211	113	107	130	87	77
16	97	a340	*190	b120	288	168	180	111	117	106	102	67
17	448	a230	152	117	239	190	170	113	107	85	93	60
18	258	a190	133	113	211	170	161	107	111	75	93	57
19	156	192	123	115	195	195	161	103	86	80	98	18
20	172	175	113	109	182	223	152	99	31	98	91	79
21	101	163	107	*117	170	198	230	99	91	90	233	125
22	84	152	111	119	182	182	152	94	105	71	150	63
23	99	161	109	113	168	190	121	92	87	53	109	66
24	182	170	105	105	156	175	85	109	77	48	119	49
25	266	a160	107	b95	163	165	206	109	83	9	89	67
26	173	a140	107	b120	159	159	76	101	73	78	70	27
27	148	a130	105	127	156	532	135	103	40	80	70	66
28	1,190	a130	103	154	150	380	143	138	98	58	48	193
29	512	a120	107	137	148	239	135	305	99	66	70	398
30	259	a120	97	194	-	200	133	199	87	67	70	202
31	177	-	97	352	-	596	-	163	-	47	78	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,653	1,190	36	215	2.69	3.09
November	7,676	1,380	103	256	3.20	3.57
December	3,584	190	97	116	1.45	1.67
Calendar year 1947	54,074	7,930	6	148	1.85	25.14
January	3,961	352	73	128	1.60	1.84
February	8,440	946	148	291	3.64	3.92
March	7,124	596	143	230	2.88	3.31
April	6,015	714	76	200	2.50	2.80
May	3,944	305	92	127	1.59	1.83
June	2,982	199	31	99.4	1.24	1.39
July	2,225	130	9	71.8	.898	1.03
August	8,531	3,520	11	275	3.44	3.97
September	3,029	398	18	101	1.26	1.41
Water year 1947-48	64,164	3,520	9	175	2.19	29.83

Peak discharge (base, 2,600 sec.-ft.).- Nov. 2 (11 p.m.) 3,740 sec.-ft.; Aug. 3 (about 9 a.m.) 10,500 sec.-ft.

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for nearby stations.

b Stage-discharge relation affected by ice.

f Discharge computed on basis of partial gage-height record.

South Fork Catawba River at Lowell, N. C.

Location.- Water-stage recorder, lat. 35°17'05", long. 81°06'00", on county highway just downstream from Housers Creek, 1 mile north of Lowell, Gaston County. Datum of gage is 603.10 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 630 square miles.

Records available.- January 1942 to September 1948.

Extremes.- Maximum discharge during year, 8,060 second-feet about Feb. 13 (gage height, 10.60 feet); minimum, 116 second-feet July 28 (gage height, 1.58 feet); minimum daily, 227 second-feet July 25.

1942-48: Maximum discharge, 22,000 second-feet Sept. 19, 1945 (gage height, 16.98 feet), from rating curve extended above 9,000 second-feet by logarithmic plotting; minimum, 43 second-feet Sept. 10, 1944.

Maximum stage known, 21.33 feet in August 1940, from floodmarks.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Considerable diurnal fluctuation and slight regulation for short periods at low flow caused by power plant above station. City of Gastonia diverts about 3 second-feet for water supply.

Revisions (water years).- W 1002: 1943(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 12

2.4	345	3.6	843	7.0	3,650
2.6	414	4.0	1,090	8.0	4,800
2.8	487	4.5	1,440	10.0	7,580
3.0	564	5.0	1,820		
3.3	690	6.0	2,680		

Feb. 13 to Sept. 30

2.0	210	3.0	540	5.0	1,700
2.2	265	3.3	660	6.0	2,520
2.4	327	3.6	800	7.0	3,550
2.6	394	4.0	1,030	8.0	4,700
2.8	465	4.5	1,340	10.0	7,280

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	348	738	738	668	2,000	900	4,940	682	790	723	314	381
2	340	1,130	714	930	1,200	1,000	3,110	660	733	630	939	442
3		4,440	690	650	1,100	1,000	2,280	734	640	410	1,830	412
4		3,650	690		1,000	900	1,480	701	682	408	6,180	377
5		3,250	690		1,000	900	1,270	698	598	353	7,280	384
6		1,580	668		3,000	900	1,180	663	559	363	5,330	458
7		1,090	645		2,200	2,600	1,340	946	618	363	2,700	598
8		1,370	690	600	1,600	2,340	1,300	727	697	334	940	660
9	1,000	1,120	690		1,300	1,860	1,240	639	682	347	800	502
10	4,980	930	714		1,000	1,440	1,090	639	540	364	692	484
11	2,180	1,670	789		1,000	1,210	1,060	618	531	374	618	426
12	1,100	2,020	738		2,000	1,090	1,090	738	484	408	578	380
13	800	1,400	668		3,000	1,000	1,000	1,940	500	401	539	415
14	600	1,090	645	1,600	7,000	910	970	1,120	546	415	544	404
15	500	2,490	738	1,000	4,500	940	970	775	586	514	521	386
16	500	2,640	1,230	600	3,000	1,030	970	682	808	829	540	347
17	1,200	1,780	1,020		2,200	2,180	882	682	576	740	521	362
18	1,000	1,260	900		1,800	1,440	855	618	472	502	528	332
19	800	1,260	816		1,500	1,180	855	598	478	466	455	301
20		1,190	714		1,300	1,240	828	578	443	394	507	344
21		1,020	690		1,200	1,210	828	559	583	387	732	259
22		930	714		1,200	1,120	910	567	454	391	1,540	324
23		1,020	668		1,100	1,580	800	503	430	370	1,350	366
24	1,700	1,190	645		1,100	1,340	750	574	484	325	727	317
25	1,000	1,090	690		1,000	1,090	682	618	458	227	578	297
26	1,000	960	714		950	1,000	800	618	415	327	559	306
27	1,000	872	714	1,000	950	1,860	704	618	360	328	464	328
28	2,000	816	690		900	2,340	704	730	463	268	437	321
29	1,740	764	714		900	1,820	704	877	600	301	401	709
30	1,740	738	645	1,500	-	1,300	704	1,090	461	1,330	376	1,030
31	1,090	-	645	3,000	-	2,860	-	970	-	470	458	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inchss
October	31,858	4,980	340	1,028	1.63	1.88
November	45,498	4,440	738	1,517	2.41	2.69
Deoember	22,716	1,230	645	733	1.16	1.34
Calendar year 1947	304,420	6,980	228	834	1.32	17.99
January	25,148	3,000	600	811	1.29	1.48
February	52,000	7,000	900	1,793	2.85	3.07
March	43,580	2,860	900	1,406	2.23	2.57
April	36,296	4,940	682	1,210	1.92	2.14
May	23,162	1,940	503	747	1.19	1.37
June	16,473	790	360	549	.871	.97
July	14,062	1,330	227	454	.721	.83
August	40,098	7,280	314	1,293	2.05	2.37
September	12,652	1,030	259	422	.670	.75
Watsr year 1947-48	363,543	7,280	227	993	1.58	21.46

Peak discharge (base, 8,000 sec.-ft.).- about Feb. 13 (time unknown) 8,060 sec.-ft.

Note.- No gage-height record Oct. 2-9, 12-28, Jan. 3 to Mar. 7; discharge computed on recorded range in stage and records for nearby stations.

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, 1½ miles downstream from Buffalo Creek, and 3 miles east of Chimney Rock, Rutherford County.

Drainage area.- 97 square miles.

Records available.- March 1927 to September 1948. May 1907 to June 1909 at site at Uree, 1 1/8 miles downstream.

Average discharge.- 21 years (1927-48), 171 second-feet.

Extremes.- Maximum discharge during year, 5,080 second-feet July 11 (gage height, 5.46 feet); minimum, 3.9 second-feet Feb. 29 (gage height, 0.48 foot); minimum daily, 4.2 second-feet Feb. 29.

1907-9, 1927-48: Maximum discharge, 26,000 second-feet Aug. 15, 1928 (gage height, 16.8 feet), by computation of flow over Lake Lure Dam; minimum, 0.7 second-foot Sept. 13, 1928 (gage height, 0.26 foot); minimum daily, 0.8 second-foot Sept. 13, 14, 1928.

Remarks.- Records good except those below 10 second-feet and those for period of no gage-height record, which are fair. Large diurnal fluctuation caused by power plant above station. Discharge regulated by Lake Lure power plant.

Revisions (water years).- W 892: 1927(M), 1928-30, 1933, 1935-39(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.5	4.4	1.1	71	2.0	441
.6	8	1.2	99	2.2	566
.7	13	1.3	131	2.5	794
.8	20	1.4	166	2.8	1,070
.9	31	1.6	243	3.2	1,500
1.0	48	1.8	334		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	350	306	170	170	144	a560	132	178	93	52	247
2	93	643	382	170	313	223	a700	7.3	146	93	324	153
3	93	1,300	282	128	170	239	a220	207	175	93	1,630	158
4	10	696	170	5.5	170	142	a6	132	170	10	814	119
5	10	527	173	130	170	114	a240	138	126	94	609	173
6	93	483	133	100	340	166	a520	201	6.6	160	507	1,310
7	97	483	5.5	33	254	134	a660	222	121	160	315	661
8	135	351	270	82	7.6	340	a240	74	154	96	170	556
9	177	65	170	170	298	394	a600	5.5	154	99	270	483
10	360	394	170	166	399	305	a140	129	84	97	158	406
11	280	499	170	170	396	278	a5	139	85	1,430	240	281
12	177	471	170	170	449	162	a330	135	94	998	159	9.5
13	270	471	133	170	580	130	a250	135	9.0	600	177	234
14	173	471	5.5	166	691	4.8	a220	141	95	520	234	228
15	173	345	118	166	522	143	226	75	92	523	9.0	236
16	173	6.9	348	166	465	218	226	6.2	94	609	234	244
17	1,290	310	310	132	477	240	149	145	89	502	156	158
18	652	422	226	6.2	471	145	5.8	140	89	216	158	91
19	592	363	147	147	471	206	220	137	73	318	148	9.0
20	508	302	150	227	428	238	221	147	9.0	267	164	239
21	430	310	5.8	230	250	5.1	219	142	152	190	157	241
22	318	234	83	149	6.6	145	144	81	254	170	19	244
23	358	6.2	126	150	320	297	141	6.6	333	165	238	163
24	495	305	170	147	465	385	72	142	329	168	237	159
25	480	388	170	6.9	430	236	5.5	82	282	14	157	92
26	305	276	170	115	285	149	141	83	52	161	148	9.5
27	225	170	125	170	166	238	144	150	9.0	103	159	156
28	398	170	4.4	310	129	352	139	234	90	169	94	229
29	527	130	151	170	4.2	438	142	315	97	100	8.5	325
30	477	5.8	125	170	-	419	138	225	93	167	159	163
31	477	-	170	170	-	a460	-	157	-	104	231	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,942	1,290	10	321	3.31	3.81
November	10,947.9	1,300	5.8	365	3.76	4.20
December	5,139.2	382	4.4	166	1.71	1.97
Calendar year 1947	62,729.0	1,300	4.4	172	1.77	24.05
January	4,462.6	310	5.5	144	1.48	1.71
February	9,297.4	691	4.2	321	3.31	3.56
March	7,089.9	460	4.8	229	2.36	2.72
April	7,024.3	700	5	234	2.41	2.69
May	4,065.6	315	5.5	131	1.35	1.56
June	3,734.6	333	6.6	124	1.28	1.43
July	8,489	1,430	10	274	2.82	3.25
August	8,135.5	1,630	8.5	262	2.70	3.12
September	7,777.0	1,310	9.0	259	2.67	2.98
Water year 1947-48	86,105.0	1,630	4.2	235	2.42	33.00

a No gage-height record; discharge computed on basis of power-plant records.

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.- 864 square miles.

Records available.- June 1925 to September 1948.

Average discharge.- 23 years, 1,399 second-feet.

Extremes.- Maximum discharge during year, 10,800 second-feet Aug. 4 (gage height, 8.74 feet); minimum, 264 second-feet Oct. 5 (gage height, 1.49 feet); minimum daily, 381 second-feet Oct. 5.

1925-48: Maximum discharge, 73,300 second-feet Aug. 16, 1928 (gage height, 24.3 feet, present datum); minimum, 61 second-feet July 21, 1940 (gage height, 1.06 feet); minimum daily, 157 second-feet Oct. 12, 1941.

Remarks.- Records good. Considerable diurnal fluctuation and some regulation caused by power plants above station.

Revisions (water years).- W 892: 1928, drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.6	346	2.6	1,360	6.0	6,000
1.7	425	3.0	1,870	7.0	7,560
1.8	508	3.5	2,560	8.0	9,400
2.0	690	4.0	3,240		
2.3	1,010	5.0	4,620		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	720	1,940	834	1,180	2,010	941	5,030	1,220	2,040	1,060	781	1,050
2	649	3,160	1,350	1,400	1,470	1,640	3,380	1,170	1,320	952	858	1,050
3	674	7,240	1,350	1,250	1,800	2,080	2,900	898	1,300	858	5,600	844
4	605	4,620	1,300	866	1,540	1,640	2,490	1,530	1,360	810	8,730	1,040
5	381	2,970	1,210	877	1,530	1,470	1,690	1,220	1,290	552	4,340	952
6	401	2,350	1,220	1,340	2,140	1,420	2,350	1,210	1,180	570	2,620	2,790
7	662	2,080	1,130	1,090	2,560	3,750	2,420	1,380	803	842	2,280	3,930
8	820	2,560	813	978	2,280	2,970	2,420	1,340	1,030	830	1,640	2,210
9	1,020	1,980	1,210	1,020	1,320	2,900	2,420	1,180	1,140	788	1,190	1,800
10	1,600	1,260	1,140	1,110	2,210	2,490	2,140	813	1,070	789	1,520	1,630
11	1,220	2,400	1,220	1,030	2,010	2,010	1,710	1,120	957	772	1,340	1,380
12	824	2,690	1,210	845	5,600	2,030	1,680	1,310	954	3,210	1,190	1,020
13	710	2,010	1,230	1,290	8,300	1,640	2,010	1,530	856	2,620	1,060	662
14	939	1,870	975	1,650	6,310	1,640	1,800	1,370	792	1,870	1,030	1,090
15	858	3,190	834	1,470	4,340	1,230	1,800	1,160	1,140	1,800	1,010	1,130
16	886	2,620	1,840	1,320	3,380	1,660	1,800	1,090	1,070	2,280	791	1,040
17	1,390	1,500	2,020	1,240	2,620	2,830	1,630	792	941	2,210	1,160	1,070
18	2,970	1,970	1,670	1,220	2,620	2,010	1,450	1,120	918	1,440	1,160	994
19	2,110	2,010	1,420	824	2,280	1,680	1,210	1,140	846	1,070	1,070	852
20	1,370	1,950	1,250	1,170	2,490	1,940	1,570	1,100	781	1,360	1,060	570
21	1,530	1,540	1,040	1,340	2,140	1,890	1,520	1,050	662	1,180	1,210	954
22	1,300	1,520	813	1,340	1,800	1,190	1,570	1,110	1,090	1,060	1,130	958
23	1,060	1,780	1,170	1,180	1,560	2,080	1,380	834	1,420	1,000	1,120	1,110
24	2,820	1,070	1,100	1,280	1,870	2,560	1,360	710	1,150	970	1,600	990
25	2,970	1,480	1,210	1,210	2,010	2,280	1,400	1,210	1,150	829	1,240	858
25	1,840	1,550	920	782	1,870	1,870	1,040	1,070	1,070	544	1,040	793
27	1,280	1,540	1,150	1,050	1,640	4,640	1,300	1,070	868	920	1,030	578
28	3,720	1,310	1,250	1,530	1,520	3,790	1,300	1,670	1,110	810	1,030	988
29	5,830	1,300	751	1,650	1,260	2,620	1,300	1,940	1,320	1,020	733	2,410
30	2,900	1,130	1,060	1,540	-	2,620	1,310	2,420	1,040	1,310	597	1,510
31	2,280	-	1,100	2,380	-	3,610	-	2,010	-	1,040	839	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	48,339	5,830	381	1,559	1.80	2.08
November	66,590	7,240	1,070	2,220	2.57	2.87
December	36,790	2,020	751	1,187	1.37	1.58
Calendar year 1947	494,631	10,000	381	1,355	1.57	21.30
January	38,452	2,380	782	1,240	1.44	1.66
February	74,480	8,300	1,260	2,568	2.97	3.21
March	69,121	4,640	941	2,230	2.58	2.98
April	57,380	5,030	1,040	1,913	2.21	2.47
May	38,787	2,420	710	1,251	1.45	1.67
June	32,668	2,040	662	1,089	1.26	1.41
July	37,366	3,210	544	1,205	1.39	1.61
August	52,019	8,730	587	1,678	1.94	2.24
September	38,253	3,930	570	1,275	1.48	1.65
Water year 1947-48	590,245	8,730	381	1,613	1.87	25.43

Peak discharge (base, 10,200 sec.-ft.).- Aug. 4 (8 a.m.) 10,800 sec.-ft.

Broad River near Gaffney, S. C.

Location.- Water-stage recorder, lat. 35°05'20", long. 81°34'20", at bridge on U. S. Highway 29, 0.3 mile upstream from Cherokee Creek, 4.4 miles downstream from Gaston Shoals Dam, and 4.5 miles east of Gaffney, Cherokee County.

Drainage area.- 1,490 square miles.

Records available.- December 1938 to September 1948. July 1896 to December 1899 at site 1.1 miles upstream.

Average discharge.- 11 years (1896-98, 1939-48), 2,513 second-feet.

Extremes.- Maximum discharge during year, 25,600 second-feet Aug. 4 (gage height, 10.80 feet); minimum, 520 second-feet Oct. 6; minimum daily, 680 second-feet Oct. 5.

1896-99, 1938-48: Maximum discharge, 119,000 second-feet Aug. 14, 1940 (gage height, 19.78 feet), by computation of flow over Gaston Shoals Dam; minimum, 242 second-feet Sept. 18, Oct. 30, 1939; minimum daily, 443 second-feet July 2, 1940.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair. Medium low flow regulated by power plants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions.- W 972: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,110	3,460	1,450	1,830	4,420	d1,800	10,800	2,320	3,440	2,260	1,440	1,430
2	968	6,450	1,830	2,480	3,220	d2,200	6,450	2,060	2,520	1,360	2,900	1,700
3	980	16,400	2,180	2,250	3,220	d3,200	4,870	1,750	2,260	1,300	7,510	1,330
4	1,030	9,260	2,120	1,700	3,020	d3,000	4,310	2,420	2,240	1,180	d21,700	1,520
5	680	5,440	1,950	1,620	2,910	d2,400	3,330	2,140	2,200	874	9,860	1,580
6	682	4,310	1,790	2,220	4,510	d2,200	3,440	2,100	1,980	845	4,640	5,060
7	800	3,650	1,750	1,900	5,560	d4,800	3,870	2,620	1,720	1,010	3,650	6,170
8	1,590	4,200	1,630	1,660	4,640	d5,800	3,980	2,500	1,560	1,100	3,100	3,330
9	3,730	3,870	1,690	1,610	3,120	d5,000	3,980	1,860	1,850	1,040	1,870	2,500
10	4,920	2,460	1,980	1,960	3,760	d4,600	3,540	1,840	1,990	1,120	2,260	2,340
11	3,510	4,430	1,980	1,660	3,650	d3,600	3,120	1,750	1,430	1,240	2,200	2,120
12	1,600	5,440	1,960	1,660	10,100	d3,200	2,800	2,280	1,560	2,960	1,940	1,500
13	1,370	3,870	1,840	2,580	d22,000	d2,600	3,330	3,760	1,410	4,240	1,680	1,160
14	1,600	3,440	1,810	3,390	d14,000	d2,600	2,800	2,380	1,540	3,020	1,530	1,480
15	1,310	5,940	1,380	2,800	d8,400	d2,800	3,020	2,100	1,640	3,290	1,920	1,810
16	1,450	5,670	2,910	2,480	d5,800	d2,400	3,120	1,660	1,860	4,170	1,430	1,710
17	2,170	3,540	3,330	2,220	d4,600	d4,800	2,700	1,680	1,470	4,430	1,510	1,490
18	4,490	3,220	2,910	1,990	d4,400	d4,000	2,620	1,630	1,480	2,500	1,700	1,580
19	3,460	3,330	2,280	1,880	d3,800	d2,600	2,140	1,680	1,370	1,560	1,720	1,370
20	2,320	3,330	2,240	1,860	d3,800	d3,600	2,910	1,750	1,180	2,120	1,510	1,040
21	2,420	2,460	1,840	2,200	d3,600	d3,800	2,700	1,670	1,390	1,650	2,300	1,360
22	2,240	2,600	1,560	2,560	d3,200	d2,800	2,810	1,510	1,270	1,540	4,670	1,510
23	1,890	2,800	1,840	2,100	d2,800	d4,000	2,360	1,440	2,140	1,380	2,840	1,680
24	6,900	2,140	1,980	2,120	d3,000	d4,400	2,500	1,440	1,610	1,280	2,410	1,480
25	7,230	2,460	1,790	2,300	d3,200	d3,800	2,420	1,640	1,690	1,210	2,200	1,280
26	d4,200	2,600	1,980	1,700	d3,200	d3,200	2,140	1,790	1,500	1,040	1,730	1,250
27	2,530	2,700	1,700	1,660	d2,800	7,190	2,360	1,720	1,230	905	1,640	1,200
28	3,760	2,120	2,140	2,910	d2,400	7,480	2,150	2,650	3,290	1,140	1,760	1,570
29	d9,560	2,120	1,430	3,220	d1,900	4,870	2,260	4,420	2,220	1,320	1,240	3,680
30	d5,140	1,980	1,650	2,790	-	4,310	2,300	4,640	1,730	4,880	1,380	2,820
31	3,980	-	1,800	5,220	-	5,910	-	3,870	-	1,990	1,230	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	89,620	9,560	680	2,891	1.94	2.24
November	125,690	16,400	1,980	4,190	2.81	3.14
December	60,720	3,330	1,380	1,959	1.31	1.51
Calendar year 1947	894,172	19,600	657	2,450	1.64	22.33
January	70,530	5,220	1,610	2,275	1.53	1.76
February	145,030	22,000	1,900	5,001	3.36	3.62
March	118,960	7,480	1,800	3,837	2.58	2.97
April	101,130	10,800	2,140	3,371	2.26	2.52
May	69,070	4,640	1,440	2,228	1.50	1.73
June	54,770	3,440	1,180	1,826	1.23	1.37
July	59,954	4,880	845	1,934	1.30	1.50
August	99,470	21,700	1,230	3,209	2.15	2.48
September	60,050	6,170	1,040	2,002	1.34	1.50
Water year 1947-48	1,054,994	22,000	680	2,882	1.93	26.34

Peak discharge (base, 16,000 sec.-ft.).- Nov. 3 (2 p.m.) 18,100 sec.-ft.; Feb. 13 (6:30 a.m.) 23,900 sec.-ft.; Aug. 4 (8 a.m.) 25,600 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of daily gage readings by U. S. Weather Bureau, weather records, and records for other stations in same drainage basin.

Broad River near Carlisle, S. C.

Location.- Water-stage recorder, lat. 34°36', long. 81°25', at bridge on State Highway 72, 2 miles upstream from Sandy River, 2 miles downstream from Seaboard Air Line Railroad bridge, 2½ miles east of Carlisle, Union County, and 5 miles downstream from Neals Shoals Dam. Datum of gage is 290.70 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,790 square miles.

Records available.- November 1938 to September 1948.

Extremes.- Maximum discharge during year, 34,600 second-feet Feb. 14 (gage height, 16.20 feet); minimum, 108 second-feet June 28 (gage height, 1.26 feet); minimum daily, 180 second-feet Oct. 5.

1938-48: Maximum discharge, 103,000 second-feet Aug. 15, 1940 (gage height, 29.41 feet), on basis of computation of flow over Neals Shoals Dam; minimum, 78 second-feet Sept. 25, 1939, Sept. 14, 1941 (gage height, 1.16 feet); minimum daily, 90 second-feet June 30, 1940.

Remarks.- Records good. Low and medium flow regulated by power plants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water year).- W 892: 1939(m), drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.4	158	2.7	1,340	9.0	14,300
1.5	206	3.0	1,770	11.0	19,400
1.7	328	3.7	2,940	13.0	24,900
2.0	565	5.0	5,540	15.4	32,000
2.3	859	7.0	9,740		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,660	5,140	3,860	3,440	7,260	4,120	20,500	3,340	5,140	3,540	2,470	2,320
2	1,580	5,170	3,000	4,000	6,740	4,540	15,400	2,250	4,440	3,150	2,730	1,940
3	1,500	24,100	2,780	3,840	5,340	5,140	8,860	3,240	4,240	2,230	5,140	1,940
4	1,490	22,300	3,230	2,290	5,340	5,740	6,340	3,540	3,440	998	20,300	2,000
5	180	9,740	3,590	3,780	5,040	4,640	6,540	3,340	3,440	1,570	23,500	830
6	1,330	6,940	3,410	2,910	5,570	4,240	6,340	3,270	2,530	2,300	11,100	3,060
7	1,830	6,340	1,090	3,750	8,420	15,300	5,540	3,280	2,990	1,870	7,380	9,190
8	1,580	8,860	3,850	2,690	8,200	16,600	11,500	4,240	3,030	1,550	4,240	6,940
9	10,100	6,140	3,840	2,790	7,980	9,520	7,870	2,170	2,810	1,450	4,140	4,840
10	9,740	5,740	3,000	3,350	6,540	7,760	6,740	3,340	2,520	2,410	3,640	3,840
11	9,300	8,580	4,540	1,220	6,140	6,940	5,540	3,540	2,860	1,090	3,040	3,540
12	3,780	14,800	3,700	2,940	8,130	5,940	5,740	2,800	2,380	2,600	3,240	2,400
13	2,870	8,860	3,670	6,590	26,400	5,540	5,140	6,040	642	4,260	2,670	2,390
14	2,800	6,140	1,370	9,080	31,900	3,540	5,140	5,140	2,640	4,540	2,760	2,300
15	2,070	8,980	3,650	5,940	20,300	4,640	5,040	4,240	3,340	4,140	2,030	2,000
16	2,640	11,500	4,590	4,440	11,100	5,040	4,740	2,020	2,710	4,240	2,100	2,170
17	2,340	7,980	5,340	4,140	8,200	8,520	4,740	3,320	2,360	6,540	2,940	2,340
18	3,780	6,140	4,940	2,450	6,940	8,860	3,540	3,840	2,450	5,540	2,850	2,580
19	4,020	5,340	4,540	3,640	6,540	6,540	4,240	2,800	2,290	3,740	2,610	521
20	4,150	5,140	4,340	3,940	5,740	5,340	4,140	2,800	652	2,670	1,810	1,940
21	2,940	5,140	1,990	3,540	5,940	4,840	3,840	2,720	2,610	3,440	2,580	2,580
22	3,260	4,540	3,320	3,590	5,340	5,340	3,640	2,530	3,160	2,670	2,740	2,120
23	2,810	3,010	4,340	3,840	5,340	6,110	3,940	750	2,200	2,580	4,340	1,990
24	8,390	5,140	2,490	3,440	4,840	8,640	3,640	3,050	2,560	2,250	3,340	1,860
25	17,800	4,940	2,500	2,470	4,940	6,940	2,360	3,040	2,380	914	2,940	1,980
26	9,360	4,440	4,040	3,440	5,340	5,940	3,940	4,040	2,400	1,960	2,850	878
27	5,740	4,540	4,120	3,940	4,840	5,540	4,040	3,440	622	2,670	2,580	2,150
28	4,620	3,940	2,810	5,540	4,640	11,000	3,740	2,900	2,660	2,410	2,370	2,110
29	12,200	3,740	4,350	5,940	3,400	9,300	3,540	3,960	4,550	1,830	780	3,140
30	9,850	1,860	3,220	5,740	-	6,940	3,040	6,340	4,140	2,760	2,020	4,640
31	6,540	-	2,940	9,960	-	7,940	-	6,740	-	4,240	2,670	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	152,250	17,800	180	4,911	1.76	2.03
November	225,220	24,100	1,860	7,507	2.69	3.00
December	108,450	5,340	1,090	3,498	1.25	1.44
Calendar year 1947	1,450,482	36,200	180	3,974	1.42	19.33
January	128,660	9,960	1,220	4,150	1.49	1.72
February	242,440	31,900	3,400	8,360	3.00	3.24
March	217,030	16,600	3,540	7,001	2.51	2.89
April	179,350	20,500	2,360	5,978	2.14	2.39
May	108,060	6,740	750	3,486	1.25	1.44
June	84,186	5,140	622	2,806	1.01	1.13
July	88,152	6,540	914	2,844	1.02	1.18
August	139,900	23,500	780	4,513	1.62	1.87
September	82,529	9,190	521	2,751	.986	1.10
Water year 1947-48	1,756,227	31,900	180	4,798	1.72	23.43

Peak discharge (base, 25,000 sec.-ft.).- Nov. 4 (1 a.m.) 29,300 sec.-ft.; Feb. 14 (6:30 a.m.) 34,600 sec.-ft.; Aug. 5 (2:30 a.m.) 28,700 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, and 11 miles downstream from Parr Shoals Dam. Datum of gage is 184.84 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 4,850 square miles.

Records available.- November 1925 to September 1948.

Average discharge.- 20 years (1926-27, 1929-48), 5,890 second-feet.

Extremes.- Maximum discharge during year, 49,400 second-feet Feb. 14 (gage height, 12.40 feet); minimum daily, 1,430 second-feet Oct. 6.

1925-48: Maximum discharge, 228,000 second-feet Oct. 3, 1929 (gage height, 30.7 feet, from floodmarks), on basis of computation of flow over Parr Shoals Dam; minimum daily, 149 second-feet Oct. 13, 1935, from rating curve extended below 320 second-feet.

Remarks.- Records good. Low and medium flow regulated by power plants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions (water years).- W 757: 1930(M). W 972: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.2	1,340	3.0	5,650	8.0	24,600
1.6	2,060	4.0	8,680	10.0	35,000
2.2	3,430	6.0	16,000	11.9	46,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,890	7,860	3,740	4,890	17,600	5,360	27,700	4,310	9,700	5,070	3,640	2,850
2	2,090	6,520	5,200	7,100	12,600	7,250	36,000	4,030	7,100	4,280	3,670	2,580
3	1,960	21,100	4,140	7,100	9,700	8,020	21,100	3,870	6,660	3,590	5,240	2,140
4	1,710	33,400	4,360	5,230	8,340	8,680	12,600	4,640	5,120	2,060	13,500	2,920
5	1,590	18,600	5,070	4,880	7,700	7,860	10,000	4,840	4,780	1,800	29,600	2,000
6	1,430	10,800	4,640	5,030	7,400	7,100	9,360	4,780	4,480	3,140	18,600	6,340
7	1,890	8,680	3,610	4,920	12,100	22,400	9,360	5,090	3,530	3,020	13,000	22,800
8	2,070	12,700	3,730	4,630	14,900	35,000	12,900	5,550	4,360	2,380	9,350	13,000
9	6,560	14,100	5,500	4,360	21,000	27,000	16,400	4,520	4,020	1,630	6,380	7,860
10	12,600	9,360	4,540	4,360	18,500	19,700	12,200	3,870	3,820	2,350	4,940	5,940
11	12,200	10,000	7,100	3,910	13,700	14,100	10,400	4,600	3,690	2,640	4,220	4,690
12	8,460	23,500	7,100	3,010	12,600	11,100	11,800	4,490	3,560	2,360	3,980	3,060
13	3,650	21,000	6,660	6,580	29,000	9,360	9,700	5,920	3,240	4,720	4,020	3,820
14	3,370	14,100	4,860	17,600	46,200	7,400	8,340	8,680	2,010	6,080	3,670	3,000
15	3,260	11,900	4,330	13,300	42,600	6,380	8,020	6,520	3,950	5,840	2,720	2,300
16	2,990	20,600	7,250	8,340	26,400	7,550	7,400	4,100	4,500	5,180	3,000	3,090
17	3,440	16,400	9,360	6,960	16,000	12,500	7,100	3,370	4,160	6,380	3,620	2,780
18	4,370	11,100	7,860	5,170	11,500	16,400	6,230	4,800	3,190	8,340	3,450	3,170
19	5,610	9,360	7,100	4,640	10,000	13,000	5,650	4,090	3,360	5,800	3,750	1,850
20	4,920	8,680	6,660	6,380	9,360	9,700	6,380	3,820	2,530	4,500	2,800	1,900
21	4,790	8,020	6,380	5,800	8,340	7,860	5,940	4,030	2,170	3,620	3,450	2,970
22	3,970	7,400	5,940	5,650	8,020	7,860	5,160	3,560	4,050	3,810	2,200	2,640
23	3,550	5,960	6,520	5,940	8,680	8,680	5,500	2,890	3,710	3,310	5,230	2,830
24	5,220	6,220	5,500	5,650	7,700	14,900	5,500	2,520	3,140	3,240	4,600	2,500
25	20,100	8,340	5,480	4,960	7,400	13,300	4,180	4,640	3,410	1,710	3,360	2,740
26	18,000	7,400	8,340	4,390	7,550	11,100	5,060	7,430	3,020	2,270	3,590	2,080
27	10,000	6,810	8,020	5,800	7,400	9,700	5,230	6,520	2,680	3,030	3,130	1,980
28	6,660	6,230	6,520	8,180	7,100	12,700	5,340	5,000	2,060	2,830	2,930	3,180
29	10,100	5,800	5,290	11,100	6,080	15,300	4,820	6,810	5,600	2,910	1,920	3,420
30	16,800	4,360	5,680	10,000	-	11,800	4,500	16,400	5,300	3,280	2,150	5,940
31	10,400	-	4,710	17,200	-	10,000	-	14,900	-	4,200	2,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	195,650	20,100	1,430	6,311	1.30	1.50
November	356,300	33,400	4,360	11,880	2.45	2.73
December	181,190	9,360	3,610	5,845	1.21	1.40
Calendar year 1947	2,226,173	55,200	831	6,099	1.26	17.09
January	213,060	17,600	3,010	6,873	1.42	1.64
February	415,470	46,200	6,080	14,330	2.95	3.18
March	379,060	35,000	5,360	12,230	2.52	2.90
April	299,870	36,000	4,180	9,996	2.06	2.30
May	170,590	16,400	2,520	5,503	1.13	1.30
June	122,900	9,700	2,010	4,097	.845	.94
July	115,370	8,340	1,630	3,722	.767	.88
August	178,570	29,600	1,920	5,760	1.19	1.37
September	128,370	22,800	1,850	4,279	.882	.98
Water year 1947-48	2,756,400	46,200	1,430	7,531	1.55	21.12

Peak discharge (base, 35,000 sec.-ft.).- Feb. 14 (6:30 p.m.) 49,400 sec.-ft.; Apr. 2 (4 a.m.) 39,600 sec.-ft.; Sept. 6 (10:30 p.m.) 37,200 sec.-ft.

Green River near Mill Spring, N. C.

Location.- Water-stage recorder, lat. 35°20'10", long. 82°04'50", at abandoned ford 1½ miles northeast of Pea Ridge Church, 2 miles downstream from Walnut Creek, and 5¼ miles northeast of Mill Spring, Polk County.

Drainage area.- 174 square miles.

Records available.- December 1939 to September 1948.

Extremes.- Maximum discharge during year, 3,240 second-feet Oct. 28 (gage height, 7.74 feet); minimum, 28 second-feet Oct. 6 (gage height, 1.52 feet); minimum daily, 30 second-feet Oct. 5.

1939-48: Maximum discharge, 10,800 second-feet Aug. 13, 1940 (gage height, 22.15 feet), by computation of flow over dam and through wheels of Turner Shoals power plant about 4 miles upstream; minimum, 25 second-feet July 6, 1940 (gage height, 1.42 feet); minimum daily, 25 second-feet July 6, 1940.

Maximum stage known, 24.2 feet sometime in July 1916, from flood-crest reference mark placed by local resident.

Remarks.- Records good. Large diurnal fluctuation caused by power plants above station; considerable regulation by Lake Summit and Turner Reservoirs (combined usable storage, 338,875,000 cubic feet, revised).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.5	24	2.0	148	3.0	748	5.0	1,980
1.6	44	2.2	227	3.3	970	5.5	2,230
1.7	64	2.4	326	3.6	1,180	6.0	2,470
1.8	87	2.6	445	4.0	1,420	6.5	2,700
1.9	115	2.8	588	4.5	1,700		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	176	450	379	431	119	356	1,210	372	390	311	58	349
2	214	861	403	428	429	712	886	99	340	285	548	297
3	164	1,390	345	180	434	619	939	596	465	280	1,570	328
4	40	1,140	435	71	433	446	644	410	384	70	1,350	397
5	30	840	390	734	425	433	659	394	400	52	1,200	115
6	226	588	399	408	479	438	752	361	107	258	855	1,110
7	242	677	165	364	855	837	504	421	315	271	853	1,130
8	243	987	307	346	207	1,110	883	432	337	248	167	629
9	263	237	388	401	623	1,150	754	184	381	233	604	566
10	263	626	367	367	656	640	480	300	284	66	687	558
11	60	775	383	101	573	814	407	360	282	317	320	295
12	40	604	408	302	1,080	503	845	332	174	1,420	308	66
13	238	569	368	386	1,270	604	461	398	66	1,040	316	309
14	241	593	75	566	1,300	436	566	422	437	558	181	413
15	264	703	367	550	1,210	363	771	315	404	394	71	408
16	278	487	868	420	822	850	500	128	330	818	312	333
17	896	615	688	375	865	1,000	476	291	277	569	417	739
18	1,080	578	396	191	612	441	264	404	289	82	403	735
19	268	674	442	348	833	449	596	368	202	457	374	320
20	520	476	350	408	718	675	470	323	62	362	377	561
21	520	370	78	415	559	116	562	306	293	352	228	583
22	293	684	452	416	401	371	438	263	770	312	296	583
23	315	240	421	344	573	901	439	64	323	321	791	638
24	650	333	415	531	566	897	601	321	316	314	528	638
25	858	422	168	85	580	569	146	410	300	73	337	559
26	185	602	317	270	566	851	529	339	187	316	350	237
27	478	416	603	339	443	1,140	366	604	76	329	414	266
28	2,580	466	108	438	387	936	446	568	366	298	366	360
29	1,560	387	304	419	82	909	431	519	410	322	70	633
30	1,000	88	407	454	-	692	441	274	330	384	269	332
31	861	-	408	629	-	924	-	588	-	273	307	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15,046	2,580	30	485	-	-
November	17,878	1,390	88	596	-	-
December	11,604	868	75	374	-	-
Calendar year 1947	134,750	2,580	30	369	2.12	28.80
January	11,717	734	71	378	-	-
February	18,100	1,300	82	624	-	-
March	21,182	1,150	116	683	-	-
April	17,466	1,210	146	582	-	-
May	11,166	604	64	360	-	-
June	9,297	770	62	310	-	-
July	11,385	1,420	52	367	-	-
August	14,927	1,570	58	482	-	-
September	14,487	1,130	66	483	-	-
Water year 1947-48	174,255	2,580	30	476	2.74	37.24

Peak discharge (base, 2,500 sec.-ft.).- Oct. 28 (4 to 5 p.m.) 3,240 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.- 211 square miles.

Records available.- June 1925 to September 1948.

Average discharge.- 23 years, 296 second-feet.

Extremes.- Maximum discharge during year, 3,600 second-feet Feb. 13 (gage height, 5.06 feet); minimum, 6 second-feet July 17; minimum daily, 42 second-feet Oct. 5.
1925-48: Maximum discharge, 15,000 second-feet Aug. 14, 1940 (gage height, 17.93 feet), by computation of flow over Cliffside Mills dam about a quarter of a mile upstream; minimum, 4 second-feet July 24, 1943; minimum daily, 6 second-feet June 9, 1940.

Remarks.- Records good except those below 100 second-feet, which are fair, and those for periods of no gage-height record, which are poor. Considerable diurnal fluctuation and some regulation caused by mills above station.

Revisions (water years).- W 892: 1928(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	220	a360	194	559	310	1,650	239	509	180	110	151
2	131	774		a220	466	378	894	241	274	163	196	154
3	122	2,090			386	373	579	304	251	132	1,260	59
4	93	1,030			369	334	528	262	245	111	2,400	115
5	42	550			355	315	461	201	245	120	496	54
6	126	444	a220	a200	611	311	437	229	232	137	371	797
7	146	345			661	896	482	266	233	120	274	370
8	116	442			535	749	437	232	183	109	243	185
9	134	346			482	518	f380	227	203	127	227	194
10	531	350			438	472	a380	250	171	135	200	165
11	170	427	a180	a380	408	409		233	178	165	188	116
12	137	507			1,560	381		338	176	212	166	119
13	174	413			3,390	342		307	189	220	178	176
14	150	305			1,780	333		250	226	187	160	177
15	144	735			961	334		223	169	d332	166	151
16	133	645	a280	a320	654	362		219	186	d245	208	150
17	219	454			534	605	305	256	154	d102	177	136
18	226	395			475	432	307	194	166	d150	163	104
19	171	a340			334	412	314	221	85	197	152	45
20	184				371	492	302	196	142	182	157	153
21	160		a200	a260	388	431	312	204	211	193	292	152
22	181				396	426	276	191	170	159	202	121
23	147			227	402	508	287	181	157	157	204	126
24	510			220	332	510	267	230	157	142	184	144
25	492			222	354	448	268	238	129	60	169	95
26	282	a280	a220	232	344	426	282	190	143	134	140	110
27	320			229	322	1,130	262	232	202	137	155	182
28	532			373	337	1,080	260	311	325	124	78	164
29	1,530			342	274	649	267	502	181	162	69	564
30	530		192	357	-	537	243	570	186	410	180	283
31	410	-	217	707	-	782	-	571	-	148	138	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	8,376	1,530	42	270	1.28	1.48
November	14,252	2,090	220	475	2.25	2.51
December	7,489	-	-	242	1.15	1.32
Calendar year 1947	101,340	5,400	14	278	1.32	17.87
January	9,003	-	-	290	1.37	1.59
February	18,478	3,390	274	637	3.02	3.26
March	15,685	1,130	310	506	2.40	2.76
April	12,460	1,650	243	415	1.97	2.20
May	8,308	571	181	268	1.27	1.46
June	6,078	509	85	203	.962	1.07
July	5,152	410	60	166	.787	.91
August	9,303	2,400	69	300	1.42	1.64
September	5,512	797	45	184	.872	.97
Water year 1947-48	120,096	3,390	42	328	1.55	21.17

Peak discharge (base, 3,000 sec.-ft.).- Feb. 13 (1 p.m.) 3,600 sec.-ft.; Aug. 4 (7 a.m.) 3,170 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.
d Computed on basis of doubtful gage-height record.
f Fragmentary gage-height record; discharge computed on basis of partly estimated gage-heights.

First Broad River near Lawndale, N. C.

Location.- Water-stage recorder, lat. 35°22'50", long. 81°32'40", 500 feet downstream from dam at Double Shoals, an eighth of a mile upstream from Barnes Creek, and 2½ miles southeast of Lawndale, Cleveland County.

Drainage area.- 198 square miles.

Records available.- February 1940 to September 1948.

Extremes.- Maximum discharge during year, 5,320 second-feet Feb. 12 (gage height, 12.51 feet); minimum, 24 second-feet Sept. 27; minimum daily, 86 second-feet Oct. 5.

1940-48: Maximum discharge, 32,500 second-feet Aug. 14, 1940 (gage height, 37.8 feet), from rating curve extended above 8,300 second-feet on basis of records for nearby streams; minimum, 16 second-feet June 23, 30, 1940, July 25, 1943; minimum daily, 29 second-feet July 29, 1940.

Flood of July 1916 reached a stage of 37.8 feet, from reference marks established by local resident.

Remarks.- Records fair. Considerable diurnal fluctuation and slight regulation at low flow caused by power plants and mills above station.

Revisions.- W 952: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	158	191	174	669	382	1,300	225	309	246	149	184
2	122	1,380	158	314	493	393	770	250	286	178	259	168
3	122	2,590	144	171	472	377	520	281	242	144	3,070	162
4	102	813	144	162	445	362	488	250	291	124	2,650	144
5	86	559	138	178	434	357	450	250	188	144	941	171
6	115	526	141	174	1,310	306	456	246	174	144	456	1,330
7	116	472	106	165	1,100	890	461	300	238	138	347	434
8	130	499	155	168	620	554	450	221	195	135	277	242
9	217	377	127	181	554	477	440	206	229	149	238	238
10	1,980	377	144	132	520	445	393	242	195	127	234	184
11	300	702	155	146	456	424	398	225	195	149	250	152
12	162	652	152	171	2,830	419	403	255	162	206	214	149
13	158	526	102	370	3,210	362	372	295	135	199	210	158
14	135	445	122	625	1,470	382	367	281	188	171	188	144
15	127	1,090	165	413	698	393	362	202	174	1,140	199	138
16	124	752	440	343	520	602	372	174	181	493	214	141
17	571	499	314	229	499	714	323	217	168	259	191	130
18	419	403	210	242	488	466	304	210	178	184	191	135
19	214	440	229	229	477	488	343	191	168	242	188	109
20	191	333	146	210	461	526	323	191	114	191	178	130
21	165	338	162	300	424	466	319	206	158	178	2,540	122
22	146	309	188	206	450	440	319	158	171	165	1,390	122
23	158	229	221	304	440	472	328	165	162	162	328	124
24	1,080	362	124	168	408	461	263	195	144	162	233	122
25	674	300	162	206	408	429	295	191	135	138	217	149
26	343	286	181	238	398	403	314	184	119	152	191	96
27	221	234	188	229	408	1,830	281	188	146	149	188	98
28	767	234	144	419	338	885	286	238	146	146	158	270
29	707	229	191	367	372	510	277	811	158	325	198	352
30	268	114	165	419	-	466	304	636	252	543	178	199
31	210	-	162	1,170	-	652	-	388	-	178	174	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,251	1,980	86	331	1.67	1.93
November	16,228	2,590	114	541	2.73	3.05
December	5,371	440	102	173	.874	1.01
Calendar year 1947	99,588	4,000	80	273	1.38	18.71
January	8,823	1,170	132	285	1.44	1.66
February	21,372	3,210	338	737	3.72	4.01
March	16,333	1,830	306	527	2.66	3.07
April	12,281	1,300	263	409	2.07	2.31
May	8,072	811	158	260	1.31	1.52
June	5,601	309	114	187	.944	1.05
July	7,061	1,140	124	228	1.15	1.33
August	16,459	3,070	149	531	2.68	3.09
September	6,297	1,330	96	210	1.06	1.18
Water year 1947-48	134,149	3,210	86	367	1.85	25.21

Peak discharge (base, 4,300 sec.-ft.).- Feb. 12 (10:30 p.m.) 5,320 sec.-ft.; Aug. 4 (12:30 a.m.) 4,440 sec.-ft.; Aug. 21 (10:30 a.m.) 4,320 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. Datum of gage is 715.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 116 square miles.

Records available.- November 1929 to September 1948.

Average discharge.- 18 years (1930-48), 204 second-feet.

Extremes.- Maximum discharge during year, 1,370 second-feet Feb. 13 (gage height, 7.30 feet); minimum, 50 second-feet May 10; minimum daily, 72 second-feet Oct. 6.
1929-48: Maximum discharge, 12,500 second-feet Aug. 14, 1940 (gage height, 27.13 feet), from rating curve extended above 1,400 second-feet by computation of flow over dam 2 miles above station; minimum, 10 second-feet Oct. 7, 1940, June 22, 1941; minimum daily, 34 second-feet Oct. 1, 2, 1931.

Remarks.- Records fair. Some diurnal fluctuation at low and medium flow caused by mill above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 16-18, 24, 25, 28-31, Nov. 2-8, 11-21, Dec. 15 to Jan. 3, Jan. 13, 14, Jan. 31 to Feb. 1, Feb. 6-8, 12-19, Mar. 7-13, 17-21, Mar. 23 to Apr. 3, Apr. 7-10, 12-18, May 13, 14, May 24 to June 8, June 27-29, July 12, 13, 15-17, Aug. 3-6, 22-24, Sept. 6, 7, 28, 29)

3.1	65	4.5	358
3.3	96	6.0	754
3.7	172	7.4	1,170

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	172	162	172	248	179	840	164	473	121	112	120
2	77	519	158	255	216	248	458	164	256	114	154	112
3	77	754	156	183	201	240	310	164	185	107	635	109
4	76	490	154	162	192	209	269	168	179	103	930	150
5	80	274	152	156	187	196	255	176	164	98	1,110	174
6	72	231	152	148	307	213	257	168	156	103	779	344
7	78	225	148	142	305	628	300	179	152	96	257	394
8	132	257	152	142	267	536	394	164	148	96	208	207
9	222	198	150	142	225	334	298	152	138	100	183	185
10	154	183	158	137	227	288	269	151	128	109	164	158
11	123	358	162	142	214	264	240	134	128	164	160	150
12	110	370	154	137	664	250	303	158	127	458	152	138
13	106	264	148	276	1,170	225	255	194	134	290	142	132
14	98	227	146	244	990	205	250	205	146	166	136	128
15	93	518	180	170	698	201	245	160	144	194	140	128
16	223	419	322	164	406	238	231	148	132	366	148	125
17	484	274	238	158	308	406	229	150	121	484	140	121
18	451	243	207	158	279	276	212	140	121	220	136	121
19	201	257	194	156	250	281	196	140	119	185	127	118
20	176	234	167	154	229	303	194	140	119	179	123	118
21	164	209	170	172	220	260	194	134	110	156	121	110
22	130	187	168	166	240	231	198	136	170	194	268	110
23	141	218	168	158	218	406	192	128	140	166	264	192
24	598	212	162	156	207	394	190	192	125	140	168	134
25	394	196	164	158	207	293	185	219	116	130	142	121
26	214	185	168	154	203	272	183	176	144	125	132	114
27	183	176	164	162	198	794	179	201	244	121	123	114
28	450	172	158	212	194	739	179	251	239	116	118	280
29	445	168	161	201	185	382	172	310	172	121	114	278
30	257	169	154	205	-	303	168	346	134	116	112	152
31	214	-	150	334	-	504	-	225	-	112	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,303	598	72	203	1.75	2.02
November	8,359	754	168	279	2.41	2.69
December	5,247	322	146	169	1.46	1.68
Calendar year 1947	69,311	1,950	72	190	1.64	22.21
January	5,476	334	137	177	1.53	1.76
February	9,455	1,170	185	326	2.81	3.03
March	10,298	794	179	332	2.86	3.30
April	7,845	840	168	262	2.26	2.52
May	5,537	346	128	179	1.54	1.78
June	4,864	473	110	162	1.40	1.56
July	5,250	484	96	169	1.46	1.68
August	7,616	1,110	112	246	2.12	2.44
September	4,837	394	109	161	1.39	1.55
Water year 1947-48	81,087	1,170	72	222	1.91	26.01

Peak discharge (base, 1,600 sec.-ft.).- No peak above base.

Pacolet River near Fingerville, S. C.

Location.- Water-stage recorder, lat. 35°07', long. 81°58', 100 feet upstream from bridge on State Highway 55, a quarter of a mile downstream from confluence of North Pacolet and South Pacolet Rivers, and 2½ miles southeast of Fingerville, Spartanburg County. Datum of gage is 706.33 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 212 square miles.

Records available.- November 1929 to September 1948.

Average discharge.- 18 years (1930-48), 334 second feet.

Extremes.- Maximum discharge during year, 3,160 second-feet Aug. 5 (gage height, 5.62 feet); minimum daily, 86 second-feet Oct. 4.

1929-48: Maximum discharge, 22,800 second-feet Aug. 14, 1940 (gage height, 22.43 feet), from rating curve extended above 9,600 second-feet by velocity-area studies; minimum daily, 38 second-feet Oct. 4, 1931.

Remarks.- Records good. Flow partly regulated by South Pacolet River Reservoir (see p. 185). Some regulation caused by mill on North Pacolet River. About 7,223,000 gallons a day diverted above station for city of Spartanburg water supply.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 15 to Jan. 14)

0.3	72	1.5	446
.4	90	2.0	697
.6	134	3.0	1,340
.8	186	4.0	2,040
1.1	283	5.2	2,880

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	313	237	284	352	302	1,550	258	585	262	182	172
2	120	623	247	349	455	391	975	235	390	238	262	159
3	113	1,330	240	298	394	394	619	237	320	216	830	159
4	86	1,040	243	248	336	352	469	262	415	181	1,620	218
5	90	580	242	258	332	332	550	259	350	195	2,880	262
6	116	487	235	255	457	342	540	262	235	186	1,660	473
7	122	478	226	245	540	862	514	280	249	159	629	547
8	194	381	241	245	390	1,140	593	252	222	146	343	356
9	306	304	235	248	428	658	600	228	242	149	344	301
10	248	298	242	238	460	550	482	243	235	162	309	262
11	191	554	232	237	478	521	385	252	235	235	290	212
12	156	611	243	248	948	497	550	261	213	554	273	201
13	158	502	232	396	2,130	437	511	298	215	408	272	201
14	149	464	222	404	1,830	287	502	305	217	298	213	175
15	144	749	261	313	1,240	336	492	252	221	312	213	175
16	291	529	442	287	779	371	449	226	229	515	262	184
17	607	560	344	258	585	595	424	242	203	798	252	202
18	582	492	213	252	535	469	280	245	191	424	235	201
19	287	511	294	255	417	497	336	220	186	332	229	192
20	276	451	262	252	377	455	336	235	186	320	219	170
21	235	357	255	272	364	368	324	219	180	269	178	175
22	198	298	266	262	340	478	328	213	244	317	350	180
23	219	318	269	251	408	624	313	204	194	294	381	259
24	996	375	258	248	455	875	287	272	182	255	266	173
25	707	340	245	242	428	648	262	344	164	210	212	184
26	396	320	255	248	344	540	283	255	180	229	178	177
27	324	313	280	262	336	1,140	302	294	285	189	170	164
28	600	305	235	324	332	1,580	305	356	347	183	173	335
29	886	280	305	305	255	826	298	428	315	185	159	448
30	559	244	280	334	-	575	287	428	276	185	168	260
31	404	-	255	474	-	839	-	325	-	163	179	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,885	996	86	319		
November	14,407	1,330	244	480		
December	8,136	442	222	262		
Calendar year 1947	116,641	3,810	86	320		
January	8,792	474	237	284		
February	16,775	2,810	255	578		
March	18,281	1,580	287	590		
April	14,146	1,550	262	472		
May	8,390	428	204	271		
June	7,706	585	164	257		
July	8,569	798	146	276		
August	13,931	2,880	159	449		
September	7,177	547	159	239		
Water year 1947-48	136,195	2,880	86	372		

Pacolet River near Clifton, S. C.

Location.- Water-stage recorder, lat. 34°58', long. 81°48', 1 mile downstream from dam at Clifton Mill 2, 1.5 miles southeast of Clifton, Spartanburg County, 2.2 miles upstream from Lawson Fork, and 2.5 miles northeast of Glendale.

Drainage area.- 320 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 4,690 second-feet Aug. 4 (gage height, 6.05 feet); minimum daily, 128 second-feet Oct. 7.
1939-48: Maximum discharge, 26,800 second-feet Aug. 14, 1940 (gage height, 21.19 feet), by computation of flow over dam at Clifton Mill 2; minimum daily, 17 second-feet Oct. 19, 1941.

Remarks.- Records fair. Low and medium flow regulated by power plants above station and South Pacolet River Reservoir (see p.185). City of Spartanburg diverts water above station from South Pacolet River Reservoir for municipal supply.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	170	416	409	399	636	461	1,740	384	592	344	268	259
2	178	1,470	360	492	671	627	1,420	406	600	325	496	230
3	185	1,580	368	404	662	688	917	436	453	279	1,280	226
4	206	1,420	365	404	539	583	750	392	496	263	2,940	344
5	139	864	383	403	521	504	803	429	529	252	3,290	263
6	179	697	342	386	794	496	794	429	392	274	2,130	1,080
7	128	688	346	363	794	1,670	970	530	369	238	912	706
8	530	706	390	350	732	1,510	900	399	325	214	574	541
9	539	504	366	370	741	1,030	873	384	319	214	492	429
10	600	490	400	358	706	856	741	406	356	201	444	382
11	268	997	396	320	741	750	627	384	295	312	417	309
12	243	952	369	384	1,790	715	785	470	295	496	382	279
13	243	768	365	610	2,960	653	741	461	290	627	386	328
14	208	688	330	662	2,640	444	706	496	350	384	366	269
15	221	1,200	454	488	1,530	478	706	399	312	513	265	260
16	322	847	706	443	1,130	618	671	384	338	803	384	255
17	697	794	534	394	864	979	600	392	284	1,570	362	300
18	750	732	456	367	768	671	496	384	301	653	326	237
19	405	732	433	422	688	680	504	350	252	487	336	268
20	415	680	389	386	583	627	513	356	252	429	308	286
21	327	592	365	414	565	539	530	363	295	369	292	236
22	293	442	406	420	513	609	504	301	295	406	268	263
23	282	492	384	399	600	970	496	325	295	369	578	309
24	1,960	586	341	419	644	1,030	436	363	284	325	368	316
25	1,030	552	376	383	653	891	422	864	228	306	338	175
26	636	485	397	412	548	706	470	399	233	325	252	243
27	496	459	353	422	521	1,570	453	384	306	284	257	272
28	809	450	374	539	436	1,780	478	478	706	243	313	354
29	1,040	418	414	548	422	1,200	470	653	548	257	151	1,070
30	803	366	398	542	-	829	444	627	406	290	257	414
31	582	-	347	838	-	1.500	-	600	-	210	237	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,884	1,960	128	480		
November	22,067	1,580	366	736		
December	12,316	706	330	397		
Calendar year 1947	171,029	4,920	105	469		
January	13,741	838	320	443		
February	25,392	2,960	422	876		
March	26,664	1,780	444	860		
April	20,960	1,740	422	699		
May	13,628	864	301	440		
June	10,996	706	228	367		
July	12,262	1,570	201	396		
August	19,669	3,290	151	634		
September	10,903	1,080	175	363		
Water year 1947-48	203,482	3,290	128	556		

South Pacolet River Reservoir near Fingerville, S. C.

Location.- Water-stage recorder, lat. 35°07', long. 81°59', at bridge on State Highway 42, 1 mile upstream from dam and 1¾ miles south of Fingerville, Spartanburg County. Datum of gage is 761.18 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 92 square miles.

Records available.- March 1930 to September 1948.

Extremes.- Maximum gage height during year, 16.13 feet Aug. 5; minimum, 10.50 feet May 2. 1930-48: Maximum gage height, 17.68 feet Oct. 19, 1937; minimum, 2.76 feet Oct. 8, 1930.

Remarks.- Reservoir is formed by concrete dam completed in 1926. Capacity, 879,000,000 gallons between gage heights 0.0 foot (limit of draw-down) and 15.0 feet (top of flashboards). Dead storage is about 350,000,000 gallons. Figures given herein represent usable contents. Spillway crest is at gage height 12.0 feet. City of Spartanburg diverted about 7,223,000 gallons daily from reservoir for municipal supply during year. Surplus water is used for generation of power.

Gage height, in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10.90	13.99	g12.27	13.36	14.74	13.29	15.40	10.58	13.87	13.95	11.99	11.56
2	10.80	14.26	g12.28	13.62	14.87	13.30	15.25	10.59	14.78	13.41	12.03	11.56
3	10.76	15.25	g12.27	13.80	14.36	13.76	15.03	10.84	14.72	12.93	12.49	11.50
4	10.87	15.29	12.28	13.73	14.25	13.97	15.12	10.86	14.28	12.72	15.04	11.76
5	11.14	14.97	12.17	13.81	14.17	13.95	14.87	11.02	13.32	12.50	16.02	12.24
6	11.23	14.39	12.08	13.63	14.25	13.87	14.36	11.10	13.19	12.14	15.51	12.71
7	11.12	13.51	12.02	13.54	14.65	14.89	13.95	11.18	13.16	11.89	15.10	13.00
8	11.21	13.38	12.00	13.41	14.89	14.32	14.54	11.28	13.08	11.79	15.07	12.77
9	11.77	13.73	11.96	13.28	15.01	15.06	15.02	11.35	13.05	11.79	14.96	12.72
10	12.18	13.70	11.97	13.11	14.93	14.74	14.75	11.42	12.84	11.84	14.67	12.66
11	11.97	13.75	12.14	13.01	14.40	14.22	15.00	11.37	12.59	12.09	14.37	12.54
12	11.96	14.11	12.24	12.89	14.29	13.51	14.83	11.23	12.37	12.46	14.15	12.67
13	12.02	14.41	12.16	12.86	15.59	12.73	14.23	11.35	12.33	13.59	13.92	12.58
14	12.02	13.79	12.14	13.13	15.51	12.78	13.53	11.74	12.39	14.11	13.73	12.61
15	11.98	g13.43	12.26	13.10	15.40	13.04	12.70	11.99	12.62	14.04	13.77	12.70
16	12.13	g14.43	12.78	12.83	15.10	12.98	11.80	12.05	12.43	14.17	13.67	12.75
17	12.82	g15.07	13.40	12.75	14.89	13.30	11.02	12.08	12.37	15.03	13.62	12.56
18	13.79	g14.68	13.59	12.77	14.52	14.19	11.04	11.82	12.18	15.13	13.20	12.30
19	14.19	g14.01	13.64	12.71	14.19	14.08	11.32	11.65	12.11	14.91	12.93	12.11
20	14.26	g13.32	13.68	12.62	14.34	14.30	11.18	11.43	12.12	14.68	12.67	11.98
21	14.11	g12.66	13.78	12.69	14.41	14.88	11.06	11.04	11.99	14.43	12.53	11.93
22	13.93	g12.26	13.88	12.75	14.72	14.95	11.10	10.86	11.83	14.17	12.60	11.66
23	13.82	g12.22	13.89	12.78	14.92	14.77	11.08	10.64	11.93	13.86	12.47	11.69
24	14.87	g12.60	13.87	12.77	14.27	15.23	11.19	10.59	11.98	13.41	12.09	11.86
25	15.15	g13.30	13.90	12.77	13.49	15.10	11.48	10.99	11.94	13.09	11.76	11.92
26	15.08	g13.28	14.10	12.76	13.24	14.77	11.74	11.22	11.98	12.79	11.78	11.80
27	14.91	g12.84	14.15	12.66	13.18	14.99	11.59	11.36	12.85	12.39	11.82	11.71
28	14.88	g12.64	14.08	12.79	13.06	15.60	11.29	11.62	13.76	12.25	11.62	11.90
29	15.19	g12.43	14.00	13.16	13.22	15.21	10.97	12.00	14.36	12.17	11.82	12.79
30	14.99	g12.30	13.62	13.43	-	14.93	10.69	12.65	14.34	11.99	11.83	12.41
31	14.35	-	13.50	13.83	-	14.87	-	13.42	-	12.03	11.88	-

g Computed from graph based on recorded range in stage and daily gage readings at powerhouse.

Monthly gage height and contents, water year October 1947 to September 1948

Date	Gage height (feet)†	Contents (millions of gallons)	Change in contents during month (equivalent, second-feet)
Sept. 30	10.92	529	-
Oct. 31	14.16	796	+13.3
Nov. 30	12.27	632	-8.5
Dec. 31	13.40	727	+4.7
Calendar year 1947	-	-	+.8
Jan. 31	14.27	807	+4.0
Feb. 29	13.42	729	-4.2
Mar. 31	15.15	895	+8.3
Apr. 30	10.56	504	-20.2
May 31	13.46	732	+11.4
June 30	14.18	798	+3.4
July 31	11.99	610	-9.4
Aug. 31	11.56	577	-1.6
Sept. 30	12.32	636	+3.0
Water year 1947-48	-	-	+.5

† Gage height at 12 p.m.

North Tyger River near Moore, S. C.

Location.- Water-stage recorder and concrete control, lat. 34°48', long. 81°58', at Ott Shoals, 1¼ miles upstream from Wards Creek, 2½ miles southeast of Moore, Spartanburg County, and 3 7/8 miles upstream from confluence with South Tyger River. Datum of gage is 564.79 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 162 square miles.

Records available.- April 1934 to September 1948.

Average discharge.- 14 years, 226 second-feet.

Extremes.- Maximum discharge during year, 3,610 second-feet Aug. 6 (gage height, 4.27 feet); minimum, 42 second-feet Oct. 6; minimum daily, 47 second-feet Oct. 5.
1934-48: Maximum discharge, 12,300 second-feet Aug. 14, 1940 (gage height, 7.15 feet), from rating curve extended above 7,800 second-feet by velocity-area studies; minimum, 9.2 second-feet (estimated) Dec. 29, 1935; minimum daily, 21 second-feet Oct. 12, 1941.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Low flow regulated by power plants above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 11

0.9	47	1.3	165
1.0	69	1.5	256
1.1	96	1.7	370
1.2	128	2.0	585

Nov. 12 to Sept. 30

0.9	53	1.3	175	2.5	1,050
1.0	76	1.5	266	3.0	1,580
1.1	104	1.7	380	3.5	2,240
1.2	137	2.0	604	4.0	3,120

Discharge, in second-feet, water year October 1947 to Septembpr 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	166	163	173	526	217	1,000	184	275	167	a75	87
2	77	284	178	202	293	298	940	140	218	83	a280	124
3	77	555	169	202	266	314	498	188	201	110	a340	107
4	72	474	166	138	225	280	362	205	192	96	a600	105
5	47	288	144	176	223	247	344	205	130	76	a1,600	85
6	62	243	162	199	309	233	326	201	96	100	a3,000	394
7	109	222	116	184	316	796	380	240	157	134	a1,000	a340
8	84	302	87	156	341	1,050	918	162	192	95	a320	213
9	168	200	127	156	332	691	577	145	162	102	a200	171
10	166	210	205	139	306	425	366	185	105	88	a190	164
11	142	510	201	84	288	342	331	201	154	93	a190	129
12	88	700	179	132	507	302	350	192	129	234	a190	67
13	93	414	173	351	1,080	278	309	232	90	350	a180	103
14	84	284	128	285	1,380	223	289	181	125	217	a180	156
15	74	465	179	235	925	271	273	147	196	201	a90	145
16	160	530	330	189	590	307	256	129	202	339	a150	93
17	298	380	273	191	400	627	237	169	167	662	a220	93
18	268	282	235	130	337	470	202	184	134	526	a190	116
19	138	259	203	169	290	357	255	152	90	228	a180	63
20	319	261	201	201	271	318	243	161	87	188	a160	108
21	146	223	133	201	251	293	218	108	113	167	a100	141
22	93	164	168	175	259	304	223	168	164	160	a80	164
23	132	164	188	164	282	441	192	111	103	113	a95	93
24	276	290	165	176	242	685	220	120	130	151	a180	64
25	250	273	121	126	247	659	163	214	130	a70	a160	105
26	190	273	167	181	237	410	212	201	103	a100	102	55
27	170	254	167	228	225	474	227	181	60	a140	87	81
28	383	199	160	254	239	827	192	182	134	a130	80	182
29	358	179	173	218	165	748	183	237	323	a130	84	374
30	308	138	196	280	-	417	137	349	223	a140	100	176
31	221	-	179	406	-	490	-	309	-	a170	139	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,929	383	47	159	0.981	1.13
November	9,186	700	138	306	1.89	2.11
December	5,436	330	87	175	1.08	1.24
Calendar year 1947	67,934	2,090	37	186	1.15	15.59
January	6,101	406	84	197	1.22	1.41
February	11,152	1,380	165	385	2.38	2.57
March	13,794	1,050	217	445	2.75	3.17
April	10,423	1,000	137	347	2.14	2.39
May	5,783	349	108	187	1.15	1.33
June	4,585	323	60	153	.944	1.05
July	5,560	662	70	179	1.10	1.27
August	10,542	3,000	75	340	2.10	2.42
September	4,298	394	55	143	.883	.99
Water year 1947-48	91,789	3,000	47	251	1.55	21.08

Peak discharge (base, 1,800 sec.-ft.).- Aug. 6 (about 4 a.m.) 3,610 sec.-ft.
a No gage-height record; discharge computed on basis of weather records and records for South Tyger River near Woodruff and Tyger River near Woodruff.

Tyger River near Woodruff, S. C.

Location.- Water-stage recorder, lat. 34°45', long. 81°55', at Nesbitts Bridge or State Highway 49, half a mile downstream from confluence of North Tyger and South Tyger Rivers and 6½ miles east of Woodruff, Spartanburg County. Datum of gage is 489.44 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 351 square miles.

Records available.- October 1929 to September 1948.

Average discharge.- 18 years (1930-48), 474 second-feet.

Extremes.- Maximum discharge during year, 4,800 second-feet Aug. 6 (gage height, 5.98 feet); minimum, 74 second-feet Oct. 6 (gage height, 1.79 feet); minimum daily, 78 second-feet Oct. 6.

1929-48: Maximum discharge, 19,200 second-feet Aug. 14, 1940 (gage height, 13.27 feet), from rating curve extended above 11,000 second-feet on basis of rating curves for North Tyger River near Moore and South Tyger River near Woodruff; minimum, 37 second-feet Oct. 18, 1941; minimum daily, 40 second-feet Oct. 17, 1941.

Flood in August 1928 reached a stage of 20.0 feet; that of September 1929, 14.65 feet, from floodmarks (discharge, 19,600 second-feet).

Remarks.- Records good. Low and medium flow regulated by power plants above station.

Revisions.- W 742: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	416	228	371	651	330	1,960	378	818	368	222	194
2	140	635	369	571	494	677	1,770	311	596	272	604	220
3	147	999	372	537	568	677	1,160	268	444	266	627	185
4	138	876	331	303	422	607	805	422	403	238	1,150	228
5	88	591	347	222	491	539	608	416	384	131	2,390	245
6	78	551	365	361	704	520	712	427	259	136	4,120	793
7	193	573	248	386	695	2,130	814	606	250	284	1,730	666
8	236	731	161	370	762	1,830	1,650	431	410	196	716	515
9	340	426	301	312	607	1,490	1,240	337	373	191	372	625
10	a320	326	458	296	695	1,120	825	286	281	178	336	355
11	a260	1,400	446	198	660	838	633	454	332	157	391	244
12	a170	1,400	390	195	1,370	714	661	403	306	267	391	185
13	142	838	390	879	2,280	591	705	471	228	673	344	182
14	228	625	330	669	2,490	427	616	395	184	698	344	296
15	.185	1,080	309	463	1,860	510	607	307	338	522	241	294
16	298	920	771	359	1,210	673	567	308	375	562	238	232
17	505	599	631	454	945	1,340	535	252	317	828	442	236
18	477	752	521	314	695	945	422	367	291	863	378	232
19	354	633	428	253	616	809	446	312	236	386	397	146
20	321	543	429	410	583	808	584	327	212	421	345	148
21	401	469	325	416	583	520	477	244	168	322	238	276
22	240	396	227	351	527	439	462	346	317	312	230	296
23	272	367	424	367	470	999	396	283	269	239	197	454
24	535	448	417	404	552	1,330	422	186	263	301	349	202
25	545	524	254	320	551	1,330	366	435	258	249	301	228
26	485	572	301	242	559	1,020	376	584	228	192	240	150
27	277	602	355	495	513	1,120	543	486	132	281	192	120
28	1,140	439	254	621	511	1,260	403	564	166	263	130	339
29	841	374	257	484	355	1,380	390	704	560	258	216	940
30	691	329	409	630	-	1,000	384	915	454	307	132	356
31	605	-	386	921	-	1,180	-	722	-	393	259	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,774	1,140	78	348	0.991	1.14
November	19,434	1,400	326	648	1.85	2.06
December	11,434	771	161	369	1.05	1.21
Calendar year 1947	147,605	4,040	75	404	1.15	15.63
January	13,174	921	195	425	1.21	1.40
February	23,419	2,490	355	808	2.30	2.48
March	29,153	2,130	330	940	2.68	3.09
April	21,539	1,960	366	718	2.05	2.29
May	12,947	915	186	418	1.19	1.37
June	9,852	818	132	328	.934	1.04
July	10,754	863	131	347	.989	1.14
August	18,272	4,120	132	589	1.68	1.94
September	9,582	940	120	319	.909	1.01
Water year 1947-48	190,334	4,120	78	520	1.48	20.17

Peak discharge (base, 3,000 sec.-ft.).- Aug. 6 (8 a.m.) 4,800 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for North Tyger River near Moore and South Tyger River near Woodruff.

Middle Tyger River at Lyman, S. C.

Location.- Water-stage recorder and masonry control, lat. 34°56'35", long. 82°08'00", at Lyman, Spartanburg County, 200 feet upstream from bridge on State Highway 292, 600 feet downstream from Southern Railway bridge, and three-quarters of a mile northeast of Duncan. Datum of gage is 776.05 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 68.3 square miles.

Records available.- January 1938 to September 1948.

Average discharge.- 10 years, 92.1 second-feet.

Extremes.- Maximum discharge during year, 3,310 second-feet Aug. 5 (gage height, 11.16 feet); minimum, 14 second-feet Sept. 19, 26; minimum daily, 29 second-feet Oct. 6.
1938-48: Maximum discharge, 4,800 second-feet Aug. 14, 1940 (gage height, 16.16 feet), by computation of flow over dam; minimum, 1 second-foot Sept. 25, 1940; minimum daily, 13 second-feet Oct. 12, 18, 26, 1941.

Remarks.- Records good. Some diurnal fluctuation caused by steam power plant above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1-29, Feb. 13 to Sept. 30						Oct. 30 to Feb. 12	
1.1	28	2.0	113	4.5	815	1.6	56
1.3	39	2.4	185	6.0	1,440	1.8	78
1.5	54	3.0	315	8.0	2,280	2.0	108
1.7	73	3.6	480	9.8	2,890	2.4	178
						2.8	262

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	68	67	70	137	84	582	79	115	57	75	48
2	32	110	67	99	116	134	259	79	91	52	89	45
3	32	230	67	76	102	132	177	80	77	51	118	45
4	32	151	64	82	89	106	151	82	75	52	1,030	55
5	33	103	65	74	84	100	138	91	70	48	2,870	79
6	29	85	65	66	141	103	140	86	68	48	722	132
7	30	81	64	63	151	344	162	103	66	45	204	113
8	44	115	67	61	137	393	197	85	65	43	127	71
9	62	84	70	62	124	189	156	79	69	48	102	73
10	50	68	79	60	121	154	127	75	61	52	92	63
11	46	149	81	59	118	133	130	75	60	66	86	63
12	44	221	72	60	242	121	131	75	59	253	81	54
13	40	126	67	106	774	110	123	83	60	224	85	52
14	38	92	66	112	495	106	113	80	86	78	77	52
15	38	174	76	76	340	102	110	70	100	78	77	52
16	62	215	149	68	207	112	105	70	64	652	74	52
17	184	127	106	73	171	240	102	69	61	461	70	49
18	134	79	82	72	142	172	101	64	59	123	68	49
19	70	100	74	62	127	138	96	63	60	88	63	49
20	58	91	72	66	116	149	98	62	56	77	62	47
21	55	76	71	82	109	129	96	61	55	70	60	45
22	52	76	70	77	126	118	98	59	54	81	61	47
23	51	106	68	70	113	251	92	61	54	70	56	52
24	110	118	67	70	106	443	91	58	55	63	55	48
25	147	105	70	71	106	208	94	67	52	60	54	45
26	89	89	70	66	103	152	88	84	49	55	52	47
27	71	81	73	74	99	285	85	116	52	53	51	48
28	186	76	65	108	98	494	84	121	85	53	50	57
29	264	77	65	108	92	206	83	153	67	59	50	55
30	125	70	61	108	-	156	80	179	60	99	48	52
31	76	-	61	169	-	269	-	113	-	59	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,316	264	29	74.7	1.09	1.26
November	3,343	230	68	111	1.63	1.82
December	2,261	149	61	72.9	1.07	1.23
Calendar year 1947	31,564	1,170	29	86.5	1.27	17.18
January	2,470	169	59	79.7	1.17	1.35
February	4,886	774	84	168	2.46	2.65
March	5,833	494	84	188	2.75	3.17
April	4,089	582	80	136	1.99	2.22
May	2,622	179	58	84.6	1.24	1.43
June	2,005	115	49	66.8	.978	1.09
July	3,318	652	43	107	1.57	1.81
August	6,756	2,870	47	218	3.19	3.68
September	1,739	132	45	58.0	.849	.95
Water year 1947-48	41,638	2,870	29	114	1.67	22.66

Peak discharge (base, 1,000 sec.-ft.).- July 16 (5:45 p.m.) 1,220 sec.-ft.; Aug. 5 (12 m.) 3,310 sec.-ft.

South Tyger River near Reidville, S. C.

Location.- Water-stage recorder, lat. 34°52'35", long. 82°05'10", 0.4 mile upstream from bridge on State Highway 296, 1.2 miles downstream from Berry Shoals, 1.8 miles northeast of Reidville, Spartanburg County, and 4 miles upstream from Bens Creek. Datum of gage is 626.28 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 106 square miles.

Records available.- April 1934 to September 1948.

Average discharge.- 14 years, 153 second-feet.

Extremes.- Maximum discharge during year, 1,420 second-feet Aug. 5 (gage height, 5.06 feet); minimum, 8.9 second-feet Jan. 10, July 29; minimum daily, 9.5 second-feet Oct. 5, July 10.

1934-48: Maximum discharge, 6,080 second-feet Apr. 6, 1936 (gage height, 13.66 feet); minimum, 4.6 second-feet June 5, 6, 1941 (gage height, 0.60 foot); minimum daily, 5.5 second-feet June 6, 1941.

Remarks.- Records good. Low and medium flow regulated by power plants above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Sept. 9

0.7	8.9	1.2	56	3.0	521
.8	15	1.4	87	4.0	915
.9	23	1.7	143	4.4	1,100
1.0	32	2.0	212		
1.1	43	2.5	354		

Sept. 10-30

0.7	8.9	1.2	54
.8	14	1.4	83
.9	22	1.6	119
1.0	31		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	157	93	160	112	164	613	101	342	167	44	71
2	53	52	143	299	213	209	539	40	205	142	104	56
3	46	200	110	94	102	225	407	137	145	107	134	57
4	12	214	123	10	150	231	136	108	151	35	411	89
5	9.5	217	146	85	197	203	291	141	150	11	1,090	61
6	48	293	95	111	208	180	197	172	56	121	738	91
7	74	176	14	185	175	243	370	184	140	79	387	315
8	63	161	126	90	123	608	458	150	143	57	120	359
9	76	40	140	78	196	481	392	48	121	48	135	288
10	87	128	123	77	210	365	175	164	140	9.5	119	91
11	50	297	118	14	224	246	114	159	117	11	119	40
12	21	279	133	121	377	200	274	116	117	87	117	94
13	98	267	140	224	600	130	200	130	32	480	112	99
14	81	264	40	160	784	104	225	109	90	416	116	105
15	77	223	136	90	456	247	226	115	114	154	50	84
16	96	60	284	148	460	196	204	41	110	144	127	109
17	122	332	150	164	256	333	160	119	107	113	167	93
18	178	301	116	17	233	216	96	106	106	192	142	41
19	155	191	130	136	188	424	247	128	102	157	128	20
20	226	181	128	138	209	171	175	87	48	132	123	86
21	131	164	42	95	195	59	159	135	98	107	114	100
22	96	130	121	135	78	162	117	125	125	100	65	98
23	104	40	159	143	181	326	126	36	110	79	122	84
24	116	129	103	117	200	507	102	107	108	134	104	78
25	284	199	53	42	212	478	102	95	92	77	99	55
26	81	223	101	126	217	471	184	142	60	105	84	12
27	114	204	47	154	191	309	200	234	11	104	70	79
28	135	126	22	102	157	336	101	403	105	73	76	97
29	332	111	136	159	59	458	168	397	108	81	38	89
30	360	42	145	193	-	381	178	220	128	128	81	94
31	197	-	141	194	-	358	-	438	-	140	82	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,572.5	360	9.5	115	1.08	1.24
November	5,401	332	40	180	1.70	1.90
December	3,558	284	14	115	1.08	1.24
Calendar year 1947	46,152.2	1,300	8.9	126	1.19	16.18
January	3,861	299	10	125	1.18	1.36
February	6,963	784	59	240	2.26	2.44
March	9,021	608	59	291	2.75	3.17
April	6,938	613	96	231	2.18	2.43
May	4,687	438	36	151	1.42	1.64
June	3,481	342	11	116	1.09	1.22
July	3,790.5	480	9.5	122	1.15	1.33
August	5,418	1,090	38	175	1.65	1.90
September	3,035	359	12	101	.953	1.06
Water year 1947-48	59,726.0	1,090	9.5	163	1.54	20.93

Peak discharge (base, 1,400 sec.-ft.).- Aug. 5 (7:45 a.m.) 1,420 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 with North Tyger River and 5¾ miles east of Woodruff, Spartanburg County. Datum of gage is 508.35 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 174 square miles.

Records available.- March 1934 to September 1948.

Average discharge.- 14 years, 229 second-feet.

Extremes.- Maximum discharge during year, 1,360 second-feet Mar. 7 (gage height, 4.27 feet); minimum, 34 second-feet Oct. 5, 6 (gage height, 1.60 feet); minimum daily, 34 second-feet Oct. 6.

1934-48: Maximum discharge, 9,510 second-feet Apr. 6, 1936 (gage height, 9.78 feet), from rating curve extended above 7,700 second-feet by velocity-area studies; minimum, 13 second-feet Oct. 17, 18, 1941; minimum daily, 14 second-feet Oct. 17, 1941.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Low and medium flow regulated by power plants above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	233	89	205	306	145	856	185	478	181	144	104
2	72	350	172	305	217	311	774	147	348	173	265	96
3	74	335	179	287	271	327	631	106	222	161	258	81
4	69	316	159	140	198	314	407	191	206	126	475	110
5	40	286	180	86	258	283	284	182	227	54	668	153
6	34	304	193	153	369	300	372	204	165	57	1,050	314
7	78	357	111	194	344	1,150	402	290	112	130	661	294
8	113	384	83	202	369	707	697	247	192	96	363	a300
9	158	209	190	143	284	745	584	166	184	82	149	a400
10	131	112	218	136	339	612	432	120	167	75	183	a180
11	115	713	201	117	332	413	286	226	177	63	170	a110
12	69	665	183	80	758	352	296	192	164	71	169	112
13	54	377	207	438	1,070	291	357	210	140	271	158	106
14	126	341	169	347	1,010	201	314	199	78	449	159	129
15	104	580	132	222	870	242	323	172	145	331	143	126
16	122	334	387	a150	569	345	302	158	149	266	94	122
17	180	222	316	a240	492	644	283	103	143	199	205	135
18	187	428	219	a170	348	419	224	171	139	241	181	106
19	208	338	187	106	291	414	208	160	141	154	178	73
20	178	261	207	190	283	446	297	163	127	209	181	62
21	229	242	170	204	310	232	244	145	78	148	163	116
22	142	223	95	170	255	175	221	171	146	154	147	126
23	129	191	200	194	189	481	190	155	153	126	95	311
24	214	146	222	216	280	563	208	81	147	146	160	119
25	270	244	136	175	287	625	171	205	127	174	131	122
26	279	282	127	97	306	569	168	340	116	95	124	78
27	113	287	165	225	272	618	268	280	73	141	100	53
28	537	226	88	284	268	364	196	355	66	127	98	140
29	427	181	95	233	193	540	186	452	182	118	116	429
30	370	157	199	313	-	517	234	539	169	156	54	152
31	358	-	200	472	-	622	-	390	-	215	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,250	537	34	169	0.971	1.12
November	9,324	713	112	311	1.79	2.00
December	5,479	387	83	177	1.02	1.18
Calendar year 1947	72,837	1,900	29	200	1.15	15.58
January	6,494	472	80	209	1.20	1.38
February	11,338	1,070	189	391	2.25	2.43
March	13,967	1,150	145	451	2.59	2.99
April	10,415	856	168	347	1.99	2.22
May	6,703	539	81	216	1.24	1.43
June	4,961	478	66	165	.948	1.06
July	4,989	449	54	161	.925	1.07
August	7,147	1,050	54	231	1.33	1.53
September	4,759	429	53	159	.914	1.02
Water year 1947-48	90,826	1,150	34	248	1.43	19.43

Peak discharge (base, 1,800 sec.-ft.).- No peak above base.

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for North Tyger River near Moore and Tyger River near Woodruff.

Fair Forest Creek near Union, S. C.

Location.- Water-stage recorder, lat. 34°41', long. 81°41', at bridge on State Highway 92, 0.3 mile downstream from Buffalo Creek and 4.3 miles southwest of Union, Union County. Datum of gage is 393.91 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 183 square miles.

Records available.- June 1940 to September 1948.

Extremes.- Maximum discharge during year, 2,760 second-feet Mar. 7 (gage height, 5.07 feet); minimum, 48 second-feet Sept. 3 (gage height, 2.09 feet).

1940-48: Maximum discharge, 7,520 second-feet Aug. 14, 1940 (gage height, 7.15 feet), from rating curve extended above 4,300 second-feet by velocity-area studies and logarithmic plotting; minimum, 19 second-feet Aug. 11, 1940 (gage height, 1.85 feet).

Remarks.- Records good. Discharge includes some water diverted from South Pacolet River Reservoir (see p. 185), which is discharged into this stream after use.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 5-10, Jan. 16 to Feb. 12, Mar. 9 to June 29)

2.1	49	2.5	162	4.0	1,300
2.2	68	2.7	264	4.5	1,910
2.3	93	3.0	458	4.9	2,510
2.4	124	3.5	830		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	186	158	193	765	214	1,180	139	269	120	53	51
2	57	610	154	226	443	302	826	139	147	88	75	51
3	57	1,240	151	214	338	344	404	143	132	78	257	49
4	55	1,050	151	176	294	301	313	139	124	73	607	53
5	53	401	151	167	264	248	276	162	121	68	607	70
6	51	270	151	158	526	277	264	154	115	66	372	134
7	51	467	147	154	593	2,460	417	195	108	62	135	175
8	117	865	143	147	750	2,280	1,400	200	105	58	105	217
9	517	558	143	147	674	868	1,660	147	105	60	93	106
10	1,040	283	300	147	528	528	596	135	99	62	86	88
11	574	1,150	364	139	417	410	479	132	96	94	80	80
12	225	1,840	289	135	1,090	325	451	258	93	105	88	70
13	131	1,000	214	834	2,120	276	358	406	90	102	105	66
14	105	369	181	978	2,040	253	307	288	88	86	86	64
15	93	813	287	554	1,040	231	282	190	88	83	76	66
16	116	881	479	267	564	283	253	151	86	113	78	62
17	157	602	444	226	404	701	236	139	83	143	78	60
18	192	325	281	204	344	902	214	132	80	115	78	60
19	130	294	226	181	307	427	204	124	80	86	70	58
20	105	288	200	176	282	319	200	121	80	76	70	58
21	93	242	190	204	258	282	190	118	76	70	70	55
22	86	209	181	204	370	253	186	112	78	66	68	53
23	83	229	171	186	351	490	181	108	80	62	66	53
24	541	301	167	186	282	630	176	108	78	58	64	64
25	938	319	271	176	264	468	171	146	73	55	62	53
26	750	276	300	176	264	307	167	186	68	53	60	51
27	286	220	248	295	253	381	158	143	66	51	58	51
28	486	195	209	600	242	444	151	132	67	51	57	73
29	1,450	171	186	550	231	397	143	196	99	62	55	121
30	784	167	176	638	-	276	143	241	132	73	51	187
31	276	-	167	960	-	616	-	287	-	60	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,659	1,450	51	312	1.70	1.96
November	15,821	1,840	167	527	2.88	3.21
December	6,880	479	143	222	1.21	1.40
Calendar year 1947	86,810	3,230	27	238	1.30	17.62
January	9,598	978	135	310	1.69	1.95
February	16,298	2,120	231	562	3.07	3.31
March	16,493	2,460	214	532	2.91	3.36
April	11,986	1,660	143	400	2.19	2.44
May	5,301	406	108	171	.934	1.08
June	3,006	269	66	100	.546	.61
July	2,399	143	51	77.4	.423	.49
August	3,859	607	49	124	.678	.78
September	2,419	217	49	80.6	.440	.49
Water year 1947-48	103,719	2,460	49	283	1.55	21.08

Peak discharge (base, 2,500 sec.-ft.).- Feb. 14 (4:30 a.m.) 2,590 sec.-ft.; Mar. 7 (8 p.m.) 2,760 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. Datum of gage is 448.07 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 307 square miles.

Records available.- August 1929 to September 1948.

Average discharge.- 19 years, 416 second-feet.

Extremes.- Maximum discharge during year, 4,140 second-feet May 28 (gage height, 4.30 feet); minimum, 26 second-feet Oct. 6; minimum daily, 87 second-feet Sept. 4.

1929-48: Maximum discharge, 30,000 second-feet Oct. 2, 1929 (gage height, 10.5 feet, from floodmark), from rating curve extended above 17,000 second-feet by logarithmic plotting; minimum, about 4 second-feet Oct. 20, 1935; minimum daily, 32 second-feet Oct. 15, 1941.

Revisions.- The maximum discharge for the water year 1934 has been revised to 4,810 second-feet June 5 (gage height, 4.58 feet), superseding figure published in Water-Supply Paper 757.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Low and medium flow regulated by power plants above station. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions (water years).- W 802: 1930(M). W 892: 1929-30, 1931(M), 1932-33, 1935.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	317	329	304	698	412	2,220	366	706	270	202	144
2	117	682	315	415	588	500	1,500	364	594	232	408	132
3	112	836	300	383	532	622	843	370	438	214	406	123
4	125	635	302	346	478	554	685	374	392	184	598	87
5	111	520	293	320	446	509	635	386	376	198	899	148
6	92	413	292	338	618	542	599	398	346	215	806	626
7	116	576	284	276	622	2,770	588	483	336	150	428	470
8	274	941	288	277	878	2,540	1,050	433	324	157	306	371
9	704	520	293	304	898	1,160	1,140	388	322	182	260	306
10	272	419	386	286	776	870	735	376	312	174	236	233
11	181	1,510	439	268	648	698	698	356	285	250	221	198
12	165	2,130	434	270	1,300	610	722	372	278	476	214	181
13	156	828	384	886	2,930	565	635	394	276	a595	201	157
14	118	532	335	784	2,400	543	599	a400	289	a360	239	162
15	155	972	400	498	1,520	564	565	a380	249	284	221	175
16	154	992	662	414	870	524	543	a360	264	374	230	175
17	204	672	468	378	698	1,060	509	338	251	468	228	137
18	268	532	468	362	588	774	488	324	245	347	208	152
19	274	498	428	336	543	635	478	324	248	258	286	146
20	242	471	393	322	520	599	468	294	237	238	240	131
21	190	417	356	348	488	576	450	301	230	230	203	125
22	140	382	341	342	565	532	434	288	232	217	188	133
23	150	394	329	330	524	733	431	282	230	242	170	310
24	440	452	312	348	478	1,060	419	280	240	213	180	190
25	605	504	357	327	458	986	412	337	218	181	174	156
26	346	458	376	332	468	698	408	428	186	162	160	135
27	300	414	342	370	457	747	404	1,170	189	170	149	122
28	946	378	331	582	429	1,200	346	2,900	203	165	160	169
29	1,610	358	313	565	421	856	378	772	384	222	136	560
30	555	314	301	637	-	648	368	832	320	206	132	224
31	384	-	304	1,030	-	1,010	-	661	-	248	138	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,622	1,610	92	310	1.01	1.16
November	19,067	2,130	314	636	2.07	2.31
December	11,155	662	284	360	1.17	1.35
Calendar year 1947	135,011	4,780	80	370	1.21	16.37
January	12,978	1,030	268	419	1.36	1.57
February	22,839	2,930	421	788	2.57	2.77
March	26,097	2,770	412	842	2.74	3.16
April	19,750	2,220	346	658	2.14	2.39
May	15,731	2,900	280	507	1.65	1.90
June	9,200	706	186	307	1.00	1.12
July	7,882	595	150	254	.827	.95
August	8,627	899	132	278	.906	1.04
September	6,378	626	87	213	.694	.77
Water year 1947-48	169,326	2,930	87	463	1.51	20.49

Peak discharge (base, 3,500 sec.-ft.).- May 28 (4:45 a.m.) 4,140 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

Saluda River near West Greenville, S. C.

Location.- Water-stage recorder, lat. 34°50'30", long. 82°28'50", 500 feet upstream from bridge on State Highway 13, 1.5 miles downstream from Saluda Lake Dam, 2.5 miles upstream from George Creek, 2.9 miles west of West Greenville, and 4.6 miles west of Greenville, Greenville County.

Drainage area.- 293 square miles.

Records available.- January 1942 to September 1948.

Extremes.- Maximum discharge during year, 3,140 second-feet Aug. 5 (gage height, 6.87 feet); minimum, 23 second-feet Sept. 5 (gage height, 1.87 feet); minimum daily, 156 second-feet Oct. 4, 5.

1942-48: Maximum discharge, 7,720 second-feet Jan. 8, 1946 (gage height, 14.48 feet); minimum, 8 second-feet July 21, 1946 (gage height, 1.67 feet); minimum daily, 124 second-feet Oct. 21, 1945.

Remarks.- Records good. Low and medium flow regulated by power plant at Saluda Lake. Capacity of reservoir insufficient to affect monthly figures of runoff.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 6 to Sept. 30)

2.4	150	3.8	822
2.7	249	4.5	1,340
3.0	370	5.5	2,160
3.4	572	6.3	2,740

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	194	436	374	367	673	607	1,810	542	470	322	384	249
2	164	542	461	642	544	602	1,550	496	406	299	411	257
3	162	1,300	390	607	496	871	1,300	496	422	272	416	257
4	156	1,340	378	336	522	667	1,020	496	390	268	1,710	253
5	156	758	438	436	501	673	962	584	414	266	2,740	330
6	168	607	353	458	572	630	962	550	340	246	1,720	570
7	171	624	361	369	766	1,440	1,010	501	410	237	830	1,300
8	171	530	402	427	660	1,800	1,100	501	372	230	545	940
9	235	590	404	367	790	1,380	998	484	366	230	539	584
10	234	491	417	384	585	962	927	442	365	245	462	506
11	260	764	400	355	679	892	843	460	350	392	365	422
12	238	1,010	416	434	952	771	892	486	276	708	408	360
13	193	721	376	474	2,020	736	829	436	287	633	580	394
14	190	642	398	836	1,880	679	809	496	362	440	381	284
15	226	728	397	596	1,630	679	717	426	344	418	465	387
16	225	1,110	812	548	1,300	688	782	390	385	963	455	299
17	538	822	838	496	968	998	660	454	321	879	360	307
18	988	642	578	486	892	950	723	416	314	544	366	303
19	493	642	508	406	719	781	654	384	246	496	303	253
20	393	601	491	465	818	962	624	380	336	496	386	260
21	422	595	486	462	616	834	697	472	319	460	307	291
22	315	491	384	423	777	842	618	331	330	590	307	307
23	295	551	446	406	679	1,220	630	344	434	532	564	257
24	280	644	424	471	642	1,630	618	404	291	331	434	287
25	494	642	364	419	630	1,340	636	481	321	374	307	295
26	479	572	466	385	648	969	539	401	287	348	388	257
27	319	486	369	465	636	1,270	607	507	264	284	307	238
28	786	481	403	448	607	1,650	578	613	417	307	253	242
29	1,340	486	388	542	501	1,490	491	630	384	370	291	283
30	700	408	340	450	-	1,170	548	613	422	336	295	317
31	474	-	416	629	-	1,170	-	613	-	414	249	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	11,459	1,340	156	370	1.26	1.45
November	20,256	1,340	408	675	2.30	2.57
December	13,678	838	340	441	1.51	1.74
Calendar year 1947	172,968	2,820	134	474	1.62	21.94
January	14,589	836	336	471	1.61	1.86
February	23,703	2,020	496	817	2.79	3.01
March	31,353	1,800	602	1,011	3.45	3.98
April	25,134	1,810	491	838	2.86	3.19
May	14,829	630	331	478	1.63	1.88
June	10,645	470	246	355	1.21	1.35
July	12,930	963	230	417	1.42	1.64
August	17,528	2,740	249	565	1.93	2.22
September	11,289	1,300	238	376	1.28	1.43
Water year 1947-48	207,393	2,740	156	567	1.94	26.32

Peak discharge (base, 2,800 sec.-ft.).- Aug. 5 (6:30 p.m.) 3,140 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. Datum of gage is 727.75 feet above mean sea level, unadjusted.

Drainage area.- 405 square miles.

Records available.- September 1929 to September 1948.

Average discharge.- 19 years, 762 second-feet.

Extremes.- Maximum discharge during year, 3,340 second-feet Aug. 6 (gage height, 4.28 feet); minimum, 9 second-feet Oct. 5 (gage height, 0.70 foot); minimum daily, 195 second-feet Oct. 5.

1929-48: Maximum discharge, 13,300 second-feet Apr. 7, 1936 (gage height, 10.26 feet); minimum, 9 second-feet Sept. 22, Oct. 5, 1947 (gage height, 0.70 foot); minimum daily, 62 second-feet Oct. 25, 1931.

Remarks.- Records good. Low and medium flow regulated by power plants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions.- W 872: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 2, Sept. 9-30				Nov. 3 to Sept. 8			
1.3	162	2.1	620	1.5	252	3.0	1,550
1.5	250	2.5	960	1.8	423	3.5	2,200
1.8	413	3.0	1,480	2.1	637	4.3	3,340
				2.5	994		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	218	498	592	507	926	744	2,540	718	842	534	598	337
2	241	964	505	688	834	897	2,270	710	584	398	629	350
3	222	2,140	554	805	702	1,100	1,810	710	599	364	598	355
4	214	2,000	513	686	702	1,010	1,470	710	576	344	2,230	361
5	195	1,410	544	547	694	869	1,350	735	602	346	3,260	411
6	223	838	591	694	779	879	1,250	779	483	333	2,780	611
7	213	863	478	511	907	2,120	1,400	805	526	314	1,420	1,180
8	351	909	498	567	1,160	2,540	2,000	669	547	292	806	1,490
9	381	770	567	460	1,200	2,140	1,520	686	511	300	764	812
10	328	722	620	533	1,080	1,570	1,300	618	497	312	653	675
11	350	1,350	628	432	936	1,240	1,210	622	490	494	526	576
12	328	1,800	638	559	1,690	1,080	1,200	653	404	686	576	451
13	266	1,170	525	644	2,820	1,040	1,110	599	392	916	710	539
14	275	892	466	1,000	2,750	954	1,090	661	478	602	601	419
15	236	1,130	554	983	2,270	897	1,060	569	455	702	595	398
16	343	1,500	926	669	1,880	965	1,040	607	478	1,170	629	445
17	646	1,260	1,200	686	1,460	1,500	866	558	475	1,340	540	389
18	1,160	912	891	629	1,180	1,380	914	554	423	776	500	395
19	840	911	694	645	1,060	1,130	936	540	378	629	478	354
20	471	814	694	532	975	1,180	842	511	386	660	450	344
21	518	796	646	645	916	1,240	851	490	436	561	481	338
22	445	720	587	542	1,020	1,060	879	462	404	631	423	378
23	395	689	592	591	916	1,780	833	450	511	702	552	389
24	368	866	524	584	879	2,400	814	497	460	484	653	332
25	488	934	569	614	851	1,940	833	809	367	378	483	372
26	598	771	599	504	851	1,500	788	753	376	454	463	354
27	451	672	511	629	869	1,750	796	841	327	367	481	311
28	826	653	569	645	805	2,070	727	842	514	350	376	311
29	1,480	646	471	779	727	2,140	735	994	736	422	350	343
30	1,190	576	504	694	-	1,580	702	1,020	591	504	416	389
31	656	-	511	860	-	2,150	-	860	-	411	373	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,916	1,480	195	481	1.19	1.37
November	30,176	2,140	498	1,006	2.48	2.77
December	18,861	1,200	471	608	1.50	1.73
Calendar year 1947	234,984	4,440	192	644	1.59	21.56
January	19,864	1,000	432	641	1.58	1.82
February	33,839	2,820	694	1,167	2.88	3.11
March	44,845	2,540	744	1,447	3.57	4.12
April	35,136	2,540	702	1,171	2.89	3.22
May	21,042	1,020	450	679	1.68	1.94
June	14,848	842	327	495	1.22	1.36
July	16,766	1,340	292	541	1.34	1.54
August	24,394	3,260	350	787	1.94	2.24
September	14,449	1,490	311	482	1.19	1.33
Water year 1947-48	289,146	3,260	195	790	1.95	26.55

Peak discharge (base, 3,000 sec.-ft.).- Feb. 13 (7:45 p.m.) 3,040 sec.-ft.; Aug. 6 (1 a.m.) 3,340 sec.-ft.

Saluda River near Ware Shoals, S. C.

Location.- Water-stage recorder, lat. 34°23', long. 82°14', 2 miles southeast of Ware Shoals, Greenwood County, 2½ miles downstream from Ware Shoals Dam, and 5 miles upstream from Turkey Creek.

Drainage area.- 569 square miles.

Records available.- March 1939 to September 1948.

Extremes.- Maximum discharge during year, 5,410 second-feet July 16; maximum gage height, 10.59 feet Mar. 7; minimum discharge, 11 second-feet July 9; minimum daily, 117 second-feet July 4, 10.

1939-48: Maximum discharge, 20,600 second-feet Aug. 13, 1940 (gage height, 20.48 feet), by computation of flow over dam; minimum, 3 second-feet Sept. 18, 1939; minimum daily, 11 second-feet Oct. 12, 19, 1941.

Remarks.- Records fair. Low and medium flow regulated by power plants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions (water year).- W 892: 1939.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	808	867	650	876	1,260	3,720	815	1,430	628	291	626
2	266	2,010	815	688	1,480	1,300	3,060	582	970	676	1,010	528
3	221	4,290	680	1,300	988	1,340	2,460	1,050	872	811	706	487
4	277	3,000	654	428	962	1,350	1,920	966	561	117	1,700	391
5	172	2,240	624	1,160	828	1,280	2,080	984	1,140	298	3,480	341
6	207	1,500	867	924	885	1,280	1,800	667	479	536	3,660	921
7	262	1,220	378	730	1,300	3,890	1,530	1,300	797	393	2,510	984
8	231	2,000	740	687	1,260	3,840	2,410	984	881	364	1,150	1,860
9	1,280	863	828	656	2,240	2,940	2,300	578	779	228	1,440	1,640
10	356	1,280	837	908	1,750	2,410	1,920	966	727	117	975	859
11	624	2,980	740	441	1,630	1,920	1,530	850	706	528	784	784
12	262	3,300	988	613	2,170	1,480	2,080	859	553	1,350	483	169
13	287	2,080	684	1,270	4,030	1,480	1,860	815	367	881	736	607
14	390	1,540	397	1,770	4,290	1,070	1,640	797	491	1,040	1,050	775
15	360	1,600	903	934	3,240	1,530	1,580	957	719	806	401	378
16	440	1,630	1,200	1,250	2,880	1,530	1,270	599	663	3,980	1,180	401
17	1,100	2,140	1,560	1,140	2,240	1,970	1,420	650	401	1,750	912	382
18	1,340	1,580	1,320	532	1,920	1,920	894	736	590	1,020	664	641
19	697	1,100	885	771	1,640	1,700	1,530	701	569	1,320	566	245
20	1,280	1,180	970	854	1,420	1,580	1,300	646	416	845	840	491
21	448	1,020	420	749	1,240	1,070	1,030	401	345	684	730	378
22	711	1,160	1,140	706	908	1,700	1,140	749	680	762	318	364
23	728	436	841	793	1,800	1,800	1,180	352	360	693	714	487
24	623	1,340	607	1,050	1,220	2,700	1,110	499	676	908	890	646
25	1,170	1,550	393	483	1,160	2,520	697	903	607	316	850	603
26	366	1,020	1,100	881	1,030	2,140	1,210	1,020	451	532	748	224
27	1,140	916	1,080	810	1,180	1,920	1,120	775	451	744	483	238
28	1,650	582	420	908	1,110	2,360	1,020	1,140	262	397	761	463
29	2,360	1,160	671	841	436	2,700	921	930	823	459	254	436
30	1,920	397	753	1,180	-	2,300	894	876	1,160	412	382	420
31	1,220	-	693	1,510	-	2,740	-	1,480	-	590	654	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	22,633	2,360	172	730	1.28	1.48
November	47,922	4,290	397	1,597	2.81	3.14
December	25,055	1,560	378	808	1.42	1.64
Calendar year 1947	329,036	6,970	129	901	1.58	21.53
January	27,617	1,770	428	891	1.57	1.81
February	48,113	4,290	436	1,659	2.92	3.15
March	61,020	3,890	1,070	1,968	3.46	3.99
April	48,626	3,720	697	1,621	2.85	3.18
May	25,627	1,480	352	827	1.45	1.67
June	19,926	1,430	262	664	1.17	1.30
July	23,985	3,980	117	774	1.36	1.57
August	31,322	3,660	254	1,010	1.78	2.05
September	17,769	1,860	169	592	1.04	1.16
Water year 1947-48	399,615	4,290	117	1,092	1.92	26.14

Peak discharge (base, 4,000 sec.-ft.).- Nov. 2 (11 p.m.) 5,000 sec.-ft.; Nov. 11 (8:15 p.m.) 4,740 sec.-ft.; Feb. 14 (8:30 a.m.) 4,810 sec.-ft.; Mar. 7 (4 p.m.) 5,340 sec.-ft.; Mar. 31 (9:15 p.m.) 4,420 sec.-ft.; July 16 (2:30 p.m.) 5,410 sec.-ft.

Lake Greenwood near Chappells, S. C.

Location.- Water-stage recorder, lat. 34°10', long. 81°54', at left upstream end of dam on Saluda River, 0.7 mile upstream from Wilson Creek and 2.4 miles west of Chappells, Newberry County. Datum of gage is 400.00 feet above mean sea level, datum of 1929 (levels by Dan T. Duncan Engineering Co.); gage readings have been reduced to elevations above mean sea level.

Drainage area.- 1,150 square miles.

Records available.- May 1940 to September 1948.

Extremes.- Maximum elevation during year, 441.68 feet Mar. 31; minimum, 424.42 feet Oct. 16. 1940-48: Maximum elevation, 441.70 feet Feb. 24, 1946; minimum elevation since normal reservoir level was first reached, that of Oct. 16, 1947.

Remarks.- Lake is formed by earth dam; storage began in May 1940; dam completed in 1940. Usable capacity, about 8,330,000,000 cubic feet between elevations 420.0 feet (limit of draw-down) and 441.5 feet (top of 1½-foot flashboards on top of spillway gates) above mean sea level. Dead Storage is about 3,500,000,000 cubic feet. Figures given herein represent usable contents. Elevation of spillway crest is 415.0 feet above mean sea level. Water is used for generation of power.

Revisions.- W 972: Drainage area.

Elevation, in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25.93	28.89	34.50	32.61	31.07	38.16	41.44	39.88	39.93	36.16	34.27	31.30
2	25.62	29.10	34.28	32.59	31.42	38.14	41.45	39.95	39.98	35.91	34.23	30.88
3	25.30	30.30	33.99	32.49	31.46	38.08	41.45	40.00	39.87	35.76	34.15	30.38
4	25.10	31.55	33.66	32.70	31.32	38.07	41.51	39.93	39.68	35.83	34.27	30.04
5	25.18	32.20	33.31	32.66	31.16	38.01	41.39	39.91	39.59	35.82	34.60	30.06
6	25.06	32.63	33.07	32.53	30.99	37.95	41.27	39.83	39.60	35.86	35.00	30.28
7	24.86	32.88	33.11	32.30	30.97	39.13	41.18	39.83	39.52	35.82	35.36	30.39
8	24.72	33.53	33.01	32.03	31.68	40.53	41.46	39.71	39.40	35.72	35.66	30.33
9	24.77	34.03	32.80	31.78	32.78	41.09	41.61	39.76	39.27	35.67	35.69	30.37
10	24.84	34.20	32.63	31.60	33.66	41.31	41.56	39.77	39.08	35.61	35.59	30.40
11	24.74	34.57	32.55	31.71	34.00	41.32	41.48	39.69	38.89	35.67	35.42	30.42
12	24.91	35.70	32.41	31.62	34.30	41.20	41.50	39.68	38.72	35.81	35.20	30.51
13	24.85	36.28	32.29	31.53	35.20	41.08	41.36	39.76	38.72	35.76	34.99	30.39
14	24.73	36.28	32.38	31.79	36.57	41.08	41.20	39.68	38.66	35.60	34.80	30.17
15	24.58	36.28	32.38	31.80	37.64	41.07	41.04	39.62	38.47	35.47	34.71	29.83
16	24.44	36.68	32.42	31.63	38.24	40.91	40.80	39.69	38.33	35.13	34.61	29.47
17	24.50	36.97	32.42	31.58	38.45	40.99	40.58	39.67	38.12	35.67	34.50	29.10
18	24.77	36.94	32.37	31.80	38.52	40.98	40.53	39.53	37.90	35.87	34.27	28.86
19	25.15	36.68	32.26	31.74	38.47	40.87	40.52	39.39	37.76	35.93	34.02	28.88
20	25.40	36.32	32.12	31.55	38.42	40.76	40.48	39.22	37.76	35.87	33.84	28.79
21	25.50	36.00	32.27	31.33	38.30	40.80	40.36	39.02	37.65	35.66	33.67	28.67
22	25.41	35.59	32.23	31.07	38.42	40.87	40.24	38.86	37.47	35.41	33.72	28.47
23	25.33	35.53	32.06	30.77	38.52	40.89	40.16	38.89	37.28	35.18	33.63	28.44
24	25.63	35.49	31.93	30.63	38.44	40.97	40.12	38.84	37.08	35.88	33.39	28.33
25	26.12	35.35	32.18	30.81	38.25	41.05	40.23	38.83	36.85	35.66	33.15	28.26
26	26.57	35.18	32.59	30.73	38.11	41.03	40.26	38.93	36.62	35.38	32.81	28.29
27	26.65	35.01	32.90	30.51	37.97	41.05	40.27	38.97	36.57	35.12	32.52	28.17
28	27.02	34.85	33.16	30.30	37.94	41.37	40.21	39.00	36.56	34.86	32.23	28.05
29	27.80	34.69	33.18	30.16	38.08	41.63	40.11	39.19	36.34	34.68	32.25	28.09
30	28.59	34.68	33.01	30.07	-	41.61	39.99	39.63	36.29	34.43	32.08	28.07
31	29.00	-	32.80	30.43	-	41.49	-	39.88	-	34.19	31.70	-

Monthly elevation and contents, water year October 1947 to September 1948

Date	Elevation (feet)†	Contents (billions of cubic feet)	Change in contents during month (equivalent, second-feet)
Sept.30	426.08	1.91	-
Oct. 31	428.99	2.94	+385
Nov. 30	434.59	5.20	+872
Dec. 31	432.67	4.37	-310
Calendar year 1947	-	-	+53
Jan. 31	430.79	3.62	-280
Feb. 29	438.13	6.78	+1,260
Mar. 31	441.68	8.41	+609
Apr. 30	439.90	7.59	-316
May 31	439.91	7.60	+4
June 30	436.24	5.93	-644
July 31	434.23	5.04	-332
Aug. 31	431.51	3.90	-426
Sept.30	427.99	2.58	-509
Water year 1947-48	-	-	+21

†Elevation at 12 p.m.

Note.- Add 400 feet to obtain elevation above mean sea level.

Saluda River at Chappells, S. C.

Location.- Water-stage recorder, lat. 34°11', long. 81°52', at bridge on State Highway 39 at Chappells, Newberry County, 7 miles downstream from dam at Lake Greenwood and 8¼ miles upstream from Little River. Datum of gage is 363.89 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,350 square miles.

Records available.- May 1927 to September 1948. Gage-height records collected at practically same site since 1905 are contained in reports of U. S. Weather Bureau.

Average discharge.- 21 years, 2,002 second-feet.

Extremes.- Maximum discharge during year, 14,200 second-feet Apr. 1 (gage height, 19.52 feet); minimum, 216 second-feet Aug. 1; minimum daily, 410 second-feet July 4.

1927-48: Maximum discharge, 63,700 second-feet Oct. 2, 1949 (gage height, 31.5 feet), from rating curve extended above 27,000 second-feet on basis of velocity-area studies; minimum, 8 second-feet Oct. 29, 1939; minimum daily, 8 second-feet Oct. 29, 1939.

Maximum stage known, 35.7 feet (present datum) Aug. 26, 1908, from reports of U. S. Weather Bureau.

Remarks.- Records good. Flow regulated by Lake Greenwood (see preceding page). Records of water analysis for the water year 1948 are given in Water-Supply Paper 1132.

Revisions.- W 972: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.7	395	11.0	4,360
2.7	677	13.0	5,680
4.0	1,130	15.0	7,400
5.5	1,730	17.5	10,100
8.0	2,860	18.5	11,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,620	1,820	2,260	2,450	1,440	1,890	11,600	1,670	2,010	2,260	424	2,590
2	1,630	1,660	2,750	2,830	2,140	3,000	10,700	607	1,980	2,320	1,620	2,580
3	1,610	1,880	2,810	2,090	2,360	2,980	5,520	1,570	2,210	1,180	2,430	2,710
4	646	1,840	2,790	942	2,680	2,840	3,370	2,040	2,200	410	2,580	1,540
5	480	1,580	2,850	1,800	2,710	2,850	3,920	1,970	1,590	479	2,460	706
6	978	1,480	2,050	2,530	2,820	2,810	3,670	2,040	812	807	2,490	2,810
7	1,270	1,720	1,100	2,510	2,330	5,170	3,770	2,330	1,640	934	1,600	2,500
8	1,270	2,240	1,830	2,510	2,360	5,380	4,360	1,840	2,110	920	678	2,220
9	1,390	1,730	2,600	2,500	4,820	4,720	4,360	615	2,060	885	1,820	1,980
10	1,650	1,890	2,780	1,680	5,760	4,360	3,820	1,510	2,110	844	2,030	1,510
11	699	3,510	2,990	688	3,880	4,030	4,130	1,950	2,110	1,040	1,920	831
12	540	4,980	2,930	1,910	3,410	3,720	3,630	2,030	1,580	2,110	2,100	530
13	977	3,950	2,310	3,110	3,770	3,320	3,980	2,140	598	2,570	2,080	1,610
14	1,170	3,540	1,050	3,390	3,820	1,730	3,520	2,130	1,580	2,280	2,010	2,170
15	1,380	3,900	2,180	2,980	2,480	2,760	3,520	1,440	2,080	2,300	1,060	2,170
16	1,270	2,280	3,070	2,710	2,830	3,870	3,470	595	1,860	2,280	1,820	2,180
17	1,250	2,790	2,910	1,900	2,970	6,950	3,210	1,610	1,950	1,580	2,220	2,150
18	868	3,370	2,830	742	3,000	5,380	1,610	2,000	1,940	834	2,180	1,370
19	506	4,360	2,730	1,960	3,040	4,200	2,350	2,000	1,490	1,820	2,300	588
20	958	3,870	1,870	2,730	2,940	3,590	2,530	2,100	608	2,280	2,620	1,130
21	1,200	3,670	1,630	2,910	2,680	1,720	2,450	2,050	1,670	2,210	1,400	1,420
22	1,190	3,560	2,480	2,780	2,000	2,650	2,380	1,490	2,010	2,270	563	1,440
23	1,290	1,770	2,810	2,770	2,680	4,460	2,260	533	2,010	2,290	1,670	1,440
24	2,640	2,870	1,680	1,940	3,120	4,780	1,830	1,370	2,020	2,410	2,250	1,420
25	1,560	3,720	1,210	984	3,080	4,140	836	1,740	2,180	1,800	2,240	1,110
26	760	3,080	1,390	1,990	2,860	3,870	1,610	1,740	1,750	2,030	2,370	533
27	1,150	2,370	1,230	3,150	2,760	3,420	1,980	1,800	662	2,220	2,400	1,170
28	1,200	2,550	752	3,380	2,120	1,930	2,040	1,810	2,030	2,200	1,440	1,460
29	1,150	2,020	1,750	3,200	720	2,900	2,140	1,610	2,640	2,270	542	1,360
30	1,150	1,640	2,470	3,380	-	3,720	2,080	1,280	2,300	2,230	1,760	1,380
31	1,340	-	2,550	3,170	-	5,060	-	1,880	-	1,450	2,570	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	36,792	2,640	480	1,187		
November	81,640	4,980	1,480	2,721		
December	68,642	3,070	752	2,214		
Calendar year 1947	761,884	7,700	402	1,841		
January	73,616	3,390	688	2,375		
February	83,580	5,760	720	2,882		
March	114,200	6,950	1,720	3,684		
April	106,646	11,600	836	3,555		
May	51,490	2,330	533	1,661		
June	53,790	2,640	598	1,793		
July	53,513	2,570	410	1,726		
August	57,647	2,620	424	1,860		
September	48,608	2,810	530	1,620		
Water year 1947-48	830,164	11,600	410	2,268		

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Saluda River near Silverstreet, S. C.

Location.- Water-stage recorder, lat. 34°11', long. 81°44', 200 feet upstream from Higgins Ferry Bridge on State Highway 19, 1 mile downstream from Little River, and 2½ miles south of Silverstreet, Newberry County. Datum of gage is 345.13 feet above mean sea level, unadjusted.

Drainage area.- 1,620 square miles.

Records available.- January 1927 to September 1948.

Average discharge.- 21 years, 2,305 second-feet.

Extremes.- Maximum discharge during year, 14,600 second-feet Apr. 2 (gage height, 20.40 feet); minimum daily, 364 second-feet Oct. 5.

1927-48: 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, 49 second-feet July 4, 1940 (gage height, 2.88 feet); minimum daily, 49 second-feet July 4, 1940.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow regulated by Lake Greenwood (see p. 196).

Revisions.- W 972: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,730	2,180	2,000	2,870	3,090	1,850	9,400	1,920	2,170	2,340	999	2,870
2	1,670	2,020	3,000	3,620	2,360	3,250	14,100	946	1,900	2,380	1,620	2,830
3	1,690	3,200	3,060	2,980	3,200	3,670	9,940	1,480	2,100	1,720	2,690	3,010
4	1,070	2,940	3,060	1,120	3,130	3,260	4,190	2,200	1,930	900	3,620	2,550
5	364	2,050	3,130	1,640	3,060	3,220	4,190	2,090	1,600	900	2,890	1,130
6	744	1,820	2,660	2,800	3,340	3,220	3,820	2,200	1,070	996	2,840	5,430
7	1,220	1,900	1,190	2,870	3,200	7,880	4,100	2,170	1,410	1,240	2,000	5,250
8	1,290	3,480	1,540	2,800	3,760	9,600	5,590	2,120	1,950	1,320	809	2,700
9	1,510	a3,000	2,680	2,740	6,680	7,890	6,120	1,080	1,920	1,260	1,570	2,350
10	1,760	a2,800	3,000	2,310	9,390	6,090	4,780	1,500	1,890	1,350	2,090	1,740
11	1,280	a4,200	3,760	862	6,810	4,890	4,550	2,060	2,000	1,410	2,000	1,170
12	a426	a7,000	3,480	1,480	4,790	4,380	4,300	2,290	1,760	2,260	2,080	754
13	a751	a5,000	3,000	3,510	5,860	3,910	4,920	2,890	1,140	2,820	1,990	1,440
14	1,100	a4,200	1,570	4,640	6,490	2,480	3,990	2,530	1,470	2,490	2,090	2,270
15	1,380	a4,400	1,870	3,900	4,780	2,850	3,900	1,810	2,030	2,320	1,330	2,270
16	1,320	a3,200	3,820	3,400	3,410	4,260	3,820	1,080	1,910	3,350	1,750	2,370
17	1,380	a3,400	3,540	2,480	3,510	7,690	3,630	1,540	1,940	2,930	2,380	2,330
18	1,250	a3,800	3,260	1,070	3,410	7,830	1,990	2,030	1,860	1,330	2,230	1,830
19	463	a5,000	3,060	1,570	3,410	5,160	2,200	1,970	1,630	1,790	2,330	828
20	780	a4,400	2,540	3,000	3,250	4,200	2,580	2,060	1,070	2,300	2,850	1,060
21	1,190	a4,000	1,800	3,400	3,120	2,390	2,640	1,940	1,640	2,130	2,110	1,460
22	1,180	a3,800	2,900	3,260	2,470	2,710	2,600	1,780	2,010	2,240	909	1,520
23	1,270	a2,400	3,340	3,130	2,900	4,880	2,380	1,210	1,950	2,240	1,490	1,540
24	2,710	a3,800	2,430	2,770	3,540	6,430	1,960	1,450	1,860	2,500	2,370	1,610
25	3,170	a4,400	1,660	1,130	3,430	4,960	1,280	1,940	2,030	1,890	2,360	1,510
26	1,660	3,540	2,480	1,690	3,190	4,200	1,610	1,870	1,830	2,030	2,570	788
27	1,190	2,800	1,820	3,480	3,040	3,810	1,960	2,100	1,230	2,290	2,620	1,090
28	1,350	2,580	1,120	4,180	2,640	2,590	1,910	1,900	1,920	2,260	2,050	1,600
29	1,380	2,510	1,460	4,040	1,180	2,730	2,180	2,680	2,870	2,660	857	1,510
30	1,270	1,730	2,800	4,080	-	3,920	2,110	2,640	2,380	2,360	1,700	1,500
31	1,270	-	2,870	5,170	-	4,740	-	2,380	-	1,970	2,780	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	40,818	3,170	364	1,317		
November	101,560	7,000	1,730	3,385		
December	79,900	3,820	1,120	2,577		
Calendar year 1947	772,640	12,300	364	2,117		
January	87,992	5,170	862	2,838		
February	112,440	9,390	1,180	3,877		
March	140,940	9,600	1,850	4,546		
April	122,740	14,100	1,280	4,091		
May	59,856	2,890	946	1,931		
June	54,470	2,870	1,070	1,816		
July	61,976	3,350	900	1,999		
August	63,974	3,620	809	2,064		
September	60,310	5,430	754	2,010		
Water year 1947-48	986,976	14,100	364	2,697		

a No gage-height record; discharge computed on basis of weather records and records for station at Chappells.

Note.- Backwater from Lake Murray Oct. 1-8, 12, 13, 19, Nov. 28 to Dec. 1, Dec. 7, 25, 27-29, Jan. 4, 5, 11, 12, 18, 19, 25, 26, Feb. 12 to Sept. 30; discharge computed by using fall as determined from records for Lake Murray near Columbia as a factor.

Lake Murray near Columbia, S. C.

Location.- Water-stage recorder, lat. 34°03', long. 81°13', in intake tower 500 feet upstream from dam on Saluda River, 10 miles upstream from confluence of Saluda and Broad Rivers at Columbia, Richland County. Datum of gage is 0.64 foot below mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,420 square miles.

Records available.- August 1929 to September 1948.

Extremes.- Maximum gage height during year, 360.21 feet Apr. 8; minimum, 346.97 feet Nov. 2.

1929-48: Maximum gage height, 361.51 feet Apr. 10, 1936; minimum gage height since generation of power was started, 320.96 feet Dec. 23, 1941.

Remarks.- Lake is formed by earth dam; storage began Aug. 31, 1929; dam completed in 1930. Usable capacity, 70,300,000,000 cubic feet between gage heights 300.0 feet (limit of draw-down) and 360.0 feet (maximum normal lake level). Dead storage, 21,800,000,000 cubic feet. Figures given herein represent usable contents. Gage height of one spillway crest (completed in 1946), 330 feet with top of gates 362 feet; gage height or other spillway crest 340 feet with top of gates 365 feet. Water is used for generation of power.

Revisions.- W 972: Drainage area.

Gage height, in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49.82	47.05	50.02	50.03	49.70	54.18	59.25	58.75	59.29	57.92	57.66	55.75
2	49.66	47.17	49.86	50.11	49.80	54.23	59.67	58.72	59.28	57.91	57.65	55.69
3	49.47	47.58	49.67	50.10	49.78	54.39	59.92	58.70	57.91	57.91	57.66	55.60
4	49.30	47.73	49.50	50.15	49.76	54.48	59.95	58.68	59.19	57.92	57.84	55.62
5	49.26	47.81	49.33	50.11	49.76	54.46	59.99	58.72	59.13	57.92	57.92	55.70
6	49.19	47.84	49.20	49.95	49.79	54.48	60.04	58.70	59.08	57.90	57.95	55.91
7	48.97	47.81	49.10	49.80	49.90	55.34	60.03	58.83	59.02	57.85	58.02	56.42
8	48.76	47.98	48.98	49.69	50.39	56.08	60.10	58.80	58.93	57.80	58.03	56.59
9	g48.63	48.08	48.79	49.53	51.17	56.34	60.04	58.78	58.86	57.79	58.00	56.58
10	g48.51	48.11	48.62	49.45	51.99	56.62	60.05	58.76	58.81	57.76	57.84	56.52
11	g48.44	48.30	48.54	49.46	52.44	56.74	60.08	58.70	58.73	57.83	57.65	56.46
12	g48.47	48.77	48.47	49.38	52.72	56.79	60.07	58.70	58.66	57.88	57.48	56.46
13	g48.44	48.99	48.40	49.34	53.11	56.81	60.01	58.76	58.60	57.95	57.26	56.42
14	g48.26	49.07	48.40	49.58	53.43	56.93	59.99	58.80	58.56	57.99	57.03	56.30
15	48.04	49.19	48.38	49.57	53.69	56.99	59.91	58.79	58.49	58.04	56.92	56.20
16	47.86	49.47	48.52	49.46	53.84	56.99	59.78	58.80	58.41	58.12	57.10	56.08
17	47.76	49.61	48.58	49.38	53.87	57.44	59.76	58.74	58.39	58.22	57.16	55.97
18	47.71	49.64	48.58	49.40	53.86	57.76	59.79	58.64	58.38	58.26	57.13	55.93
19	47.76	49.80	48.51	49.37	53.84	57.90	59.82	58.57	58.35	58.30	57.07	55.94
20	47.76	49.97	48.49	49.27	53.83	57.98	59.78	58.51	58.36	58.31	57.02	55.89
21	47.60	50.08	48.72	49.31	53.83	58.10	59.71	58.48	58.33	58.29	56.94	55.73
22	47.44	50.17	49.18	49.28	54.01	58.18	59.60	58.42	58.27	58.21	56.92	55.55
23	47.28	50.27	49.22	49.17	54.09	58.25	59.47	58.40	58.21	58.13	56.88	55.38
24	47.18	50.39	49.27	49.14	54.06	58.50	59.40	58.34	58.15	58.09	56.72	55.24
25	47.31	50.49	49.50	49.15	54.04	58.60	59.39	58.27	58.08	58.13	56.57	55.09
26	47.42	50.47	49.86	49.13	54.07	58.67	59.38	58.57	58.02	58.12	56.37	55.01
27	47.43	50.40	50.00	49.01	54.07	58.74	59.24	58.58	58.00	57.96	56.21	54.92
28	47.37	50.37	50.06	48.96	54.12	58.92	59.07	58.59	58.00	57.83	56.07	54.77
29	47.34	50.19	50.08	48.96	54.20	58.99	58.91	58.70	57.96	57.78	56.04	54.73
30	47.29	50.08	50.05	48.98	-	59.03	58.81	59.07	57.92	57.72	55.97	54.66
31	47.20	-	50.04	49.39	-	59.07	-	59.24	-	57.66	55.86	-

g From graph based on 4 gage readings daily at powerhouse.
Note.- Add 300 feet to obtain gage height.

Monthly gage height and contents, water year October 1947 to September 1948

Date	Gage height (feet)†	Contents (billions of cubic feet)	Change in contents during month (equivalent, second-feet)
Sept. 30	349.90	50.60	-
Oct. 31	347.10	45.94	-1,740
Nov. 30	350.06	50.87	+1,900
Dec. 31	350.03	50.82	-19
Calendar year 1947	-	-	+479
Jan. 31	349.60	50.09	-273
Feb. 29	354.21	58.42	+3,320
Mar. 31	359.09	68.32	+3,700
Apr. 30	358.77	67.64	-262
May 31	359.28	68.74	+411
June 30	357.91	65.81	-1,130
July 31	357.65	65.28	-198
Aug. 31	355.77	61.45	-1,430
Sept. 30	354.58	59.13	-895
Water year 1947-48	-	-	+270

† Gage height at 12 p.m.

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 confluence with Broad River at Columbia, Richland County. Datum of gage is 149.46 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,510 square miles.

Records available.- August 1925 to September 1948.

Average discharge.- 23 years, 2,926 second-feet.

Extremes.- Maximum discharge during year, 20,400 second-feet Apr. 8 (gage height, 8.31 feet); minimum, 58 second-feet July 19; minimum daily, 95 second-feet July 11.

1925-48: 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 Bridge near Chapin; minimum, 11 second-feet July 13, 1930; minimum daily, 12 second-feet July 13, 1930.

Remarks.- Records good. Flow regulated by Lake Murray (see preceding page) and Lake Greenwood (see p. 196).

Revisions.- W 972: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Aug. 15, Sept. 28-30						Aug. 16 to Sept. 27			
1.0	92	1.6	265	3.5	2,590	1.7	320	3.3	2,080
1.1	110	1.8	385	4.0	3,680	2.0	521	4.0	3,440
1.2	131	2.0	540	4.5	5,030	2.3	773	4.7	5,190
1.3	155	2.3	810	6.0	9,950	2.7	1,200	5.2	6,650
1.4	184	2.6	1,150	7.0	13,900				
1.5	220	3.0	1,700						

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,960	3,050	5,770	3,710	1,160	3,730	8,230	3,100	3,010	2,380	248	3,940
2	5,240	1,030	6,570	4,780	3,900	4,810	8,780	1,050	2,730	2,410	3,480	3,950
3	6,230	1,940	7,390	2,440	4,540	4,060	7,410	3,050	4,630	867	1,960	4,130
4	2,540	1,950	6,620	1,130	5,200	4,290	6,550	2,990	4,310	278	1,440	1,690
5	582	1,810	7,020	5,480	4,740	4,990	4,560	3,090	3,560	212	1,140	500
6	4,860	2,410	6,130	6,660	4,210	2,800	5,480	3,110	1,430	1,300	891	351
7	5,810	2,860	2,400	6,030	1,720	2,000	6,370	2,480	4,120	1,540	1,120	604
8	5,760	2,320	6,230	6,060	916	4,470	13,600	3,260	4,110	1,220	1,400	2,650
9	5,240	817	6,620	6,280	6,240	6,100	6,930	812	3,490	1,350	3,630	3,290
10	3,080	3,090	7,820	2,770	4,440	5,250	5,540	3,080	3,710	264	6,320	3,810
11	372	5,740	7,020	861	4,620	5,150	6,730	3,140	4,100	95	6,280	1,050
12	410	5,090	6,970	6,180	5,250	5,900	5,830	2,590	3,180	1,290	6,770	568
13	4,350	4,050	7,410	6,260	6,190	1,620	6,630	2,530	1,330	1,810	7,360	3,890
14	5,570	5,570	2,630	5,260	2,930	874	7,050	3,000	3,800	1,330	6,740	4,570
15	5,400	3,780	5,790	6,460	770	4,390	8,540	1,490	4,200	906	538	4,470
16	5,610	1,240	4,910	6,620	4,100	5,900	6,920	781	2,620	1,110	3,140	4,270
17	3,360	3,130	4,510	2,780	5,020	5,120	3,100	4,720	2,320	512	3,550	4,020
18	686	5,080	5,040	833	4,660	4,830	578	4,100	2,760	118	3,380	578
19	512	4,460	4,990	5,050	4,560	5,790	3,160	3,220	1,450	1,320	3,850	370
20	3,110	3,430	1,940	6,400	4,940	2,130	4,000	3,030	466	2,780	4,440	4,470
21	4,580	2,550	2,520	6,650	1,790	710	5,000	2,970	3,120	3,020	2,540	4,980
22	4,970	3,080	6,010	5,780	1,300	4,900	6,160	2,000	4,290	4,010	438	4,930
23	4,460	1,080	4,910	6,270	4,720	5,860	5,250	1,250	3,580	3,960	4,160	3,990
24	4,680	4,270	819	3,280	5,470	5,260	1,730	4,020	4,180	964	5,860	4,480
25	681	5,440	934	894	4,160	4,910	584	3,860	3,880	388	5,770	3,110
26	545	5,820	1,060	5,580	4,080	5,070	4,460	3,290	1,810	4,500	5,970	724
27	3,360	3,040	1,450	7,190	3,940	1,600	6,390	2,560	413	5,810	6,390	5,210
28	2,820	6,270	823	6,230	1,250	499	6,140	2,320	3,690	4,850	3,040	6,080
29	2,290	6,920	2,900	5,960	990	2,600	5,230	1,120	4,300	4,560	418	5,620
30	3,000	2,260	3,760	6,040	-	3,740	4,000	882	2,380	4,700	4,070	5,080
31	3,620	-	4,220	3,120	-	5,460	-	2,150	-	1,340	4,620	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	108,688	6,230	372	3,506		
November	103,577	6,920	817	3,453		
December	143,186	7,820	819	4,619		
Calendar year 1947	922,320	7,820	112	2,527		
January	149,038	7,190	833	4,808		
February	107,806	6,240	770	3,717		
March	124,813	6,100	499	4,026		
April	170,932	13,600	578	5,698		
May	81,045	4,720	781	2,614		
June	92,969	4,630	413	3,099		
July	61,194	5,810	95	1,974		
August	110,953	7,360	248	3,579		
September	97,375	6,080	351	3,246		
Water year 1947-48	1,351,576	13,600	95	3,693		

Reedy River near Greenville, S. C.

Location.- Water-stage recorder, lat. 34°48'00", long. 82°21'55", 200 feet upstream from bridge on State Highway 291, 0.5 mile upstream from Brushy Creek, 2.5 miles upstream from dam at Conestee, and 3.9 miles southeast of Greenville, Greenville County.

Drainage area.- 48.6 square miles.

Records available.- November 1941 to September 1948.

Extremes.- Maximum discharge during year, 1,430 second-feet May 27 (gage height, 4.29 feet); minimum, 18 second-feet Oct. 24.
1941-48: Maximum discharge, 2,360 second-feet Jan. 7, 1946 (gage height, 6.25 feet); minimum, 12 second-feet Nov. 29, Dec. 3, 1941.

Remarks.- Records good except those for period of doubtful gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 31, Sept. 6-30				Apr. 1 to Sept. 5			
0.6	8	1.0	85	0.7	20	1.2	139
.7	22	1.2	142	.8	37	1.5	242
.8	40	1.5	242	.9	58	2.0	426
.9	61	2.2	504	1.0	82	2.5	626

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	48	53	77	94	63	330	68	112	74	74	32
2	21	208	48	78	80	152	165	56	73	58	57	32
3	19	285	46	61	71	101	124	58	68	52	99	27
4	32	160	55	53	68	85	101	70	67	48	593	48
5	26	93	54	50	66	75	96	72	65	41	240	59
6	22	68	55	48	124	130	101	71	56	35	85	172
7	24	95	44	48	101	432	139	87	57	32	60	115
8	39	102	53	46	169	241	226	65	63	30	48	74
9	38	66	50	46	121	133	148	56	54	35	45	50
10	29	57	91	53	109	107	112	54	50	66	43	42
11	31	303	66	46	101	93	126	52	50	103	43	50
12	31	200	59	42	492	85	106	54	52	106	56	37
13	29	94	59	118	480	85	96	68	45	54	72	33
14	29	68	55	71	300	75	90	59	43	52	76	36
15	26	233	112	55	189	75	87	58	45	48	52	36
16	49	147	133	53	121	158	82	52	45	88	45	36
17	203	88	79	57	101	206	87	50	43	77	45	36
18	d94	75	68	55	93	114	75	48	43	45	41	44
19	d39	78	61	48	85	112	75	48	52	43	60	34
20	d31	66	63	48	80	109	72	48	41	50	48	33
21	d27	61	55	57	84	90	70	48	42	41	45	33
22	d26	63	53	53	109	88	70	50	43	45	35	33
23	d22	92	53	50	80	452	70	43	43	41	35	47
24	d44	99	50	55	75	361	75	46	48	43	34	31
25	d44	78	57	48	78	150	68	90	39	32	34	39
26	d40	66	57	53	75	115	68	163	44	32	34	30
27	46	59	53	73	71	290	65	557	32	34	32	29
28	191	57	48	101	78	189	63	130	114	30	40	50
29	128	57	48	80	66	118	65	185	137	36	30	40
30	58	50	46	105	-	101	65	126	91	47	28	35
31	48	-	46	151	-	482	-	84	-	49	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,507	203	19	48.6	1.00	1.15
November	3,216	303	48	107	2.20	2.46
December	1,870	133	44	60.3	1.24	1.43
Calendar year 1947	25,431	1,190	15	69.7	1.43	19.46
January	1,979	151	42	63.8	1.31	1.51
February	3,761	492	66	130	2.67	2.88
March	5,067	482	63	163	3.35	3.86
April	3,117	330	63	104	2.14	2.39
May	2,716	557	43	87.6	1.80	2.08
June	1,757	137	32	58.6	1.21	1.35
July	1,567	106	30	50.5	1.04	1.20
August	2,261	593	28	72.9	1.50	1.73
September	1,393	172	27	46.4	.955	1.07
Water year 1947-48	30,211	593	19	82.5	1.70	23.11

Peak discharge (base, 1,000 sec.-ft.).- Mar. 31 (12 m.) 1,090 sec.-ft.; May 27 (2:30 a.m.) 1,430 sec.-ft.; Aug. 4 (9 a.m.) 1,300 sec.-ft.

d Doubtful gage-height record; discharge computed from graph based on partial record and weather records.

Reedy River near Ware Shoals, S. C.

Location.- Water-stage recorder, lat. 34°27', long. 82°12, 1¾ miles downstream from dam at Boyd's mill, 4.5 miles northeast of Ware Shoals, Greenwood County, and 10.5 miles upstream from Redburn Creek.

Drainage area.- 228 square miles.

Records available.- March 1939 to September 1948.

Extremes.- Maximum discharge during year, 2,680 second-feet Mar. 8 (gage height, 4.74 feet); minimum, 10 second-feet July 23, Sept. 26 (gage height, 0.68 foot); minimum daily, 14 second-feet Aug. 28.

1939-48: Maximum discharge, 7,750 second-feet Aug. 14, 1940 (gage height, 13.32 feet), by computation of flow over dam at Boyd's mill; minimum, 9 second-feet Sept. 30, Oct. 1, 1942; minimum daily, 14 second-feet Sept. 15, 22, 1940, Aug. 28, 1948.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Low and medium flow regulated by power plants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions (water year).- W 892: 1939. W 922: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1-29, Mar. 8 to May 28					
0.9	22	1.5	100	2.7	675
1.0	30	1.7	142	3.3	1,270
1.1	40	1.9	202	4.3	2,280
1.2	52	2.1	283		
1.3	66	2.4	448		

Oct. 30 to Mar. 7, May 29 to Sept. 30			
1.7	142	2.7	618
1.9	198	3.2	1,030
2.1	273	4.1	1,980
2.4	423		

Note.- Same as preceding table below 1.7 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	256	350	253	625	315	1,690	248	432	302	25	144
2	104	503	322	337	521	317	1,430	226	419	254	202	142
3	96	1,590	204	309	339	499	880	397	322	259	269	144
4	91	929	216	38	320	557	707	319	310	204	345	139
5	28	633	241	323	344	366	650	351	265	158	286	16
6	96	459	250	228	357	433	466	338	38	153	553	158
7	146	503	33	255	463	1,610	479	315	321	116	381	203
8	59	844	305	260	592	2,230	743	23	306	141	206	a240
9	279	633	154	217	843	1,180	1,070	192	256	147	198	a150
10	236	417	228	245	747	841	787	347	214	202	199	a190
11	197	862	430	45	625	729	684	357	200	203	201	a150
12	25	1,930	360	284	734	658	642	271	222	221	198	a130
13	182	906	331	459	1,980	576	503	363	25	210	145	a150
14	149	655	172	591	1,930	405	490	347	247	207	108	a150
15	94	633	359	350	1,230	410	425	206	246	256	27	a150
16	a150	715	434	318	731	505	424	36	174	322	265	a150
17	a200	662	477	290	618	680	338	364	151	336	215	a150
18	a320	536	372	32	511	834	432	342	206	199	216	a150
19	a340	358	320	357	406	729	392	270	116	204	204	a70
20	a200	338	259	325	368	639	365	164	21	208	147	a150
21	a150	329	158	308	410	461	337	167	216	201	118	128
22	a79	317	249	254	468	336	345	215	213	198	21	151
23	150	261	258	253	450	387	351	26	209	128	212	145
24	334	307	216	305	358	987	340	341	205	102	196	147
25	436	423	272	33	317	980	283	231	199	18	195	142
26	238	321	328	403	348	739	346	481	105	209	143	42
27	431	273	352	308	353	720	347	532	17	199	144	136
28	885	318	176	309	352	697	337	770	164	148	14	157
29	1,500	259	312	437	319	895	339	603	211	191	19	149
30	525	38	314	544	-	720	275	452	286	195	206	149
31	368	-	204	618	-	702	-	469	-	136	145	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	8,231	1,500	25	266	1.17	1.35
November	17,208	1,930	38	574	2.52	2.81
December	8,656	477	33	279	1.22	1.41
Calendar year 1947	112,676	3,080	22	309	1.36	18.37
January	9,288	618	32	300	1.32	1.52
February	17,659	1,980	317	609	2.67	2.88
March	22,137	2,230	315	714	3.13	3.61
April	16,897	1,690	275	563	2.47	2.76
May	9,763	770	23	315	1.38	1.59
June	6,316	432	17	211	.925	1.03
July	6,027	336	18	194	.851	.98
August	5,803	553	14	187	.820	.95
September	4,272	240	16	142	.623	.70
Water year 1947-48	132,257	2,230	14	361	1.58	21.59

Peak discharge (base, 2,200 sec.-ft.).- Nov. 12 (10:45 a.m.) 2,380 sec.-ft.; Feb. 13 (3:30 p.m.) 2,500 sec.-ft.; Mar. 8 (6 a.m.) 2,680 sec.-ft.; Apr. 1 (5 p.m.) 2,230 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and powerplant records at Boyd's mill.

Lakes Marion-Moultrie diversion canal near Pineville, S. C.

Location.- Two water-stage recorders in diversion canal. Upper gage, lat. 33°23'15", long. 80°08'25", 0.7 mile upstream from temporary bridge on State Highway 45 and 7.0 miles southwest of Pineville, Berkeley County; auxiliary gage, 3.9 miles downstream.

Records available.- February 1944 to September 1948.

Extremes.- Maximum daily discharge during year, 29,200 second-feet Feb. 26; minimum daily, 6,130 second-feet July 6.

1944-48: Maximum daily discharge, 33,200 second-feet Jan. 28, 1947; maximum daily reverse flow, 12,100 second-feet Feb. 9, 1947.

Remarks.- Records good. Discharge computed by using fall as determined by auxiliary water-stage recorder as a factor. Canal diverts water from Lake Marion to Lake Moultrie for generation of power and navigation. Water is discharged from power plant and navigation lock into West Branch Cooper River.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,330	13,700	21,300	22,300	25,500	25,300	26,700	19,400	14,700	21,700	13,400	f10,600
2	10,200	14,000	20,800	f23,900	25,100	25,400	25,400	18,400	15,700	12,700	12,800	f12,400
3	9,820	15,900	19,900	f22,800	25,900	25,100	22,200	17,600	16,200	12,400	13,200	f12,300
4	9,610	16,000	19,300	f22,000	27,000	25,200	19,000	16,800	16,000	9,560	12,100	f12,300
5	9,240	16,000	19,500	f21,700	27,900	24,900	20,100	17,600	14,700	7,150	13,200	f11,100
6	7,800	16,700	19,800	f20,700	28,100	25,200	23,900	16,700	11,600	6,130	13,800	f10,600
7	7,270	17,300	19,300	f21,000	28,000	25,900	25,700	18,600	11,200	8,290	14,600	10,300
8	7,910	19,700	19,300	f21,900	27,300	25,900	26,000	16,900	12,900	8,980	15,500	12,200
9	9,450	19,800	18,300	22,600	26,300	26,500	25,900	14,300	14,100	10,200	15,900	13,800
10	9,720	19,900	18,700	22,900	27,600	25,100	25,100	14,100	13,400	17,800	16,900	15,100
11	10,200	21,400	19,300	22,200	27,700	23,100	24,800	14,100	13,700	17,500	18,000	15,200
12	9,650	23,600	19,900	22,100	27,700	24,300	25,400	12,900	13,900	9,120	18,800	14,300
13	10,400	24,100	20,300	21,600	27,300	26,400	25,400	15,200	12,100	10,600	18,400	13,700
14	11,200	25,000	19,900	22,500	26,200	28,400	24,600	15,000	11,800	10,800	18,000	13,300
15	9,910	26,100	20,200	22,300	21,700	28,200	24,200	14,700	12,700	12,000	16,300	13,200
16	10,700	25,100	21,500	22,900	20,300	27,700	23,900	13,600	12,900	12,600	15,100	13,200
17	11,000	23,500	21,900	23,900	19,400	26,700	24,000	13,900	12,200	12,600	14,200	13,200
18	10,800	22,900	22,800	24,400	21,800	24,800	23,600	13,900	13,300	12,000	13,700	13,000
19	9,410	22,600	23,400	24,800	25,900	24,000	23,300	14,300	13,000	12,300	13,800	11,600
20	8,050	21,300	23,700	25,400	26,700	24,000	23,900	14,700	10,400	14,200	13,600	10,400
21	8,030	20,100	23,900	25,600	26,000	23,400	23,900	15,000	9,600	15,100	13,800	10,300
22	9,200	19,400	23,700	25,500	26,000	23,900	24,200	14,200	11,500	15,700	12,700	11,000
23	9,980	18,500	24,000	24,800	27,600	25,400	24,300	10,700	12,600	15,900	11,400	12,300
24	10,300	18,900	24,000	25,200	28,500	26,500	24,600	11,400	13,900	15,600	10,900	12,600
25	10,600	20,400	23,900	24,500	28,900	25,400	24,400	11,700	14,300	13,800	12,500	11,800
26	10,200	21,000	22,800	24,200	29,200	25,700	23,500	13,300	13,000	12,900	13,000	11,300
27	10,300	21,400	21,800	24,000	28,800	25,600	21,900	14,400	10,200	13,300	13,700	10,600
28	12,100	22,200	21,200	23,500	28,500	25,600	21,300	14,800	9,400	14,000	13,800	11,100
29	13,500	21,700	21,000	23,900	27,100	24,000	20,400	13,300	10,800	14,700	13,000	12,600
30	13,800	21,400	21,800	23,900	-	23,900	20,200	13,100	11,700	14,900	11,800	13,500
31	14,000	-	22,300	24,900	-	25,100	-	13,500	-	14,600	10,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	313,680	14,000	7,270	10,120		
November	609,600	26,100	13,700	20,320		
December	659,500	24,000	18,300	21,270		
Calendar year 1947	5,113,920	33,200	-12,100	14,010		
January	723,900	25,600	20,700	23,350		
February	764,000	29,200	19,400	26,340		
March	786,600	28,400	23,100	25,370		
April	711,800	26,700	19,000	23,730		
May	458,100	19,400	10,700	14,780		
June	383,500	16,200	9,400	12,780		
July	390,130	17,800	6,130	12,580		
August	438,600	18,800	10,700	14,150		
September	368,900	15,200	10,300	12,300		
Water year 1947-48	6,608,310	29,200	6,130	18,060		

f Computed on basis of partly estimated gage-height record.

Note.- Minus sign indicates reverse flow.

Lake Moultrie near Pinopolis, S. C.

Location.- Water-stage recorder, lat. 33°15' long. 80°00', at power plant, three-quarters of a mile upstream from Atlantic Coast Line Railroad bridge, 2¼ miles northeast of Pinopolis, Berkeley County, and 4¼ miles upstream from West Branch Cooper River. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Harza Engineering Co.).

Records available.- January 1942 to September 1948.

Extremes.- Maximum elevation during year, 75.88 feet Dec. 29; minimum, 67.95 feet Oct. 3, 4, 9.

1942-48: Maximum elevation, 78.18 feet Feb. 24, 1946 (caused by high wind); minimum elevation observed, 63.0 feet Apr. 25, 27, Apr. 29 to May 1, 1942.

Remarks.- Lake is formed by earth dikes and dam, with concrete navigation lock; dikes and dam completed in 1941. Storage began in November 1941. Water is diverted through canal from Lake Marion (see p. 169) and discharged through tailrace canal into West Branch Cooper River. Usable capacity, 28,314,000,000 cubic feet between elevations 60.0 feet (limit of draw-down) and 75.0 feet (maximum normal elevation). Dead storage, about 19,600,000,000 cubic feet. Figures given herein represent usable contents. Water is used for generation of power and for navigation.

Elevation at 12 p.m., in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68.03	70.17	75.21	75.29	73.61	74.92	75.15	74.29	74.32	73.21	70.66	71.52
2	68.00	70.60	75.28	75.21	73.58	74.90	75.11	74.51	74.31	73.11	70.64	71.43
3	67.96	70.81	75.29	75.19	73.60	74.85	75.07	74.40	74.29	73.19	70.68	71.39
4	68.09	71.04	75.33	75.30	73.60	74.83	74.99	74.32	74.31	73.26	70.56	71.50
5	68.27	71.30	75.30	75.31	73.65	74.72	74.83	74.23	74.48	73.30	70.54	71.55
6	68.22	71.49	75.28	75.22	73.76	74.67	74.78	74.12	74.62	73.09	70.50	71.54
7	68.10	71.62	75.30	75.01	73.91	74.99	74.79	74.21	74.49	73.01	70.51	71.59
8	68.00	71.91	75.30	74.81	74.31	74.92	74.91	74.31	74.50	72.82	70.79	71.51
9	67.96	72.31	75.25	74.69	74.68	75.01	74.89	74.45	74.41	72.66	70.77	71.47
10	67.99	72.56	75.38	74.59	74.72	74.90	74.87	74.40	74.30	72.61	70.81	71.52
11	68.19	72.94	75.39	74.61	74.76	74.79	74.99	74.35	74.20	72.62	70.87	71.72
12	68.45	73.11	75.38	74.44	74.83	74.69	75.04	74.37	74.24	72.41	70.93	71.93
13	68.53	73.39	75.50	74.35	74.88	74.68	75.11	74.41	74.39	72.22	71.04	71.91
14	68.64	73.60	75.59	74.30	74.91	74.92	75.26	74.42	74.22	72.07	71.44	71.84
15	68.61	73.90	75.51	74.04	74.92	74.97	75.32	74.47	74.13	72.00	71.82	71.75
16	68.69	74.29	75.43	73.90	74.71	75.05	75.27	74.61	74.05	71.93	71.83	71.67
17	68.75	74.49	75.31	73.83	74.41	75.22	75.12	74.58	73.95	71.95	71.84	71.59
18	68.98	74.70	75.21	74.00	74.22	75.16	75.21	74.50	73.88	72.03	71.82	71.70
19	69.21	74.80	75.13	73.91	74.13	75.06	75.09	74.41	73.96	71.83	71.87	71.81
20	69.20	74.89	75.12	73.90	74.11	75.02	74.94	74.33	74.07	71.60	71.77	71.63
21	69.12	74.95	75.51	73.81	74.04	75.18	f74.80	74.25	73.91	71.40	71.87	71.47
22	69.07	74.99	75.52	73.77	74.24	75.14	f74.64	74.34	73.73	71.22	72.02	71.37
23	69.03	75.06	75.51	73.71	74.30	75.31	f74.52	74.42	73.64	71.05	71.96	71.29
24	69.07	75.01	75.51	73.70	74.33	75.25	74.41	74.30	73.55	71.23	71.82	71.19
25	69.23	74.92	75.72	73.80	74.40	75.18	74.46	74.20	73.49	71.40	71.72	71.25
26	69.49	74.89	75.77	73.75	74.43	75.11	74.40	74.15	73.57	71.14	71.64	71.37
27	69.59	74.93	75.81	73.69	74.50	75.11	74.39	74.10	73.71	70.91	71.62	71.19
28	69.67	74.99	75.84	73.59	74.60	75.29	74.38	74.04	73.52	70.76	71.62	71.17
29	69.81	75.07	75.72	73.50	74.96	75.15	74.30	74.19	73.32	70.62	71.79	71.16
30	69.95	75.19	75.76	73.49	-	75.02	74.24	74.42	73.29	70.51	71.77	71.22
31	70.03	-	75.40	73.57	-	74.98	-	74.40	-	70.56	71.64	-

f Computed on basis of partly estimated gage-height record.

Monthly elevation and contents, water year October 1947 to September 1948

Date	Elevation (feet)†	Contents (billions of cubic feet)	Change in contents during month (equivalent, second-feet)
Sept. 30	68.12	12.61	-
Oct. 31	70.03	16.53	+1,460
Nov. 30	75.19	28.82	+4,740
Dec. 31	75.40	29.38	+209
Calendar year 1947	-	-	+557
Jan. 31	73.57	24.68	-1,750
Feb. 29	74.96	28.21	+1,410
Mar. 31	74.98	28.26	+19
Apr. 30	74.24	26.36	-733
May 31	74.40	26.77	+153
June 30	73.29	23.98	-1,080
July 31	70.56	17.69	-2,350
Aug. 31	71.64	20.09	+896
Sept. 30	71.22	19.14	-367
Water year 1947-48	-	-	+206

† Elevation at 12 p.m.

South Fork Edisto River near Montmorenci, S. C.

Location.- Wire-weight gage, lat. 33°34'35", long. 81°30'50", at bridge on State Highway 215, 0.4 mile upstream from Cedar Creek, 1 mile upstream from Shaw Creek, and 7.6 miles northeast of Montmorenci, Aiken County. Datum of gage is 250.18 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).
Drainage area.- 198 square miles.
Records available.- April 1940 to September 1948.
Extremes.- Maximum discharge during year, 1,400 second-feet Mar. 9 (gage height, 7.62 feet, from graph based on gage readings); minimum observed, 110 second-feet Oct. 5 (gage height, 2.81 feet).

1940-48: Maximum discharge, 2,460 second-feet Aug. 15, 1940, July 19, 1941 (gage height, 8.81 feet, from graph based on gage readings); minimum observed, 58 second-feet June 8, 1941 (gage height, 1.52 feet).
Remarks.- Records good. Gage read twice daily.
Revisions.- W 1032: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 17-30)

Oct. 1 to Dec. 22

2.8	110	5.0	226
3.4	136	5.4	268
4.5	192	5.8	329

Note.- Same as following table above 5.8 feet.

Dec. 23 to Sept. 30

3.4	146	6.1	398
4.5	202	6.3	470
5.0	234	6.5	580
5.4	272	7.0	935
5.8	329	7.4	1,240

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	211	295	349	550	385	650	261	790	178	188	202
2	118	250	288	349	685	385	972	261	428	184	188	220
3	116	329	281	360	470	398	1,010	256	320	176	188	220
4	118	515	281	414	398	520	458	256	290	166	220	224
5	112	615	274	360	360	520	495	290	278	166	246	227
6	116	421	274	329	349	495	270	320	266	161	242	403
7	118	349	268	320	372	720	470	385	251	156	196	580
8	128	372	268	312	580	1,010	720	339	238	158	171	685
9	144	339	268	312	1,080	1,240	935	339	234	178	168	440
10	156	339	288	304	1,160	790	755	312	227	181	168	297
11	166	372	349	a297	1,010	685	520	272	224	234	164	246
12	166	678	414	297	935	650	450	278	217	261	161	234
13	168	1,080	470	340	1,010	520	430	290	214	290	181	227
14	154	860	550	450	1,010	450	398	304	211	272	191	211
15	158	490	495	615	935	430	385	312	224	261	168	205
16	184	398	580	615	720	430	414	320	234	261	208	199
17	214	398	495	398	550	615	414	278	272	256	256	188
18	230	430	580	349	470	755	385	242	266	217	304	176
19	226	398	495	339	450	898	349	230	238	186	297	171
20	192	414	470	349	430	580	329	224	214	184	284	168
21	164	470	450	398	414	520	312	217	205	178	242	164
22	151	470	739	450	470	520	312	220	208	176	224	161
23	154	372	1,160	470	520	520	304	220	220	168	199	164
24	206	360	860	398	615	685	304	208	266	211	184	168
25	295	398	580	372	470	1,010	297	226	224	174	176	174
26	463	430	580	349	430	430	290	574	196	164	166	174
27	450	450	550	349	398	520	284	615	188	156	164	174
28	329	372	520	349	385	495	278	550	181	148	161	184
29	268	295	430	360	372	495	266	414	178	158	156	238
30	256	250	372	398	-	470	261	580	176	181	156	320
31	230	-	320	450	-	430	-	825	-	196	161	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,072	463	112	196	0.990	1.14
November	13,125	1,080	211	438	2.21	2.47
December	14,244	1,160	268	459	2.32	2.68
Calendar year 1947	94,810	1,160	92	260	1.31	17.81
January	11,801	615	297	381	1.92	2.21
February	17,598	1,160	349	607	3.07	3.31
March	18,571	1,240	385	599	3.03	3.49
April	13,917	1,010	261	464	2.34	2.61
May	10,418	825	208	336	1.70	1.96
June	7,678	790	176	256	1.29	1.44
July	6,036	290	148	195	.985	1.14
August	6,178	304	156	199	1.01	1.16
September	7,444	685	161	248	1.25	1.40
Water year 1947-48	133,082	1,240	112	364	1.84	25.01

Peak discharge (base, 900 sec.-ft.).- Nov. 13 (11 a.m.) 1,240 sec.-ft.; Dec. 23 (3 p.m.) 1,320 sec.-ft.; Feb. 10 (4 a.m.) 1,160 sec.-ft.; Mar. 9 (5:30 a.m.) 1,400 sec.-ft.; Mar. 19 (8 a.m.) 970 sec.-ft.; Mar. 25 (7 a.m.) 1,160 sec.-ft.; Apr. 3 (2 p.m.) 1,080 sec.-ft.; Apr. 9 (9 p.m.) 1,080 sec.-ft.

a No gage-height record; discharge computed from graph based on record for preceding and following days and weather records.

South Fork Edisto River near Denmark, S. C.

Location.- Water-stage recorder, lat. 33°23'35", long. 81°08'00", at bridge on State Highway 5, 200 feet downstream from Seaboard Air Line Railroad bridge, 1½ miles downstream from Little River, and 4¾ miles north of Denmark, Bamberg County. Datum of gage is 155.68 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 720 square miles.

Records available.- August 1931 to September 1948.

Average discharge.- 17 years, 770 second-feet.

Extremes.- Maximum discharge during year, 4,010 second-feet Feb. 14 (gage height, 8.38 feet); minimum, 415 second-feet Oct. 7.

1931-48: Maximum discharge, 13,500 second-feet Apr. 11, 1936 (gage height, 10.91 feet), from rating curve extended above 4,800 second-feet on basis of velocity-area studies and logarithmic plotting; minimum, 183 second-feet June 30 to July 3, 1935.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

5.1	422	6.7	980
5.8	534	6.9	1,220
6.1	608	7.4	2,080
6.4	747	8.4	4,010

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	692	1,010	1,400	1,860	1,770	1,700	2,220	859	2,040	554	525	499
2	720	1,070	1,390	1,830	1,790	1,630	2,830	828	2,100	593	516	508
3	669	1,320	1,360	1,740	1,810	1,630	3,210	813	1,950	669	516	525
4	576	1,400	1,260	1,630	1,700	1,700	3,310	852	1,740	669	554	578
5	491	1,510	1,190	1,560	1,700	1,720	3,120	908	1,520	608	646	646
6	444	1,510	1,120	1,470	1,740	1,700	2,920	991	1,210	554	720	929
7	422	1,360	1,080	1,370	1,670	1,880	2,830	1,060	1,010	526	800	2,410
8	422	1,540	1,040	1,340	1,850	2,640	2,640	1,080	890	608	720	2,830
9	430	1,830	1,010	1,360	2,240	3,020	2,640	1,080	806	608	669	2,540
10	437	1,830	1,240	1,340	2,830	2,920	2,640	1,070	747	720	627	2,010
11	444	1,900	1,860	1,260	3,120	2,920	2,640	1,070	720	720	593	1,740
12	452	2,120	2,220	1,210	3,210	3,120	2,450	1,070	692	1,100	544	1,630
13	460	2,080	2,370	1,210	3,710	3,020	2,370	1,070	646	1,080	525	1,440
14	475	2,040	2,450	1,320	3,910	2,740	2,220	1,050	646	991	516	1,170
15	491	2,040	2,410	1,400	3,410	2,540	2,060	971	646	1,010	534	962
16	534	2,080	2,540	1,610	2,830	2,320	1,880	890	646	1,090	554	836
17	566	2,390	2,540	1,700	2,830	2,340	1,740	821	627	1,080	578	747
18	578	2,360	2,410	1,590	2,640	2,540	1,590	806	608	1,000	578	669
19	593	2,280	2,260	1,670	2,300	2,640	1,470	787	608	944	593	646
20	608	2,080	2,040	1,740	2,100	2,540	1,370	754	608	828	608	627
21	627	1,900	2,030	1,850	2,120	2,450	1,320	720	608	800	627	608
22	669	1,880	2,450	1,860	2,260	2,370	1,260	692	608	813	669	593
23	692	1,830	2,640	1,880	2,320	2,320	1,190	646	646	747	720	578
24	767	1,720	2,640	1,830	2,300	2,280	1,120	627	692	646	692	578
25	890	1,850	2,450	1,670	2,080	2,260	1,060	669	669	608	669	578
26	926	1,920	2,540	1,580	1,900	2,260	1,010	900	a646	578	627	566
27	852	1,860	2,830	1,590	1,860	2,260	971	1,220	a608	544	578	544
28	867	1,760	2,740	1,540	1,810	2,300	944	2,140	a608	534	534	578
29	875	1,630	2,320	1,510	1,770	2,340	908	2,640	a593	544	499	768
30	908	1,490	2,030	1,440	-	2,130	890	2,340	578	544	483	1,040
31	1,010	-	1,920	1,610	-	1,940	-	2,150	-	534	491	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	19,587	1,010	422	632	0.878	0.01
November	53,590	2,390	1,010	1,786	2.48	2.77
December	61,780	2,830	1,010	1,993	2.77	3.19
Calendar year 1947	328,214	2,830	300	899	1.25	16.95
January	48,570	1,880	1,210	1,567	2.18	2.51
February	67,580	3,910	1,670	2,330	3.24	3.49
March	72,170	3,120	1,630	2,328	3.23	3.72
April	58,823	3,310	890	1,961	2.72	3.04
May	33,574	2,640	627	1,083	1.50	1.73
June	26,716	2,100	578	891	1.24	1.38
July	22,844	1,100	526	737	1.02	1.18
August	18,505	800	483	597	.829	.96
September	30,373	2,830	499	1,012	1.41	1.57
Water year 1947-48	514,112	3,910	422	1,405	1.95	26.55

Peak discharge (base, 1,700 sec.-ft.).- Nov. 17 (8 p.m.) 2,450 sec.-ft.; Dec. 27 (4 p.m.) 2,830 sec.-ft.; Feb. 14 (8 a.m.) 4,010 sec.-ft.; Mar. 12 (2 p.m.) 3,120 sec.-ft.; Apr. 4 (10 a.m.) 3,310 sec.-ft.; May 29 (1 a.m.) 2,740 sec.-ft.; Sept. 8 (3 a.m.) 2,920 sec.-ft.

a No gage-height record; discharge computed from graph based on recorded range in stage and record for preceding and following days.

Note.- Doubtful gage-height record Feb. 16 to May 11; discharge computed from graph based on partial record, engineers' inspections, and weekly gage readings by observer.

Edisto River near Branchville, S. C.

Location.- Water-stage recorder, lat. 33°10'35", long. 80°48'05", 400 feet downstream from bridge on U. S. Highway 21, 4.7 miles downstream from Brier Branch, and 5.2 miles south of Branchville, Orangeburg County.

Drainage area.- 1,720 square miles.

Records available.- November 1945 to September 1948.

Extremes.- Maximum discharge during year, 9,140 second-feet Apr. 4 (gage height, 9.10 feet); minimum, 936 second-feet Oct. 13, 14 (gage height, 1.14 feet).
1945-48: Maximum discharge, that of Apr. 4, 1948; minimum, 606 second-feet Aug. 20, 1946 (gage height, 0.11 foot).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 19				Feb. 20 to Sept. 30			
1.1	936	6.5	3,740	1.6	970	6.5	3,650
3.0	1,590	7.2	4,690	3.0	1,440	7.2	4,600
4.5	2,230	8.0	6,370	4.5	2,100	8.0	6,260
5.5	2,840	8.7	8,210	5.5	2,730	9.1	9,140

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,830	1,910	3,530	4,870	3,740	3,880	5,800	2,200	3,600	1,230	1,260	1,000
2	1,790	1,870	3,340	4,530	3,850	3,760	7,760	2,100	3,800	1,230	1,230	970
3	1,670	2,090	3,250	4,230	3,850	3,760	8,860	2,000	3,700	1,160	1,200	970
4	1,550	2,380	3,080	4,090	3,850	3,760	9,140	2,000	3,600	1,120	1,160	1,000
5	1,440	2,770	2,920	3,970	3,740	3,760	8,580	1,900	3,500	1,120	1,120	1,060
6	1,410	3,080	2,840	3,850	3,740	3,760	8,020	2,000	3,200	1,160	1,090	1,090
7	1,340	3,160	3,700	3,630	3,630	4,000	7,240	2,100	2,900	1,200	1,090	1,260
8	1,170	3,160	2,630	3,430	3,740	4,280	6,500	2,100	2,660	1,200	1,100	1,400
9	1,000	3,160	2,560	3,340	4,230	4,600	6,260	2,100	2,390	1,200	1,200	2,680
10	969	3,080	2,630	3,250	5,450	5,360	6,020	2,100	2,150	1,200	1,300	4,440
11	969	3,080	3,160	3,080	6,610	6,020	5,580	2,100	1,900	1,230	1,300	4,440
12	969	3,340	3,740	3,000	7,130	6,260	5,160	2,100	1,760	1,230	1,200	4,280
13	936	3,530	4,370	3,000	7,650	6,260	4,960	2,200	1,640	1,300	1,200	3,880
14	936	3,740	5,050	3,000	7,650	6,260	4,960	2,300	1,560	1,400	1,100	3,540
15	969	3,970	5,450	3,000	7,930	6,260	4,960	2,400	1,480	1,600	1,100	3,240
16	1,000	4,090	5,670	3,000	8,210	5,800	5,160	2,400	1,440	1,850	1,000	2,970
17	1,100	4,090	5,890	3,000	8,210	6,020	4,960	2,300	1,370	1,850	1,000	2,660
18	1,170	4,090	5,670	3,080	7,390	7,240	4,280	2,100	1,340	1,950	1,100	2,390
19	1,240	4,230	5,450	3,160	6,610	6,980	3,880	1,900	1,340	1,900	1,100	2,100
20	1,270	4,530	5,250	3,250	6,020	6,500	3,540	1,800	1,300	1,900	1,100	1,800
21	1,300	4,870	5,250	3,430	5,360	6,260	3,340	1,700	1,300	1,900	1,100	1,600
22	1,300	4,690	5,450	3,630	4,960	5,800	3,150	1,600	1,400	1,850	1,100	1,440
23	1,300	4,530	5,450	3,850	4,780	5,580	2,970	1,600	1,370	1,760	1,200	1,340
24	1,380	4,230	5,670	3,970	4,780	6,020	2,890	1,500	1,370	1,680	1,200	1,230
25	1,550	4,090	5,890	3,850	4,780	6,260	2,730	1,500	1,340	1,600	1,200	1,200
26	1,670	3,970	6,130	3,740	4,600	6,020	2,660	1,700	1,340	1,440	1,200	1,160
27	1,870	3,850	6,130	3,630	4,440	4,000	2,520	2,000	1,370	1,340	1,230	1,120
28	2,040	3,740	5,670	3,530	4,280	5,360	2,390	2,150	1,340	1,260	1,230	1,100
29	2,140	3,740	5,450	3,430	4,000	5,160	2,330	2,270	1,300	1,200	1,160	1,400
30	2,140	3,630	5,450	3,430	-	4,960	2,200	2,800	1,260	1,160	1,090	1,800
31	2,040	-	5,050	3,630	-	4,960	-	3,200	-	1,230	1,060	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	43,458	2,140	936	1,402	0.815	0.94
November	106,690	4,870	1,870	3,556	2.07	2.31
December	140,770	6,130	2,560	4,541	2.64	3.04
Calendar year 1947	743,571	6,130	656	2,037	1.18	16.07
January	109,880	4,870	3,000	3,545	2.06	2.38
February	155,210	8,210	3,630	5,352	3.11	3.35
March	164,900	7,240	3,760	5,319	3.09	3.56
April	148,800	9,140	2,200	4,960	2.88	3.21
May	64,220	3,200	1,500	2,072	1.20	1.38
June	60,020	3,800	1,260	2,001	1.16	1.28
July	44,450	1,950	1,120	1,434	.834	.96
August	35,720	1,300	1,000	1,152	.670	.77
September	60,560	4,440	970	2,019	1.17	1.30
Water year 1947-48	1,134,678	9,140	936	3,100	1.80	24.49

Peak discharge (base, 3,500 sec.-ft.).- Nov. 21 (8 p.m.) 4,870 sec.-ft.; Dec. 26 (7 p.m.) 6,130 sec.-ft.; Feb. 16 (1 p.m.) 8,210 sec.-ft.; Mar. 18 (10 a.m.) 7,240 sec.-ft.; Apr. 4 (7 a.m.) 9,140 sec.-ft.; June 2 (time unknown) 3,880 sec.-ft.; Sept. 10 (6 p.m.) 4,600 sec.-ft.

Note.- No gage-height record Apr. 30 to May 27, May 30 to June 7, Aug. 8-26, Sept. 28-30; discharge computed on basis of recorded range in stage and records for other stations in basin.

Edisto River near Givhans, S. C.

Location.- Water-stage recorder, lat. 33°01'40", long. 80°23'30", at bridge on State Highway 65, 2.3 miles downstream from Four Hole Swamp and 2.8 miles west of Givhans, Dorchester County. Datum of gage is 20.46 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 2,730 square miles.

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge during year, 15,200 second-feet Apr. 6 (gage height, 14.38 feet); minimum, 1,020 second-feet Sept. 3.

1939-48: Maximum discharge, 24,300 second-feet Sept. 21, 1945 (gage height, 17.28 feet), from rating curve extended above 14,000 second-feet by logarithmic plotting; minimum, 422 second-feet June 3, 1941 (gage height, 1.12 feet).

Remarks.- Records good. About 38,626,000 gallons a day (59.8 second-feet) diverted above station for Charleston water supply during year.

Revisions.- W 1032: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 25 to Dec. 2)

Oct. 1 to Dec. 2				Dec. 3 to Sept. 30			
3.0	1,080	8.5	4,260	3.3	1,020	9.5	5,010
4.5	1,720	9.5	5,440	4.5	1,480	10.5	6,470
6.0	2,500	10.5	6,940	6.0	2,220	12.0	9,290
7.5	3,410	11.5	8,740	7.5	3,100	13.5	12,800
				8.5	3,890	14.3	15,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,720	2,600	6,310	9,730	5,690	6,790	9,730	2,730	3,100	1,280	1,360	1,090
2	2,660	2,600	5,860	8,870	6,150	6,630	10,800	2,610	3,380	1,240	1,400	1,060
3	2,600	g2,660	5,410	8,470	6,470	6,310	12,600	2,440	3,800	1,240	1,400	1,020
4	2,500	g2,780	5,140	7,870	6,630	6,310	13,300	2,320	4,410	1,200	1,360	1,060
5	2,330	g3,080	4,760	7,330	6,630	6,310	13,800	2,270	4,640	1,120	1,320	1,060
6	2,160	3,480	4,520	6,790	6,470	6,310	14,700	2,220	4,520	1,090	1,240	1,090
7	1,960	3,880	4,190	6,310	6,310	6,630	15,000	2,270	4,300	1,090	1,160	1,160
8	1,860	4,260	3,890	5,990	6,310	6,970	14,100	2,270	3,990	1,160	1,120	1,280
9	1,680	4,690	3,710	5,830	6,630	7,690	13,100	2,270	3,620	1,200	1,120	1,320
10	1,400	5,310	3,710	5,140	7,870	8,470	11,800	2,220	3,310	1,200	1,160	1,400
11	1,240	5,720	4,090	4,880	9,950	9,510	10,600	2,220	3,030	1,240	1,200	1,760
12	1,160	6,010	4,880	4,640	11,600	10,600	9,510	2,320	2,730	1,280	1,240	2,270
13	1,120	6,160	5,690	4,410	12,300	11,300	8,670	2,490	2,380	1,280	1,280	3,040
14	1,080	6,160	6,470	4,190	13,100	11,600	8,070	2,670	2,100	1,320	1,240	3,710
15	1,080	6,310	7,150	3,990	13,300	11,300	7,690	2,670	1,900	1,400	1,200	3,990
16	1,160	6,460	8,070	3,890	13,300	10,600	7,690	2,670	1,710	1,580	1,160	3,890
17	1,280	6,620	9,290	3,800	12,800	10,600	7,510	2,670	1,620	1,760	1,120	3,620
18	1,500	6,780	10,400	3,710	12,300	10,600	7,330	2,550	1,530	1,960	1,090	3,380
19	1,580	7,100	10,800	3,710	11,800	11,600	7,150	2,440	1,440	2,060	1,090	3,170
20	1,630	7,620	10,600	3,710	11,600	13,300	6,790	2,320	1,400	2,100	1,060	2,910
21	1,720	8,340	10,600	3,800	10,800	13,600	6,150	2,220	1,320	2,160	1,060	2,610
22	1,720	8,740	11,300	3,990	10,200	12,800	5,550	2,060	1,400	2,100	1,090	2,270
23	1,720	8,740	12,300	4,300	9,290	12,300	5,140	1,900	1,530	2,060	1,120	1,860
24	1,680	8,740	12,600	4,640	8,670	12,600	4,760	1,760	1,580	2,000	1,120	1,530
25	1,760	8,540	12,300	4,760	8,070	12,300	4,300	1,710	1,620	2,000	1,120	1,360
26	1,960	8,160	12,000	5,010	7,510	12,000	3,990	1,800	1,580	1,900	1,120	1,240
27	2,160	7,800	12,000	5,010	7,330	11,600	3,620	2,000	1,440	1,800	1,160	1,160
28	2,330	7,440	12,000	5,140	7,150	11,300	3,380	1,960	1,400	1,620	1,160	1,240
29	2,440	7,100	11,800	5,010	6,970	10,800	3,100	2,100	1,360	1,440	1,160	1,120
30	2,500	6,780	11,100	5,010	-	10,400	2,910	2,550	1,320	1,440	1,160	1,760
31	2,600	-	10,400	5,270	-	9,730	-	2,910	-	1,400	1,090	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	57,290	2,720	1,080	1,848		
November	180,660	8,740	2,600	6,022		
December	253,340	12,600	3,710	8,172		
Calendar year 1947	1,171,975	12,600	846	3,211		
January	165,200	9,730	3,710	5,329		
February	263,200	13,300	5,690	9,076		
March	308,860	13,600	6,310	9,963		
April	252,840	15,000	2,910	8,428		
May	71,610	2,910	1,710	2,310		
June	73,460	4,640	1,320	2,449		
July	47,720	2,160	1,090	1,539		
August	36,680	1,400	1,060	1,183		
September	59,430	3,990	1,020	1,981		
Water year 1947-48	1,770,290	15,000	1,020	4,837		

Peak discharge (base, 5,000 sec.-ft.).- Nov. 23 (10:30 p.m.) 8,740 sec.-ft.; Dec. 24 (7:30 a.m.) 12,600 sec.-ft.; Feb. 15 (1 p.m.) 13,300 sec.-ft.; Mar. 21 (1:30 a.m.) 13,600 sec.-ft.; Apr. 6 (10 p.m.) 15,200 sec.-ft.

g Computed from graph based on recorded range in stage and daily gage readings by U. S. Weather Bureau.

North Fork Edisto River at Orangeburg, S. C.

Location.- Water-stage recorder, lat. 33°29'00", long. 80°52'25", at bridge on State Highway 4 at Orangeburg, Orangeburg County, 0.5 mile upstream from Atlantic Coast Line Railroad bridge and 1½ miles downstream from Caw Swamp. Datum of gage is 149.02 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 683 square miles.

Records available.- December 1938 to September 1948.

Extremes.- Maximum discharge during year, 4,170 second-feet Sept. 7 (gage height, 10.25 feet); minimum, 398 second-feet Oct. 7.

1938-48: Maximum discharge, 9,500 second-feet Sept. 18, 1945 (gage height, 14.28 feet), from rating curve extended above 3,900 second-feet by velocity-area studies and logarithmic plotting; minimum, 236 second-feet July 3, 1945.

Remarks.- Records good. Records of chemical analyses for the water year 1948 are given in Water-Supply Paper 1132.

Revisions.- W 1032: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 8, 9)

Oct. 1 to Feb. 9				Feb. 10 to Sept. 30			
4.3	398	7.9	1,490	4.0	425	7.3	1,240
5.5	612	8.5	1,950	5.0	593	8.0	1,760
6.3	800	9.0	2,420	6.3	850	9.0	2,720
7.2	1,100			6.8	990	10.0	3,910

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	676	665	1,020	1,360	1,400	1,370	2,260	815	1,340	539	593	449
2	654	756	990	1,360	1,420	1,340	3,050	805	1,150	530	539	457
3	622	1,010	990	1,300	1,360	1,370	2,940	785	990	530	513	473
4	573	1,180	955	1,250	1,300	1,440	2,570	785	925	539	521	513
5	500	1,130	920	1,200	1,250	1,440	2,160	815	912	539	548	557
6	431	1,060	890	1,150	1,280	1,440	2,070	900	862	513	566	1,220
7	398	1,020	860	1,100	1,280	1,800	1,980	955	795	481	584	3,910
8	406	1,060	845	1,060	1,490	2,360	1,840	955	725	465	611	2,830
9	422	1,130	830	1,040	2,000	2,570	1,670	912	715	449	629	2,410
10	431	1,250	990	1,020	2,830	2,410	1,630	912	715	449	611	1,840
11	431	1,280	920	1,020	2,830	2,360	1,670	912	705	481	575	1,480
12	440	1,460	1,630	990	2,720	2,620	1,670	940	675	513	521	1,270
13	448	1,560	1,670	1,010	3,160	2,360	1,880	955	656	557	481	1,240
14	456	1,560	1,740	1,060	3,160	1,980	1,710	972	638	593	457	1,050
15	491	1,490	1,780	1,150	2,830	1,760	1,550	912	629	629	457	900
16	564	1,460	1,820	1,220	2,410	1,670	1,400	850	620	695	489	785
17	643	1,560	1,780	1,250	2,210	1,980	1,300	815	611	795	489	715
18	676	1,630	1,670	1,220	2,160	2,260	1,210	795	602	862	489	675
19	665	1,600	1,520	1,200	1,930	2,160	1,150	765	575	795	489	647
20	612	1,490	1,420	1,250	1,710	1,930	1,100	745	575	735	489	611
21	582	1,460	1,490	1,340	1,670	1,840	1,080	715	566	715	513	584
22	573	1,400	2,040	1,400	1,710	1,840	1,050	675	602	665	530	566
23	573	1,360	2,380	1,360	1,760	1,980	1,030	638	620	620	557	548
24	676	1,340	2,220	1,300	1,710	2,070	990	638	675	566	575	539
25	875	1,360	1,910	1,220	1,630	2,020	955	675	656	557	575	521
26	1,040	1,460	1,780	1,200	1,550	1,840	925	715	629	557	566	513
27	938	1,420	1,910	1,180	1,480	1,760	912	755	611	530	539	505
28	815	1,300	1,950	1,200	1,480	1,760	875	785	602	521	497	584
29	773	1,200	1,700	1,180	1,440	1,930	838	875	584	539	457	745
30	722	1,100	1,520	1,150	-	1,880	825	1,120	566	620	433	955
31	687	-	1,400	1,280	-	1,710	-	1,270	-	638	433	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	18,793	1,040	398	606	0.887	1.02
November	38,751	1,630	665	1,292	1.89	2.11
December	45,540	2,380	830	1,469	2.15	2.48
Calendar year 1947	290,675	2,380	284	796	1.17	15.83
January	37,020	1,400	990	1,194	1.75	2.02
February	55,160	3,160	1,250	1,902	2.78	3.00
March	59,250	2,620	1,340	1,911	2.80	3.23
April	46,290	3,050	825	1,543	2.26	2.52
May	26,161	1,270	638	844	1.24	1.43
June	21,526	1,340	566	718	1.05	1.17
July	18,217	862	449	588	.861	.99
August	16,326	629	433	527	.772	.89
September	30,092	3,910	449	1,003	1.47	1.64
Water year 1947-48	413,126	3,910	398	1,129	1.65	22.50

Peak discharge (base, 1,600 sec.-ft.).- Nov. 18 (10 p.m.) 1,670 sec.-ft.; Dec. 16 (1 p.m.) 1,820 sec.-ft.; Dec. 23 (6 a.m.) 2,380 sec.-ft.; Feb. 14 (1 p.m.) 3,280 sec.-ft.; Mar. 12 (8 a.m.) 2,620 sec.-ft.; Mar. 18 (10 a.m.) 2,260 sec.-ft.; Apr. 2 (1 p.m.) 3,160 sec.-ft.; Sept. 7 (10 a.m.) 4,170 sec.-ft.

Chattooga River near Clayton, Ga.

Location.- Water-stage recorder, lat. 34°49', long. 83°18', at Rogues Ford, at bridge on U. S. Highway 76, 2¾ miles upstream from Stekoa Creek, 7 miles southeast of Clayton, Rabun County, 9 miles downstream from War Woman Creek, and 9 miles upstream from confluence with Tallulah River.

Drainage area.- 203 square miles.

Records available.- May 1907 to June 1908, November 1939 to September 1948.

Extremes.- Maximum discharge during year, 12,400 second-feet July 12 (gage height, 8.1 feet); minimum, 122 second-feet Oct. 6, 7.

1907-8, 1939-48: Maximum discharge, 29,000 second-feet Aug. 30, 1940 (gage height, 13.8 feet), by slope-area method; minimum, that of Oct. 6, 7, 1947.

Remarks.- Records good except those above 1,000 second-feet, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.8	104	2.1	850
1.0	160	2.5	1,260
1.2	238	3.0	1,900
1.4	338	4.0	3,410
1.7	530	5.2	5,620

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	333	350	526	551	586	1,630	551	586	386	696	435
2	130	704	338	812	509	787	1,300	544	516	317	922	410
3	127	913	322	551	481	778	1,130	558	481	285	1,390	398
4	127	616	322	488	460	720	1,040	586	509	276	1,900	481
5	125	544	327	454	460	664	1,000	593	454	262	1,130	903
6	122	474	327	429	600	925	1,060	544	429	257	877	3,660
7	125	448	312	410	648	2,930	990	544	435	247	760	g1,490
8	151	558	327	392	868	1,510	1,130	509	423	238	704	g940
9	204	460	338	386	787	1,180	1,150	488	429	262	648	g778
10	262	417	386	374	704	1,020	990	474	392	322	632	712
11	189	408	429	362	640	922	960	467	380	4,090	608	672
12	160	704	386	356	2,130	868	931	460	368	5,620	600	624
13	148	544	356	624	1,760	805	868	467	368	3,170	565	600
14	139	488	338	558	2,620	769	868	448	362	1,830	558	586
15	136	818	509	410	1,590	744	850	429	350	1,560	586	572
16	213	720	1,240	448	1,240	796	805	423	350	1,580	558	565
17	2,110	586	696	429	1,060	868	778	417	333	1,270	523	551
18	929	530	572	410	940	752	736	398	327	980	530	544
19	460	572	502	386	868	823	720	386	398	904	516	530
20	350	523	460	350	814	868	704	380	338	805	509	530
21	290	474	441	386	737	787	696	374	327	744	488	509
22	257	448	417	380	805	744	580	368	368	728	502	495
23	234	460	398	362	744	1,460	664	356	374	664	551	488
24	511	488	386	386	704	1,180	648	356	333	624	616	495
25	814	474	398	356	696	960	640	454	306	593	608	474
26	488	429	398	356	680	886	616	648	285	565	530	460
27	398	398	374	380	648	2,000	600	664	280	544	488	441
28	656	386	368	488	656	1,430	586	1,010	327	544	460	516
29	558	368	368	435	616	1,140	572	1,260	441	586	441	544
30	435	356	356	454	-	1,020	565	787	474	600	429	467
31	374	-	350	664	-	1,590	-	696	-	579	417	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	11,352	2,110	122	366	1.80	2.08
November	15,941	913	333	531	2.62	2.92
December	13,091	1,240	312	422	2.08	2.40
Calendar year 1947	176,191	4,450	122	483	2.38	32.26
January	13,802	812	350	445	2.19	2.52
February	26,066	2,620	460	899	4.43	4.78
March	32,512	2,930	586	1,049	5.17	5.96
April	25,907	1,630	565	864	4.26	4.75
May	16,639	1,260	356	537	2.65	3.06
June	11,743	586	280	391	1.93	2.15
July	31,432	5,620	238	1,014	5.00	5.76
Augumt	20,742	1,900	417	669	3.30	3.80
September	20,870	3,660	398	696	3.43	3.83
Water year 1947-48	240,097	5,620	122	656	3.23	44.01

Peak discharge (base, 3,400 sec.-ft.).- Feb. 12 (3 p.m.) 3,500 sec.-ft.; Mar. 7 (6 a.m.) 4,010 sec.-ft.; July 12 (3 a.m.) 12,400 sec.-ft.; Sept. 6 (3 a.m.) 6,870 sec.-ft.

g Computed from graph based on staff-gage readings.

Tugaloo River near Hartwell, Ga.

Location.- Water-stage recorder, lat. 34°29', long. 82°55', three-quarters of a mile upstream from Beaverdam Creek, 5 miles upstream from confluence with Seneca River, and 10 miles north of Hartwell, Hart County.

Drainage area.- 905 square miles.

Records available.- April 1925 to September 1927, February 1940 to September 1948.

Extremes.- Maximum discharge during year, 18,800 second-feet July 13 (gage height, 8.98 feet); minimum daily, 258 second-feet Oct. 6.
1925-27, 1940-48: Maximum discharge, 28,600 second-feet Aug. 31, 1940 (gage height, 10.8 feet); minimum daily, 189 second-feet Oct. 6, 1941.

Remarks.- Records good. Flow regulated by power plants above station and by Burton and Mathis Reservoirs on Tallulah River. Burton Reservoir, completed in 1920, and Mathis Reservoir, completed in 1914, have combined usable capacity of 129,000 acre-feet and regulate flow from 150 square miles of Tallulah River Basin.

Cooperation.- Records of monthly reservoir contents furnished by Georgia Power Co.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 14 to Aug. 3)

1.6	236	2.6	740	5.0	4,740
2.0	370	3.0	1,180	6.0	7,380
2.2	460	3.5	1,840	7.0	10,600
2.4	578	4.1	2,810	7.9	14,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,610	2,470	749	1,510	1,230	948	6,350	1,860	1,670	2,400	725	2,310
2	1,540	2,370	1,770	1,260	772	3,040	4,400	1,200	1,930	2,170	2,950	2,420
3	1,440	1,980	1,410	2,350	1,350	2,610	4,230	1,100	2,210	2,350	5,780	2,500
4	1,420	2,140	1,210	1,060	1,810	2,900	2,400	1,280	2,270	534	9,520	2,280
5	310	1,930	1,420	1,030	1,710	2,220	2,320	2,280	2,050	798	7,460	654
6	258	1,610	1,680	785	2,320	2,710	3,810	1,830	628	628	4,370	3,430
7	1,020	2,610	590	1,330	1,860	8,450	3,310	2,830	688	516	3,270	4,480
8	1,900	2,820	518	1,250	3,700	5,460	3,760	1,820	1,990	976	2,270	2,950
9	1,600	851	1,340	1,800	2,910	4,440	3,620	660	1,780	1,410	1,290	734
10	1,370	676	1,520	1,450	3,660	3,580	3,630	722	2,070	1,100	2,720	2,670
11	2,400	5,830	1,690	606	2,750	2,740	3,160	1,730	2,600	3,060	2,210	2,490
12	485	3,260	1,870	804	6,240	2,900	2,160	2,070	1,180	14,000	2,230	567
13	342	1,690	2,250	2,180	6,880	2,520	3,890	2,170	852	12,400	2,940	526
14	940	2,150	778	1,990	5,230	1,410	3,570	2,250	566	5,890	2,240	2,220
15	1,300	3,660	783	1,760	4,880	1,060	2,980	1,990	1,030	4,100	956	2,110
16	1,660	2,080	3,870	1,690	2,840	1,820	2,780	619	1,650	8,260	920	2,220
17	2,950	892	2,230	2,210	2,950	4,560	2,120	582	1,480	5,840	1,990	2,420
18	3,870	2,030	2,270	1,520	2,610	2,630	1,140	1,500	2,010	3,550	2,190	2,310
19	1,760	3,190	2,410	550	2,970	3,410	954	1,550	1,950	1,380	1,950	512
20	446	1,630	1,910	1,670	2,460	2,980	2,240	1,710	524	2,840	2,500	568
21	1,160	1,560	680	1,670	2,920	1,910	2,270	2,040	482	2,440	1,960	2,780
22	1,060	1,740	891	1,120	1,900	1,160	2,520	1,850	2,040	2,110	678	2,780
23	1,370	1,460	2,180	1,370	869	5,700	2,240	560	2,380	2,690	872	3,150
24	2,170	832	1,810	1,660	1,780	2,590	1,560	572	1,400	2,720	2,150	2,670
25	3,640	1,170	600	1,170	2,520	4,070	1,640	2,160	1,550	869	2,550	1,450
26	613	1,390	833	684	2,020	2,960	1,160	2,330	1,510	688	2,110	570
27	474	1,860	575	1,780	1,670	4,990	1,910	2,770	480	1,140	2,460	618
28	3,100	792	526	2,190	1,610	4,200	2,660	3,670	504	1,900	2,290	2,540
29	2,340	1,590	595	1,760	1,360	3,160	1,680	4,680	3,830	2,250	517	1,820
30	1,830	604	737	1,890	-	3,820	2,160	3,640	2,060	2,270	496	1,820
31	1,770	-	1,440	2,390	-	5,260	-	996	-	2,280	2,050	-

Month	Observed				Change in contents in Burton and Mathis Reservoirs (acre-feet)	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	48,148	3,870	258	1,553	-16,300	1,288	1.42	1.64
November	58,867	5,830	604	1,962	+5,600	2,056	2.27	2.53
December	43,135	3,870	518	1,391	+6,100	1,490	1.65	1.90
Calendar year 1947	628,133	13,600	232	1,721	-19,500	1,694	1.87	25.40
January	46,489	2,390	550	1,500	-1,900	1,469	1.62	1.87
February	77,781	6,880	772	2,682	+33,200	3,259	3.60	3.88
March	102,208	8,450	948	3,297	+18,600	3,599	3.98	4.59
April	82,624	6,350	954	2,754	+3,100	2,806	3.10	3.46
May	57,021	4,680	560	1,839	-700	1,828	2.02	2.33
June	47,364	3,830	480	1,579	-6,800	1,465	1.62	1.81
July	95,559	14,000	516	3,083	+6,900	3,195	3.53	4.07
August	78,614	9,520	496	2,536	-7,200	2,419	2.67	3.08
September	60,569	4,480	512	2,019	-22,600	1,639	1.81	2.02
Water year 1947-48	798,379	14,000	258	2,181	+18,000	2,206	2.44	33.18

Peak discharge (base, 10,000 sec.-ft.).- Feb. 13 (2 a.m.) 10,300 sec.-ft.; July 13 (1 a.m.) 18,800 sec.-ft.; Aug. 4 (9 p.m.) 12,400 sec.-ft.

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 72, 1 mile downstream from Seaboard Air Line Railroad bridge, 1½ miles downstream from Rocky River, and 3 miles southwest of Calhoun Falls, Abbeville County. Datum of gage is 363.53 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,876 square miles.

Records available.- August 1896 to December 1900 (fragmentary), January to December 1903 (revised), March 1930 to July 1932, April 1938 to September 1948. Gage-height records collected at original site 1 mile upstream 1899-1928 and at present site since 1928 are contained in reports of U. S. Weather Bureau.

Average discharge.- 12 years (1896-97, 1930-31, 1938-48), 4,770 second-feet.

Extremes.- Maximum discharge during year, 29,800 second-feet Mar. 7 (gage height, 6.11 feet); minimum, 920 second-feet Oct. 6; minimum daily, 1,130 second-feet Oct. 6.

1896-1900, 1903, 1930-32, 1938-48: Maximum discharge, 96,500 second-feet Aug. 13, 1940 (gage height, 11.52 feet), from rating curve extended above 50,000 second-feet by velocity-area studies and logarithmic plotting; minimum, 660 second-feet Oct. 14, 1941; minimum daily, 845 second-feet Oct. 14, 1941.

Maximum stage known, 28.2 feet Aug. 25, 1908, original site and datum.

Remarks.- Records good. Flow partly regulated by Burton and Mathis Reservoirs (see p. 211 for monthly change in contents) and power plants above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Aug. 4				Aug. 5 to Sept. 30			
0.9	1,020	3.3	8,500	1.3	1,670	3.2	8,600
1.2	1,480	4.0	12,300	1.5	2,090	3.9	12,700
1.5	2,090	4.8	17,900	1.9	3,170	4.8	19,100
1.9	3,170	5.5	24,000	2.5	5,350	5.4	24,000
2.5	5,180						

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,200	4,040	2,730	3,950	5,740	4,000	17,100	4,820	4,820	5,180	2,850	3,940
2	2,410	5,920	3,660	4,060	4,680	5,900	13,100	4,030	5,360	4,460	4,520	4,100
3	2,610	10,800	3,500	5,780	4,460	7,040	9,500	3,600	4,680	4,120	8,460	4,040
4	2,290	7,870	3,470	3,680	4,820	6,970	8,040	4,500	4,700	3,090	15,700	3,950
5	1,990	5,740	3,470	3,470	4,820	5,930	6,320	5,440	4,850	1,940	24,000	2,600
6	1,130	5,360	3,800	3,800	5,180	6,160	7,780	4,820	3,380	2,280	14,100	4,660
7	1,180	5,640	3,000	3,960	6,300	22,600	7,580	5,600	2,620	2,110	8,350	13,000
8	2,860	9,530	2,590	3,470	10,700	22,200	8,490	5,180	3,620	2,060	5,750	9,240
9	3,590	5,320	2,980	3,800	14,600	11,700	8,750	3,670	4,130	2,780	3,970	6,240
10	3,040	3,670	3,880	4,060	12,600	9,750	7,810	3,170	4,120	2,820	5,280	5,140
11	3,860	12,400	5,000	3,020	8,750	7,810	7,370	3,780	4,540	3,470	4,960	5,080
12	2,840	16,800	4,570	2,670	11,800	7,160	6,320	4,530	3,740	13,800	4,760	2,980
13	1,650	7,580	4,940	4,850	23,400	6,950	7,080	4,900	2,870	22,500	5,000	2,280
14	1,550	5,540	3,480	6,320	16,400	5,360	7,370	4,570	2,700	10,800	5,380	2,870
15	2,230	8,020	3,380	5,180	13,200	4,710	6,950	5,040	3,300	8,860	3,560	4,200
16	2,820	8,750	7,680	4,460	8,680	5,200	6,320	3,620	3,590	13,300	3,170	3,900
17	3,940	5,450	7,980	4,740	7,810	11,900	6,320	2,620	3,320	18,100	3,970	3,990
18	7,110	4,780	5,740	4,330	6,950	8,620	4,680	3,200	3,660	8,150	4,380	4,040
19	5,380	6,320	5,560	3,380	6,680	7,370	4,300	3,960	3,920	4,250	4,060	2,730
20	2,600	5,000	4,780	3,470	6,120	7,580	5,000	3,820	2,840	5,690	4,140	1,890
21	2,160	4,390	3,800	4,520	6,400	6,320	5,540	4,070	2,230	4,860	4,430	3,100
22	2,540	4,460	3,350	3,730	6,120	5,180	5,540	4,110	2,500	4,640	2,780	4,220
23	2,440	3,980	4,380	3,800	5,180	8,980	5,540	3,140	4,680	4,450	2,490	4,310
24	2,970	4,030	4,330	4,330	4,820	16,000	4,820	2,620	3,760	4,910	3,780	4,260
25	5,160	4,490	3,900	3,600	5,930	10,800	4,530	3,700	3,350	3,150	4,270	3,360
26	4,180	4,030	3,500	3,140	5,540	7,580	4,130	5,440	3,230	2,430	4,110	2,240
27	2,490	4,580	3,470	3,790	5,180	8,610	4,570	4,820	2,470	2,860	4,230	1,770
28	3,400	3,520	2,930	5,180	5,000	12,900	5,460	7,160	1,960	3,480	4,010	3,240
29	9,140	3,840	2,760	5,540	4,460	8,750	4,710	9,360	4,650	3,660	2,720	3,420
30	4,900	3,010	3,080	5,610	-	8,070	4,700	9,500	6,580	4,360	1,850	3,590
31	3,960	-	3,410	7,580	-	10,300	-	5,500	-	4,440	2,790	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	100,610	9,140	1,130	3,245	-	-
November	185,770	16,800	3,010	6,192	-	-
December	125,100	7,980	2,590	4,035	-	-
Calendar year 1947	1,592,200	37,000	1,080	4,362	1.52	20.57
January	133,270	7,580	2,670	4,299	-	-
February	232,320	23,400	4,460	8,011	-	-
March	278,400	22,600	4,000	8,981	-	-
April	205,720	17,100	4,130	6,857	-	-
May	144,290	9,500	2,620	4,655	-	-
June	112,170	6,580	1,960	3,739	-	-
July	183,000	22,500	1,940	5,903	-	-
August	173,820	24,000	1,850	2,607	-	-
September	124,380	13,000	1,770	4,146	-	-
Water year 1947-48	1,998,850	24,000	1,130	5,461	1.90	25.84

Peak discharge (base, 25,000 sec.-ft.).- Feb. 13 (8:45 a.m.) 26,800 sec.-ft.; Mar. 7 (7:15 p.m.) 29,800 sec.-ft.; July 13 (7 a.m.) 26,800 sec.-ft.; July 17 (3 a.m.) 25,800 sec.-ft.; Aug. 5 (7:15 a.m.) 25,800 sec.-ft.

Savannah River at Augusta, Ga.

Location.- Water-stage recorder, lat. 33°22'15", long. 81°56'40", at Butler Creek, 0.3 mile downstream from New Savannah Bluff lock and dam and 13 miles downstream from Augusta, Richmond County. Datum of gage is 97.00 feet above mean sea level (Corps of Engineers bench mark). Auxiliary water-stage recorder at Fifth Street Bridge on U. S. Highway 1 at Augusta for use in connection with measurement of discharge during flood periods. Datum of auxiliary gage is 102.56 feet above mean sea level (U. S. Weather Bureau bench mark).

Drainage area.- 7,508 square miles, including that of Butler Creek. Drainage area at site 13 miles upstream, 7,240 square miles (revised).

Records available.- October 1938 to September 1948. January 1884 to December 1891, January 1898 to December 1906, June 1927 to July 1932 at site 13 miles upstream. January 1925 to June 1933 (at site 13 miles upstream) in House Document 64, 74th Congress, 1st Session. June 1933 to September 1938 in report of South Carolina Research, Planning and Development Board. Gage-height records collected at site of auxiliary gage since 1875 and at Butler Creek site since 1937 are contained in reports of U. S. Weather Bureau.

Average discharge.- 22 years (1898-1906, 1927-31, 1938-48), 10,860 second-feet

Extremes.- Maximum discharge during year, 83,200 second-feet Feb. 10 (gage height, 23.90 feet); minimum, 1,520 second-feet Sept. 15; minimum daily, 1,900 second-feet Oct. 8.

1884-91, 1898-1906, 1927-32, 1938-48: Maximum discharge, 350,000 second-feet Oct. 3, 1929; maximum gage height, 46.3 feet Sept. 27, 1929 (at site and datum of present auxiliary gage); minimum discharge, 648 second-feet Sept. 24, 1939, from rating curve extended below 1,400 second-feet; minimum daily, 1,040 second-feet Oct. 2, 1927.

Remarks.- Records good. Flow partly regulated by Burton and Mathis Reservoirs (see p.211 for monthly change in contents), power plants, and New Savannah Bluff lock and dam above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,540	4,810	7,020	7,510	32,600	12,000	23,400	8,820	17,400	14,800	7,790	4,100
2	2,150	11,600	6,190	10,700	26,200	10,300	53,400	7,280	11,600	13,600	5,960	5,670
3	3,740	31,800	7,860	12,900	19,600	12,600	47,900	6,560	8,040	8,240	6,920	6,080
4	3,290	33,700	7,600	21,400	13,900	19,000	30,700	7,280	7,910	4,920	10,800	5,330
5	2,700	27,000	7,830	13,100	13,600	19,000	24,400	7,520	8,040	5,380	21,500	5,430
6	3,170	19,200	7,150	7,590	13,300	16,600	20,100	10,500	7,680	3,300	29,200	9,640
7	2,480	13,400	6,740	8,070	11,500	28,200	19,600	10,900	6,250	3,840	23,500	15,000
8	1,900	13,100	5,930	8,430	30,600	62,300	20,100	10,900	5,100	3,750	15,200	21,000
9	2,910	22,900	6,580	8,070	59,600	61,300	22,200	9,940	5,130	3,480	7,740	17,900
10	5,030	19,800	7,480	7,470	80,400	40,400	23,200	7,910	5,990	4,050	6,580	11,200
11	5,030	14,400	11,700	7,130	72,000	30,300	20,300	5,990	6,680	4,830	6,360	7,590
12	4,550	41,900	13,800	6,910	50,700	14,900	17,500	6,440	5,360	10,300	6,800	6,360
13	5,130	55,400	16,900	7,890	49,800	21,000	16,200	8,300	6,270	17,100	6,690	6,470
14	4,190	35,600	18,300	17,300	59,300	17,300	15,000	9,800	4,720	29,500	6,800	4,640
15	3,760	23,900	17,700	21,000	48,700	15,000	15,300	8,300	5,330	23,400	6,800	3,860
16	2,870	25,700	18,100	15,400	36,000	11,700	14,600	7,910	6,500	21,200	6,690	4,340
17	4,320	27,500	25,700	10,800	27,000	20,400	13,000	6,440	7,650	22,000	6,690	5,930
18	5,230	21,500	24,700	9,590	22,400	36,400	11,400	5,770	6,660	26,800	6,800	5,130
19	7,740	20,100	18,300	9,070	19,600	30,300	9,960	4,720	5,900	20,800	6,690	4,640
20	8,610	22,900	14,400	8,190	16,000	22,900	8,690	6,320	5,960	12,300	6,690	4,730
21	4,940	19,200	11,500	9,720	13,600	18,200	8,690	5,550	5,410	6,200	6,470	4,100
22	2,620	13,300	25,000	11,200	16,600	16,000	10,100	6,210	5,880	7,690	6,470	4,370
23	3,920	10,800	26,000	11,000	20,500	15,500	11,400	5,990	5,770	7,640	5,530	5,230
24	4,890	11,100	19,900	10,300	19,200	26,000	10,200	4,820	6,650	7,850	5,130	5,730
25	8,940	15,000	15,800	10,100	15,600	33,400	9,660	4,920	6,100	6,560	3,890	5,330
26	9,070	19,000	19,200	9,200	14,400	26,900	7,520	7,330	5,120	5,080	5,190	5,230
27	6,530	13,500	20,500	8,450	14,100	21,400	8,430	10,500	4,620	3,820	5,250	4,370
28	4,930	9,330	16,600	11,400	13,300	19,500	7,650	9,660	4,520	2,580	4,730	4,460
29	5,030	9,660	11,700	15,400	12,400	22,700	8,170	10,400	3,750	6,010	5,030	5,130
30	10,700	6,470	8,310	17,500	-	19,500	8,820	16,800	6,950	6,680	4,730	6,030
31	8,550	-	8,550	26,700	-	16,700	-	21,200	-	6,560	4,190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	151,510	10,700	1,900	4,887	-	-
November	613,570	55,400	4,810	20,450	-	-
December	433,040	26,000	5,930	13,970	-	-
Calendar year 1947	3,782,780	83,200	1,840	10,360	1.38	18.75
January	350,490	26,700	6,910	11,310	-	-
February	842,500	80,400	11,500	29,050	-	-
March	747,700	62,300	10,300	24,120	-	-
April	516,590	53,400	7,520	17,220	-	-
May	260,980	21,200	4,720	8,419	-	-
June	198,940	17,400	3,750	6,631	-	-
July	320,260	29,500	2,580	10,330	-	-
August	258,810	29,200	3,890	8,349	-	-
September	205,020	21,000	3,860	6,834	-	-
Water year 1947-48	4,899,410	80,400	1,900	13,390	1.78	24.27

Peak discharge (base, 50,000 sec.-ft.).- Nov. 13 (5 a.m.) 61,600 sec.-ft.; Feb. 10 (2 a.m.) 83,200 sec.-ft.; Mar. 8 (9 p.m.) 69,200 sec.-ft.; Apr. 2 (6 p.m.) 57,100 sec.-ft.

Note.- Discharge for Oct. 30 to Nov. 1, Dec. 3 to Jan. 12, Jan. 14-16, Feb. 9-15, July 13-19, July 26 to Aug. 3, Aug. 9 to Sept. 30 computed from graph based on several gage readings daily at lock.

Savannah River at Burtons Ferry Bridge, near Millhaven, Ga.

Location.- Water-stage recorder, lat. 32°56'20", long. 81°30'10", at bridge on U. S. Highway 301, 2 miles downstream from Rocky Creek and 9 miles east of Millhaven, Screven County. Datum of gage is 52.42 feet above mean sea level, datum of 1929, supplementary adjustment of 1926 (levels by Corps of Engineers).

Drainage area.- 8,650 square miles.

Records available.- October 1939 to September 1948.

Extremes.- Maximum discharge during year, 61,000 second-feet Feb. 14 (gage height, 21.10 feet); minimum daily, 3,230 second-feet Oct. 10.
1939-48: Maximum discharge, 141,000 second-feet Aug. 18, 1940 (gage height, 27.0 feet); minimum daily, 2,240 second-feet Oct. 18, 25, 1941.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow partly regulated by Burton and Mathis Reservoirs (see p.211 for change in monthly contents), power plants, and New Savannah lock and dam above station. Minimum flows may be affected by regulation, but figures of monthly runoff closely represent those for natural runoff except during periods of extremely low flow.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,300	10,000	13,600	17,300	14,700	17,000	28,600	9,400	14,100	6,070	7,500	5,260
2	3,490	9,100	11,400	14,900	15,700	16,300	29,900	9,640	14,900	9,640	7,500	4,940
3	3,320	10,300	9,940	13,600	17,600	15,300	29,200	9,040	15,800	11,100	7,500	5,620
4	3,850	12,700	9,610	13,300	21,300	14,700	32,400	8,250	16,600	10,800	7,000	6,610
5	4,300	13,800	9,720	13,500	25,700	14,500	40,600	8,580	14,900	8,360	7,500	6,340
6	4,030	15,300	9,610	13,600	25,700	14,900	42,200	8,800	12,800	6,900	8,000	6,610
7	3,940	18,800	9,400	13,100	23,000	16,300	38,500	10,000	11,200	5,530	9,500	8,940
8	3,940	24,000	8,900	13,500	20,000	17,600	33,700	11,000	9,280	5,180	12,000	11,700
9	3,400	25,700	8,240	11,100	18,500	19,200	29,200	11,400	8,030	5,440	16,000	12,700
10	3,230	23,600	8,710	10,800	19,200	26,200	26,200	11,400	6,700	5,710	17,000	13,700
11	4,840	22,100	10,200	10,200	23,100	45,200	24,000	10,700	6,900	5,620	17,000	14,800
12	5,830	21,200	12,500	9,500	45,700	50,500	23,000	8,920	7,400	6,000	16,000	14,800
13	5,830	20,700	13,600	9,200	58,000	46,200	23,000	8,360	7,000	6,500	14,000	13,200
14	5,920	21,200	14,500	9,610	60,000	39,900	22,600	9,280	7,100	7,500	12,000	10,800
15	5,740	26,100	15,500	11,500	57,000	33,700	22,100	10,000	6,520	10,000	10,000	9,600
16	5,110	37,100	16,600	13,000	54,100	29,200	20,400	10,000	6,430	12,000	9,500	7,060
17	4,660	39,200	17,600	14,000	53,200	26,200	19,200	9,520	6,900	13,000	9,000	6,160
18	5,290	35,700	18,500	14,900	49,600	24,000	17,900	8,470	7,920	14,000	8,500	6,970
19	5,830	33,700	19,200	15,300	43,800	22,600	17,000	7,400	7,920	16,000	8,500	6,790
20	7,190	31,100	20,400	14,900	37,100	22,600	15,600	6,520	7,200	18,000	8,000	6,520
21	8,800	29,200	22,100	13,800	31,800	26,800	13,700	6,800	7,000	20,000	8,000	6,160
22	7,570	26,800	23,600	13,300	27,400	31,100	12,300	6,900	6,610	22,000	7,500	5,710
23	5,470	25,200	22,600	13,300	24,000	30,400	11,700	6,800	6,800	22,000	7,500	5,350
24	4,930	23,600	21,200	13,300	21,200	28,600	11,800	6,900	6,800	19,000	7,000	5,890
25	6,640	21,200	21,200	13,100	20,000	25,200	11,800	6,430	6,900	14,000	6,500	6,610
26	9,940	18,800	22,600	12,800	19,600	23,600	11,500	6,430	7,200	10,000	6,000	6,430
27	11,000	17,300	23,000	12,400	19,200	25,700	10,500	7,400	6,610	8,250	6,000	6,520
28	10,500	16,800	23,000	11,800	18,800	31,800	10,000	9,640	5,930	7,000	6,500	6,070
29	8,800	16,300	22,100	11,900	17,900	33,000	9,400	11,000	5,530	5,180	6,000	5,930
30	7,570	15,500	21,200	12,700	-	31,100	9,160	12,200	5,180	5,620	6,000	6,520
31	9,300	-	19,600	13,600	-	28,600	-	13,200	-	7,000	5,500	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	184,560	11,000	3,230	5,954	0.688	0.79
November	662,100	39,200	9,100	22,070	2.55	2.84
December	499,930	23,600	8,240	16,130	1.86	2.14
Calendar year 1947	4,296,130	66,500	2,720	11,770	1.36	18.45
January	398,810	17,300	9,200	12,860	1.49	1.72
February	882,900	60,000	14,700	30,440	3.52	3.80
March	828,000	50,500	14,500	26,710	3.09	3.56
April	647,160	42,200	9,160	21,570	2.49	2.78
May	280,380	13,200	6,430	9,045	1.05	1.21
June	260,210	16,600	5,180	8,674	1.00	1.12
July	323,400	22,000	5,180	10,430	1.21	1.40
August	284,500	17,000	5,500	9,177	1.06	1.22
September	239,360	14,800	4,940	7,970	.922	1.03
Water year 1947-48	5,491,310	60,000	3,230	15,000	1.73	23.61

Peak discharge (base, 35,000 sec.-ft.).- Nov. 17 (5 a.m.) 39,200 sec.-ft.; Feb. 14 (3 a.m.) 61,000 sec.-ft.; Mar. 12 (9 a.m.) 51,400 sec.-ft.; Apr. 6 (4 a.m.) 43,000 sec.-ft.

Note.- No gage-height record July 12-26, Aug. 2-31; discharge computed on basis of records for stations at Augusta and near Clyo.

Savannah River near Clyo, Ga.

Location.- Water-stage recorder, lat. 32°31'30", long. 81°15'45", at bridge on Seaboard Air Line Railroad 3 miles north of Clyo, Effingham County. Datum of gage is 13.41 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 9,850 square miles.

Records available.- October 1937 to September 1948. April 1930 to June 1933 (below 12,000 second-feet only) in House Document 64, 74th Congress, 1st Session. Gage-height records collected at same site 1921-43 by U. S. Weather Bureau (unpublished prior to 1933).

Average discharge.- 11 years, 11,530 second-feet.

Extremes.- Maximum discharge during year, 71,000 second-feet Feb. 17 (gage height, 19.66 feet); minimum daily, 4,050 second-feet Oct. 11.

1937-48: Maximum discharge observed, 128,000 second-feet Aug. 21, 22, 1940 (gage height, 23.6 feet); minimum daily, 2,830 second-feet Oct. 19, 25-28, 1941.

1921-48: Maximum gage height, 29.7 feet Oct. 6, 1929; minimum observed, 1.3 feet Oct. 11, 1931.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair. Flow partly regulated by Burton and Mathis Reservoirs (see p.211 for change in monthly contents), power plants, and New Savannah lock and dam above station.

Revisions.- Revised figures of monthly and yearly discharge, in second-feet, in the water and calendar years 1940, superseding those published in Water-Supply Papers 892 and 922, are given herewith:

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
April	310,200	11,500	8,020	10,340	1.05	1.17
Water year 1939-40	3,682,750	127,000	3,460	10,060	1.02	13.92
Calendar year 1940	3,861,120	127,000	3,550	10,550	1.07	14.59

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,760	12,200	23,100	27,500	16,200	24,000	41,500	13,300	11,800	6,040	8,780	6,800
2	5,310	12,900	21,800	27,000	16,500	23,600	43,100	12,700	12,600	6,220	9,000	6,700
3	4,770	14,100	20,400	25,500	16,800	23,600	43,100	12,300	13,000	7,880	9,240	6,400
4	4,410	14,800	19,200	24,000	17,400	23,100	43,900	12,200	13,800	9,120	9,480	6,700
5	4,320	15,000	17,400	21,800	18,400	22,200	43,100	11,900	14,200	9,720	9,360	7,460
6	4,770	15,500	15,800	20,000	19,600	21,300	42,300	11,500	14,800	9,840	9,600	8,010
7	4,860	15,800	14,500	18,800	22,600	20,800	46,300	11,700	15,000	8,880	10,300	9,000
8	4,680	16,500	13,500	17,700	26,500	20,400	50,600	11,900	15,000	7,440	10,900	10,100
9	4,680	17,100	12,700	17,100	29,600	20,800	50,600	12,300	14,500	6,320	11,500	11,100
10	4,320	18,400	12,300	16,800	30,800	22,200	46,300	12,700	13,000	6,220	12,100	11,800
11	4,050	21,800	12,200	16,000	29,000	24,000	41,500	13,100	11,000	6,520	12,700	12,300
12	4,680	26,000	12,900	15,500	28,000	28,000	36,500	13,500	9,360	6,620	13,300	12,900
13	5,760	28,000	13,700	14,800	28,500	43,100	32,600	13,900	d8,500	6,920	13,900	13,500
14	6,160	28,000	14,500	13,900	36,800	57,100	29,600	12,900	d8,500	7,880	14,300	14,500
16	6,360	27,500	15,500	13,300	57,100	59,100	28,500	12,000	d8,000	9,120	14,500	15,500
16	6,460	27,000	16,800	12,900	67,600	55,100	28,000	11,500	d8,000	9,960	13,900	15,800
17	6,060	27,000	18,000	13,300	69,800	49,700	27,500	11,200	d8,000	10,500	12,500	14,500
18	5,580	30,800	19,600	13,700	69,800	44,700	26,500	10,800	d8,000	11,100	11,200	11,800
19	5,670	39,300	20,800	14,300	67,600	40,000	25,500	10,500	d8,000	11,600	10,400	9,960
20	6,160	43,900	22,200	15,200	65,400	36,500	24,000	9,840	d8,500	12,200	9,960	9,000
21	7,160	44,700	24,000	16,200	60,100	33,800	22,600	8,880	d8,500	13,000	9,600	8,340
22	8,500	43,100	26,000	17,100	54,200	32,000	21,300	d8,100	d8,000	14,000	9,240	7,680
23	8,740	40,000	27,500	18,000	47,100	32,000	20,000	d7,770	d8,000	15,500	8,890	7,130
24	7,490	37,900	28,500	18,400	40,700	37,200	18,400	d7,660	d8,000	17,100	8,670	6,600
25	8,040	35,100	29,600	18,400	35,800	40,700	17,100	d7,660	d7,500	19,600	8,340	6,600
26	10,500	32,600	29,600	18,000	31,400	40,000	16,200	d7,660	d7,500	19,600	7,790	7,130
27	12,200	30,800	29,000	17,700	28,000	37,200	15,500	d7,660	d7,500	18,400	7,130	7,240
26	13,100	28,500	28,000	17,400	26,000	33,800	15,000	d7,880	d7,550	16,600	6,700	7,460
29	13,700	26,500	28,000	17,100	25,000	32,000	14,500	9,120	d7,000	14,300	7,130	7,350
30	13,700	24,500	28,000	16,500	-	33,800	13,900	10,200	6,420	11,300	7,130	7,130
31	12,900	-	28,000	16,500	-	38,600	-	11,100	-	9,120	6,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	220,850	13,700	4,050	7,124	0.723	0.83
November	795,300	44,700	12,200	26,510	2.69	3.00
December	643,100	29,600	12,200	20,750	2.11	2.43
Calendar year 1947	5,006,210	63,200	4,050	13,720	1.39	18.89
January	550,400	27,500	12,900	17,750	1.80	2.08
February	1,082,300	69,800	16,200	37,320	3.79	4.09
March	1,050,400	59,100	20,400	33,880	3.44	3.97
April	925,500	50,600	13,900	30,850	3.13	3.49
May	335,430	13,900	7,660	10,820	1.10	1.27
June	299,480	15,000	6,420	9,983	1.01	1.13
July	338,620	19,600	6,040	10,920	1.11	1.28
August	314,340	14,500	6,700	10,140	1.03	1.19
September	286,490	15,800	6,400	9,550	.970	1.08
Water year 1947-48	6,842,210	69,800	4,050	18,690	1.90	25.84

Peak discharge (base, 30,000 sec.-ft.).- Nov. 21 (3 a.m.) 44,700 sec.-ft.; Feb. 17 (4:30 p.m.) 71,000 sec.-ft.; Mar. 15 (6 a.m.) 60,100 sec.-ft.; Apr. 8 (7 p.m.) 51,500 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of partial record and records for stations at Augusta and near Millhaven.

Panther Creek near Toccoa, Ga.

Location.- Water-stage recorder, lat. 34°41', long. 83°21', at Yonah Dam, a quarter of a mile upstream from mouth and 7 miles north of Toccoa, Stevens County.

Drainage area.- 31.4 square miles.

Records available.- January 1943 to September 1948.

Extremes.- Maximum discharge during year, 2,430 second-feet July 11 (gage height, 7.0 feet); minimum, 14 second-feet Oct. 7.

1943-48: Maximum discharge, 6,200 second-feet Jan. 6, 1946 (gage height, 11.3 feet), from rating curve extended above 800 second-feet on basis of slope-area determination at gage height 18.0 feet; minimum, 14 second-feet Sept. 6, 7, Oct. 7, 1947.

Remarks.- Records good except those for period of no gage-height record, which are fair.

Cooperation.- Water-stage recorder inspected by employee of Georgia Power Co.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 1 to July 10, July 18 to Sept. 30)

1.5	15	2.2	117
1.6	25	2.4	165
1.7	36	2.7	250
1.9	61	3.3	455
2.0	77	4.1	770

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	28	36	52	56	60	150	63	56	57	63	46
2	17	102	36	47	52	88	122	63	51	46	88	46
3	17	60	36	43	49	77	106	63	48	44	92	46
4	17	44	36	42	48	71	100	71	46	42	621	60
5	16	48	36	41	47	58	96	64	48	40	131	90
6	16	41	36	40	60	124	98	64	53	40	96	71
7	19	49	36	38	71	284	94	64	48	38	86	102
8	32	48	40	37	177	135	96	61	47	38	79	66
9	36	42	37	37	109	111	90	60	44	43	74	56
10	28	37	48	36	90	96	86	58	44	47	71	47
11	41	142	48	36	79	90	92	57	44	750	71	46
12	29	72	44	37	286	85	88	57	44	350	69	42
13	26	53	42	66	184	79	85	58	47	a150	71	42
14	25	48	41	49	165	77	85	56	51	a100	66	42
15	25	95	90	48	113	75	83	54	52	a60	66	41
16	83	67	86	57	96	81	81	54	51	227	64	40
17	133	56	61	42	86	77	77	53	44	181	61	41
18	48	52	54	42	77	74	74	49	44	102	58	44
19	36	54	49	41	74	79	74	48	43	92	58	43
20	32	49	47	41	71	77	74	48	41	81	58	44
21	29	46	44	42	71	74	72	47	41	72	54	43
22	27	43	42	41	74	74	72	44	126	69	54	43
23	27	48	42	40	69	220	71	44	51	64	53	43
24	55	52	41	42	66	128	69	44	46	63	52	42
25	49	48	43	38	66	104	67	53	41	60	51	40
26	40	46	41	37	66	96	67	48	37	56	48	40
27	35	43	40	42	64	160	66	46	37	53	48	40
28	42	40	40	52	64	119	64	72	37	53	49	56
29	34	38	38	48	61	104	64	74	96	52	48	47
30	32	37	37	54	-	96	64	56	64	56	48	43
31	29	-	37	66	-	188	-	60	-	56	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,092	133	16	35.2	1.12	1.29
November	1,628	142	28	54.3	1.73	1.93
December	1,384	90	36	44.6	1.42	1.64
Calendar year 1947	18,944	907	16	51.9	1.65	22.40
January	1,374	66	36	44.3	1.41	1.63
February	2,591	286	47	89.3	2.84	3.06
March	3,261	284	58	105	3.34	3.85
April	2,527	150	64	84.2	2.68	2.99
May	1,753	74	44	56.5	1.80	2.08
June	1,522	126	37	50.7	1.61	1.80
July	3,182	750	38	103	3.28	3.78
August	2,596	621	48	83.7	2.67	3.08
September	1,492	102	40	49.7	1.58	1.76
Water year 1947-48	24,402	750	16	66.7	2.12	28.89

Peak discharge (base, 900 sec.-ft.).- July 11 (8 a.m.) 2,430 sec.-ft.; July 16 (6 p.m.) 1,250 sec.-ft.; Aug. 4 (5 a.m.) 2,080 sec.-ft.

a No gage-height record; discharge computed on basis of records for Chattooga River near Clayton.

Keowee River near Newry, S. C.

Location.- Water-stage recorder, lat. 34°44', long. 82°53', 0.4 mile upstream from Six Mile Creek, 1 mile downstream from Little River, and 1.5 miles east of Newry, Oconee County.

Drainage area.- 455 square miles.

Records available.- December 1939 to September 1948.

Extremes.- Maximum discharge during year, 17,500 second-feet Aug. 4; maximum gage height, 19.09 feet Aug. 4; minimum discharge, 223 second-feet Oct. 4, 5; minimum daily, 283 second-feet Oct. 5.

1939-48: Maximum discharge, 25,200 second-feet Aug. 13, 1940, from rating curve extended above 20,000 second-feet by logarithmic plotting; maximum gage height, 24.60 feet Aug. 13, 1940; minimum discharge, 184 second-feet Oct. 27, 1941; minimum daily, 224 second-feet Oct. 26, 1941.

Remarks.- Records good. Low flow partly regulated by power plant above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	716	748	740	1,210	1,120	3,380	944	978	714	2,140	614
2	288	1,820	714	1,630	1,080	1,460	2,520	816	876	495	2,700	503
3	305	2,520	748	978	995	1,590	2,100	868	782	542	k4,500	488
4	300	1,420	655	868	952	1,380	1,890	918	859	429	k13,600	511
5	283	1,080	680	800	927	1,210	1,760	1,000	723	402	k4,480	k1,300
6	309	918	766	774	1,210	k1,430	1,840	876	689	382	2,610	k6,230
7	300	868	589	723	1,290	k7,200	1,760	927	723	363	2,020	3,880
8	349	1,030	630	698	1,800	3,290	2,020	910	647	350	1,760	2,100
9	536	825	698	655	1,630	2,180	1,890	704	698	396	1,590	1,590
10	519	740	757	766	1,420	1,840	1,630	757	598	486	1,420	1,380
11	391	2,060	876	565	1,250	1,590	1,630	732	581	k2,690	1,380	1,340
12	369	1,800	782	606	k4,610	1,420	1,550	757	672	k6,620	1,340	1,060
13	363	1,210	834	1,420	k4,240	1,290	1,460	748	526	k2,980	1,250	1,020
14	350	995	614	1,420	4,480	1,210	1,420	800	630	2,140	1,380	986
15	327	2,020	927	970	3,120	1,160	1,380	825	550	k2,610	1,250	986
16	440	1,720	k2,850	927	2,360	1,250	1,290	639	573	k5,400	1,120	902
17	2,020	1,290	1,380	918	2,060	1,550	1,340	614	503	2,520	1,000	902
18	1,810	1,120	1,050	842	1,800	1,250	1,120	647	511	1,720	961	952
19	889	1,160	927	842	1,680	1,340	1,120	614	656	2,100	902	782
20	716	1,060	774	774	1,550	1,550	1,120	606	472	1,460	902	706
21	574	978	740	774	1,460	1,210	1,080	581	409	1,340	791	766
22	513	902	732	782	1,550	1,210	1,070	689	614	1,160	902	732
23	462	978	664	740	1,460	k3,290	1,040	518	647	1,120	944	723
24	827	1,120	622	782	1,340	2,700	1,080	495	542	1,080	927	732
25	1,600	1,080	655	740	1,290	1,840	986	740	466	850	800	689
26	954	952	689	748	1,290	1,590	910	884	536	842	740	655
27	807	902	598	748	1,250	k4,040	936	k1,790	367	825	630	655
28	2,060	834	589	1,070	1,160	2,950	952	1,720	397	834	598	782
29	1,320	782	639	995	1,160	2,180	902	2,270	714	986	581	1,030
30	930	740	557	986	-	1,890	884	1,630	808	1,080	550	766
31	798	-	557	1,380	-	k3,200	-	1,210	-	961	550	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	22,009	2,060	283	710	1.56	1.80
November	35,640	2,520	716	1,188	2.61	2.91
December	25,041	2,850	557	808	1.78	2.05
Calendar year 1947	341,272	11,000	275	935	2.05	27.90
January	27,661	1,630	565	892	1.96	2.26
February	51,624	4,610	927	1,780	3.91	4.22
March	62,410	7,200	1,120	2,013	4.42	5.10
April	44,060	3,380	884	1,469	3.23	3.60
May	28,265	2,270	495	912	2.00	2.31
June	18,747	978	367	625	1.37	1.53
July	45,877	6,620	350	1,480	3.25	3.75
August	56,318	13,600	550	1,817	3.99	4.60
September	35,762	6,230	488	1,192	2.62	2.92
Water year 1947-48	453,414	13,600	283	1,239	2.72	37.05

Peak discharge (base, 7,000 sec.-ft.).- Feb. 12 (7 p.m.) 8,150 sec.-ft.; Mar. 7 (9:30 a.m.) 10,100 sec.-ft.; July 12 (7:15 a.m.) 9,900 sec.-ft.; July 16 (1:30 a.m.) 9,560 sec.-ft; Aug. 4 (3:15 p.m.) 17,500 sec.-ft.; Sept. 6 (9:45 a.m.) 9,360 sec.-ft.

k Computed by using rate of change of stage as a factor.

Seneca River near Anderson, S. C.

Location.- Water-stage recorder, lat. 34°30', long. 82°50', a quarter of a mile downstream from bridge on State Highway 80, 1½ miles downstream from Deep Creek, 4 miles upstream from confluence with Tugaloo River, and 10½ miles west of Anderson, Anderson County.
Drainage area.- 1,026 square miles.
Records available.- October 1931 to September 1948. May 1928 to September 1931 in House Document 64, 74th Congress, 1st Session.
Average discharge.- 17 years (1931-48), 2,001 second-feet.
Extremes.- Maximum discharge during year, 15,300 second-feet Aug. 5 (gage height, 10.84 feet); minimum, 342 second-feet Oct. 5; minimum daily, 451 second-feet Oct. 6.

1931-48: Maximum discharge, 55,200 second-feet Oct. 1, 1936 (gage height, 20.07 feet), from rating curve extended above 18,000 second-feet by logarithmic plotting; minimum, about 90 second-feet Nov. 18, 1934; minimum daily, 326 second-feet Oct. 13, 1941.

Maximum stage known, 25 feet observed Aug. 17, 18, 1928 (discharge, 77,000 second-feet, from rating curve extended above 18,000 second-feet).
Remarks.- Records good except those for period of no gage-height record, which are fair. Some regulation at low flow by power plants above station.
Revisions.- W 757: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 8				Mar. 9 to Sept. 30			
2.8	408	4.5	2,290	3.3	788	7.0	6,170
3.1	642	5.5	3,720	3.8	1,300	8.7	9,770
3.4	925	7.0	6,170	4.5	2,170	10.2	13,600
3.8	1,380	8.7	9,770	5.5	3,640		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	480	1,110	1,280	1,260	2,290	1,740	6,940	1,610	2,170	1,510	2,020	1,220
2	503	2,300	1,200	2,350	1,950	2,140	4,440	1,510	1,780	1,170	2,870	1,060
3	488	5,990	1,190	1,880	1,750	2,850	3,400	1,480	1,480	1,120	4,340	951
4	526	3,630	1,200	1,500	1,630	2,360	2,940	1,600	1,440	970	9,170	980
5	457	2,360	1,090	1,450	1,580	2,080	2,720	1,850	1,510	902	13,600	1,310
6	451	1,880	1,160	1,340	1,750	2,160	2,720	1,660	1,170	863	4,780	5,610
7	492	1,730	1,160	1,270	2,360	9,390	2,720	1,720	1,230	807	2,870	6,300
8	604	2,290	1,050	1,260	3,310	8,620	3,320	1,620	1,280	835	2,370	3,430
9	1,130	1,750	1,170	1,240	3,800	4,280	3,100	1,570	1,280	807	2,040	2,100
10	956	1,500	1,330	1,160	3,130	3,320	2,650	1,350	1,170	941	1,910	1,720
11	895	3,880	1,580	1,240	2,640	2,870	a2,600	1,440	1,150	1,910	1,720	1,550
12	748	5,480	1,440	1,050	5,400	2,580	a2,600	1,380	1,100	6,690	1,660	1,490
13	617	2,790	1,350	1,680	9,770	2,300	a2,400	1,440	1,160	4,850	1,850	1,170
14	612	1,880	1,260	2,710	6,740	2,170	a2,400	1,460	1,180	2,940	1,720	1,280
15	594	3,160	1,340	1,820	5,290	2,100	a2,200	1,630	1,120	2,650	1,850	1,220
16	628	3,780	4,050	1,440	3,720	2,340	a2,200	1,120	1,060	11,000	1,550	1,170
17	1,630	2,430	2,920	1,410	3,130	4,280	2,040	1,110	1,070	6,160	1,480	1,110
18	3,080	1,950	2,080	1,440	2,710	2,800	2,040	1,270	990	2,730	1,400	1,160
19	1,470	1,820	1,720	1,320	2,500	2,440	1,780	1,230	1,050	2,410	1,330	1,080
20	1,030	1,820	1,560	1,270	2,360	2,720	1,910	1,220	1,110	2,370	1,300	960
21	895	1,580	1,450	1,300	2,220	2,440	1,780	1,180	863	1,850	1,280	1,030
22	825	1,470	1,460	1,330	2,360	2,170	1,780	1,230	990	1,570	1,240	1,000
23	759	1,500	1,350	1,260	2,360	5,130	1,780	1,170	1,170	1,440	1,290	980
24	900	1,820	1,330	1,280	2,080	7,040	1,780	1,010	1,020	1,310	1,330	990
25	2,030	1,950	1,330	1,290	2,020	3,800	1,780	1,200	960	1,300	1,290	980
26	1,440	1,670	1,410	1,230	2,020	2,870	1,600	1,720	970	1,050	1,140	941
27	1,130	1,500	1,330	1,320	1,950	4,550	1,660	1,970	882	1,150	1,090	892
28	3,710	1,410	1,280	1,660	1,880	6,100	1,610	2,800	788	1,060	1,090	951
29	3,770	1,330	1,220	1,880	1,820	3,720	1,570	3,320	2,700	1,240	980	1,270
30	1,670	1,240	1,210	1,740	-	3,020	1,560	3,320	2,170	1,400	951	1,120
31	1,220	-	1,190	2,360	-	4,100	-	2,240	-	1,300	970	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	35,740	3,770	451	1,153	1.12	1.29
November	69,000	5,990	1,110	2,300	2.24	2.50
December	45,690	4,050	1,050	1,474	1.44	1.66
Calendar year 1947	599,948	16,100	444	1,644	1.60	21.73
January	46,740	2,710	1,050	1,508	1.47	1.70
February	86,520	9,770	1,580	2,983	2.91	3.14
March	110,480	9,390	1,740	3,564	3.47	4.00
April	74,020	6,940	1,560	2,467	2.40	2.68
May	50,430	3,320	1,010	1,627	1.59	1.83
June	38,013	2,700	788	1,267	1.23	1.37
July	68,305	11,000	807	2,203	2.15	2.48
August	74,481	13,600	951	2,403	2.34	2.70
September	47,025	6,300	892	1,568	1.53	1.71
Water year 1947-48	746,444	13,600	451	2,039	1.99	27.06

Peak discharge (base, 13,000 sec.-ft.).- July 16 (7 p.m.) 15,000 sec.-ft.; Aug. 5 (1 p.m.) 15,300 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Keowee River near Newry.

South Beaverdam Creek at Dewy Rose, Ga.

Location.- Staff gage, lat. 34°11', long. 82°57', at bridge on county road 1 mile northeast of Dewy Rose, Elbert County, and 3 miles upstream from confluence with North Beaverdam Creek.

Drainage area.- 36.6 square miles.

Records available.- October 1942 to September 1948.

Extremes.- Maximum gage height during year, 7.4 feet Nov. 12, from graph based on gage readings (discharge not determined); minimum discharge observed, 13 second-feet Oct. 6, 7.

1942-48: Maximum gage height, 13.4 feet Jan. 18, 1943, from graph based on gage readings (discharge not determined); minimum discharge observed, 6.5 second-feet Sept. 9, 1947.

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	32	45	60	87	71	231	42	87	29	29	18
2	15	232	43	71	71	118	137	42	64	26	33	18
3	15	322	43	57	66	105	93	42	50	25	35	18
4	15	99	42	54	64	93	87	47	42	23	189	20
5	15	87	42	52	62	82	87	51	40	22	72	29
6	14	76	42	51	71	178	87	49	40	22	40	46
7	13	121	42	50	105	684	93	57	38	21	36	111
8	64	322	42	48	370	295	150	46	38	21	33	64
9	124	99	42	48	455	150	124	42	38	22	31	39
10	52	71	64	47	421	144	93	40	36	37	28	33
11	39	404	99	46	217	124	93	40	34	69	25	31
12	30	594	71	46	261	105	87	41	34	55	26	29
13	26.	124	60	87	472	93	81	41	33	35	48	25
14	23	82	52	81	246	93	81	40	33	111	62	25
15	24	203	71	64	137	87	87	39	33	111	38	25
16	42	137	203	58	105	99	75	37	38	44	33	24
17	52	76	87	54	99	338	68	35	33	42	25	23
18	57	66	76	53	87	144	64	34	29	38	31	22
19	42	76	71	52	82	118	61	33	37	35	29	22
20	32	66	61	54	76	93	61	32	33	33	26	21
21	29	58	66	54	76	87	58	31	30	29	25	20
22	26	54	71	52	105	82	57	29	34	27	25	20
23	29	59	62	52	87	250	56	29	34	26	29	19
24	66	66	58	55	76	189	52	28	30	25	25	19
25	53	66	76	55	76	111	52	32	28	24	24	19
26	44	57	81	54	76	99	51	49	26	22	23	18
27	41	53	66	53	71	105	50	40	25	20	22	18
28	52	50	61	76	71	99	48	81	25	19	20	31
29	47	48	57	76	71	87	47	203	73	25	20	29
30	36	47	55	76	-	82	46	137	37	54	19	24
31	33	-	54	118	-	203	-	69	-	35	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,165	124	13	37.6	1.03	1.19
November	3,847	594	32	128	3.50	3.90
December	2,005	203	42	64.7	1.77	2.04
Calendar year 1947	20,342.8	1,090	7.9	55.7	1.52	20.66
January	1,854	118	46	59.8	1.63	1.88
February	4,263	472	62	147	4.02	4.34
March	4,608	684	71	149	4.07	4.69
April	2,457	231	46	81.9	2.24	2.50
May	1,558	203	28	50.3	1.37	1.58
June	1,152	87	25	38.4	1.05	1.17
July	1,127	111	19	36.4	.995	1.15
August	1,119	189	18	36.1	.986	1.14
September	860	111	18	28.7	.784	.87
Water year 1947-48	26,015	684	13	71.1	1.94	26.45

Broad River near Bell Ga.

Location.- Water-stage recorder, lat. 33°58', long. 82°46', at bridge on State Highway 17, half a mile downstream from Long Creek, 1 mile south of Bell, and 12 miles southeast of Elberton, Elbert County. Datum of gage is 357.16 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,420 square miles.

Records available.- November 1926 to July 1932, August 1937 to September 1948.

Average discharge.- 14 years (1928-31, 1937-48), 1,754 second-feet.

Extremes.- Maximum discharge during year, 19,900 second-feet Feb. 10 (gage height, 21.3 feet); minimum daily, 352 second-feet Oct. 6.
1926-32, 1937-48: Maximum gage height, 34.8 feet Oct. 2, 1929 (discharge not determined); minimum daily discharge, 217 second-feet Oct. 13, 1941.

Remarks.- Records good except those for period of no gage-height record, which are fair. Moderate diurnal fluctuation at low flow caused by small power plants above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 18 to Jan. 27, Sept. 9-28)

2.9	343	11.0	6,000
3.5	622	14.0	9,100
5.0	1,450	18.0	14,200
8.0	3,520	21.1	19,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	387	912	1,420	1,580	4,940	2,040	9,700	1,390	2,800	3,380	1,240	775
2	387	4,700	1,360	2,040	3,150	2,660	9,580	1,360	2,520	1,610	1,420	775
3	374	9,460	1,330	1,900	2,380	3,600	5,820	1,390	1,710	1,130	1,970	775
4	383	4,780	1,270	1,580	2,100	3,080	3,750	1,450	1,520	995	3,150	775
5	383	2,520	1,270	1,480	1,970	2,590	2,870	1,970	1,520	940	3,750	940
6	352	2,450	1,270	1,390	2,040	2,660	3,080	1,780	1,270	912	2,520	1,780
7	396	2,300	1,270	1,330	3,240	10,300	3,450	1,780	1,190	858	1,520	2,380
8	530	6,650	1,220	1,300	10,600	14,200	3,150	1,640	1,160	802	1,270	1,970
9	2,450	3,900	1,270	1,270	16,900	9,120	4,220	1,450	1,190	830	1,160	1,520
10	1,160	2,170	1,840	1,270	19,500	5,020	3,150	1,360	1,130	940	1,100	1,100
11	912	6,750	3,150	1,220	14,700	3,900	2,660	1,330	1,050	2,310	1,050	968
12	995	14,400	2,800	1,190	7,780	3,150	2,660	1,330	1,020	3,750	995	968
13	749	12,200	2,450	2,170	11,000	2,800	2,450	1,480	995	5,820	1,130	912
14	647	3,810	2,310	3,150	11,600	2,590	2,240	1,420	1,050	4,300	1,300	912
15	622	4,470	2,380	2,100	7,560	2,450	2,310	1,270	1,450	5,460	1,100	858
16	647	6,270	5,370	1,640	4,300	2,590	2,170	1,220	2,040	5,370	1,020	830
17	1,130	3,980	5,100	1,520	3,380	6,180	2,040	1,190	1,520	5,910	1,160	830
18	1,710	2,590	3,010	1,480	2,940	6,360	1,970	1,160	1,130	4,780	1,130	802
19	1,270	3,080	2,240	1,450	2,660	3,680	1,840	1,100	1,520	2,310	968	775
20	885	2,730	1,970	1,390	2,520	2,940	1,840	1,100	1,640	1,710	940	749
21	775	2,170	2,310	1,450	2,380	2,660	1,780	1,020	1,190	1,450	940	749
22	698	1,900	3,450	1,480	3,010	2,450	1,780	1,050	1,050	1,300	885	749
23	672	1,900	2,730	1,420	3,220	5,210	1,710	995	1,240	1,220	912	749
24	749	2,450	2,040	1,480	2,590	8,770	1,640	995	1,160	1,100	885	749
25	1,130	3,010	2,800	1,520	2,380	5,910	1,640	1,020	995	1,080	858	749
26	1,220	2,450	3,680	1,450	2,380	3,300	1,610	1,270	885	968	830	672
27	995	1,900	2,940	1,710	2,240	3,380	1,550	1,390	858	968	830	698
28	995	1,710	2,040	a2,200	2,240	5,100	1,520	1,450	858	940	802	858
29	1,780	1,580	1,780	a3,000	2,170	3,450	1,420	3,230	1,650	1,050	802	968
30	1,520	1,480	1,640	a3,500	-	2,730	1,390	5,100	6,090	1,580	775	940
31	1,080	-	1,520	a7,000	-	4,030	-	3,680	-	1,520	775	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	27,983	2,450	352	903	0.636	0.73
November	120,672	14,400	912	4,022	2.83	3.16
December	71,230	5,370	1,220	2,298	1.62	1.87
Calendar year 1947	697,919	26,000	290	1,912	1.35	18.29
January	58,660	7,000	1,190	1,892	1.33	1.53
February	157,870	19,500	1,970	5,444	3.83	4.13
March	138,900	14,200	2,040	4,481	3.16	3.64
April	86,990	9,700	1,390	2,900	2.04	2.28
May	49,370	5,100	995	1,593	1.12	1.29
June	45,401	6,090	858	1,513	1.07	1.19
July	67,293	5,910	802	2,171	1.53	1.76
August	39,187	3,750	775	1,264	.890	1.03
September	29,275	2,380	672	976	.687	.77
Water year 1947-48	892,831	19,500	352	2,439	1.72	23.38

Peak discharge (base, 14,000 sec.-ft.).- Nov. 12 (8 p.m.) 15,200 sec.-ft.; Feb. 10 (1 p.m.) 19,900 sec.-ft.; Mar. 8 (11 a.m.) 14,500 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

Little River near Mount Carmel, S. C.

Location.- Water-stage recorder, lat. 34°04', long. 82°30', 480 feet downstream from Island Ford Bridge, 2.8 miles upstream from Calhoun Creek, and 4.5 miles north of Mount Carmel, McCormick County. Datum of gage is 353.97 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 217 square miles.

Records available.- December 1939 to September 1948.

Extremes.- Maximum discharge during year, 3,130 second-feet Nov. 11 (gage height, 12.81 feet); minimum, 39 second-feet Oct. 7.

1939-48: Maximum discharge, 20,800 second-feet Aug. 14, 1940 (gage height, 29.60 feet, from high-water mark), from rating curve extended above 13,000 second-feet by logarithmic plotting; minimum, 19 second-feet Oct. 19, 1941.

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	80	156	228	600	222	1,930	150	360	373	94	72
2	40	1,240	150	350	372	372	908	146	521	126	159	79
3	42	1,520	146	232	298	424	457	146	178	100	158	67
4	42	975	146	198	266	319	361	148	148	94	440	71
5	42	340	146	188	252	271	319	184	138	88	585	92
6	40	277	152	178	288	423	319	166	125	84	170	285
7	39	432	146	172	573	2,740	392	168	119	77	125	222
8	54	1,270	142	166	1,850	2,400	662	160	115	74	112	117
9	176	700	148	166	2,720	826	644	144	115	75	107	100
10	110	258	394	164	2,260	872	361	138	108	82	102	85
11	70	1,880	523	154	1,030	545	424	134	102	194	98	79
12	63	2,430	350	152	1,180	414	435	144	98	288	96	75
13	57	939	277	891	1,620	340	319	218	96	248	97	72
14	54	330	234	757	1,420	308	275	194	104	319	96	70
15	54	1,080	348	330	1,060	288	264	148	206	210	91	71
16	80	849	757	242	534	384	244	132	265	163	96	70
17	122	392	403	224	424	1,750	228	126	103	510	98	66
18	176	330	275	214	361	1,240	212	121	96	168	96	63
19	102	403	252	196	330	468	204	114	96	126	92	62
20	74	298	220	192	298	382	202	112	91	152	188	61
21	65	240	271	204	275	340	198	108	88	117	112	59
22	61	212	264	202	468	308	190	105	90	103	91	58
23	65	222	210	186	403	1,000	184	102	96	96	85	57
24	91	403	198	196	298	803	182	103	82	90	81	63
25	110	372	537	188	277	414	178	139	78	85	78	63
26	91	244	523	186	277	340	172	232	72	82	75	57
27	124	204	298	277	260	479	166	168	71	79	71	53
28	256	182	240	457	266	424	162	130	131	946	68	58
29	173	170	214	403	248	308	154	148	188	217	66	81
30	102	160	196	620	-	273	152	186	254	164	63	77
31	87	-	188	1,130	-	933	-	271	-	100	61	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,705	256	39	87.3	0.402	0.46
November	18,432	2,430	80	614	2.83	3.16
December	8,504	757	142	274	1.26	1.45
Calendar year 1947	94,919	4,500	21	260	1.20	16.26
January	9,443	1,130	152	305	1.41	1.63
February	20,508	2,720	248	707	3.26	3.52
March	20,610	2,740	222	665	3.06	3.53
April	10,898	1,930	152	363	1.67	1.86
May	4,685	271	102	151	.696	.80
June	4,334	521	71	144	.664	.74
July	5,630	946	74	182	.839	.97
August	3,951	585	61	127	.585	.67
September	2,505	285	53	83.5	.385	.43
Water year 1947-48	112,205	2,740	39	307	1.41	19.22

Peak discharge (base, 2,500 sec.-ft.).- Nov. 11 (5:15 p.m.) 3,130 sec.-ft.; Feb. 9 (8 p.m.) 3,010 sec.-ft.; Mar. 7 (4:45 p.m.) 2,970 sec.-ft.; Apr. 1 (5:15 p.m.) 2,540 sec.-ft.

Little River near Lincolnton, Ga.

Location.- Wire-weight gage, lat. 33°39', long. 82°29', at Raysville Bridge on State Highway 70, half a mile downstream from Big Creek, 2½ miles south of Amity, and 10 miles south of Lincolnton, Lincoln County. Datum of gage is 271.7 feet above mean sea level (unadjusted).

Drainage area.- 574 square miles.

Records available.- January 1943 to September 1948. June 1928 to September 1931 in House Document 64, 74th Congress, 1st session.

Extremes.- Maximum discharge during year, 9,750 second-feet Feb. 10 (gage height, 20.2 feet, from graph based on gage readings); minimum observed, 44 second-feet Aug. 30.

1943-48: Maximum discharge, 16,900 second-feet Mar. 23, 1944 (gage height, 26.4 feet); minimum observed, 14 second-feet Oct. 12, 1944.

Maximum stage known, 44.3 feet Sept. 28, 1929, from information by local resident.

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	100	426	646	3,090	692	2,930	271	344	208	96	76
2	54	2,920	385	1,110	2,490	834	3,920	271	254	194	63	62
3	54	2,850	385	976	1,480	1,110	3,380	254	223	172	116	62
4	54	2,090	344	646	834	1,110	2,370	288	208	136	511	87
5	54	1,200	385	600	739	929	1,200	468	208	109	208	344
6	51	1,160	325	511	692	1,610	1,480	533	194	98	163	1,300
7	57	834	325	490	1,750	6,080	1,920	976	180	89	126	739
8	81	1,200	325	468	5,980	4,980	1,480	406	180	78	98	223
9	288	976	364	447	6,560	3,860	1,340	306	177	70	85	166
10	271	692	555	426	8,940	2,490	1,020	271	172	107	83	134
11	194	3,110	1,300	406	7,740	1,480	834	254	174	139	76	109
12	112	6,220	1,700	385	6,940	1,160	739	306	174	169	70	100
13	98	3,920	2,050	1,070	7,420	882	646	578	160	194	74	98
14	77	2,210	2,210	1,520	5,780	786	600	490	152	254	72	92
15	77	1,920	2,050	929	3,380	739	578	325	174	834	67	77
16	96	2,530	2,890	834	2,250	1,020	533	254	646	468	63	74
17	136	2,010	2,050	600	1,160	4,100	490	238	786	254	81	72
18	129	1,700	976	578	976	2,930	447	223	271	169	94	68
19	121	2,890	882	511	882	2,410	426	208	223	144	94	68
20	112	1,970	692	511	786	1,700	406	208	223	158	254	65
21	96	1,160	2,270	882	692	929	385	208	238	136	96	67
22	83	739	4,220	739	1,840	834	385	194	739	121	79	68
23	85	692	1,840	646	1,660	2,050	364	194	325	89	98	70
24	104	882	1,300	646	1,020	3,170	364	180	208	83	85	72
26	149	1,970	1,920	739	882	3,210	344	180	146	79	68	68
26	180	1,340	2,490	739	834	2,370	344	194	136	70	60	72
27	149	739	1,920	1,020	786	976	325	194	131	67	52	76
28	208	578	1,340	1,300	786	882	306	238	112	60	47	89
29	139	490	976	1,340	786	834	271	325	112	85	47	160
30	114	447	692	1,740	-	692	271	511	136	152	44	254
31	104	-	646	4,480	-	882	-	578	-	129	52	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,587	288	51	116	0.202	0.23
November	51,539	6,220	100	1,718	2.99	3.34
December	40,233	4,220	325	1,298	2.26	2.61
Calendar year 1947	259,802	8,070	32	712	1.24	16.83
January	27,935	4,480	385	901	1.57	1.81
February	79,155	8,940	692	2,729	4.75	5.12
March	57,731	6,080	692	1,862	3.24	3.74
April	30,098	3,920	271	1,003	1.75	1.95
May	10,124	976	180	327	.570	.66
June	7,406	786	112	247	.430	.48
July	5,115	834	60	165	.287	.33
August	3,222	511	44	104	.181	.21
September	5,012	1,300	62	167	.291	.32
Water year 1947-48	321,157	8,940	44	877	1.53	20.80

Peak discharge (base, 4,500 sec.-ft.).- Nov. 12 (4 a.m.) 7,880 sec.-ft.; Dec. 22 (8 a.m.) 4,800 sec.-ft.; Jan. 31 (10 a.m.) 4,920 sec.-ft.; Feb. 10 (10 a.m.) 9,750 sec.-ft.; Mar. 7 (11 p.m.) 7,170 sec.-ft.

Stevens Creek near Modoc, S. C.

Location.- Water-stage recorder, lat. 33°43'45", long. 82°10'55", at bridge on State Highway 23, 1.4 miles east of Modoc, McCormick County, and 3.2 miles downstream from Turkey Creek.

Drainage area.- 545 square miles.

Records available.- February 1940 to September 1948. October 1929 to September 1931 in House Document 64, 74th Congress, 1st Session.

Extremes.- Maximum discharge during year, 14,200 second-feet Feb. 10 (gage height, 27.36 feet); minimum, 6.9 second-feet Sept. 1.
1940-48: Maximum discharge, 35,100 second-feet Aug. 14, 1940; maximum gage height, 41.08 feet Aug. 14, 1940; minimum discharge, 1.8 second-feet Oct. 19, 1944 (gage height, 0.17 foot).

Remarks.- Records good. Slight diurnal fluctuation during low flow caused by small mills above station.

Revisions.- W 1032: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	58	215	k516	k2,080	407	k5,340	126	381	182	48	42
2	11	k1,850	196	1,760	977	k1,080	k6,200	124	191	95	35	114
3	13	k2,500	186	842	734	k1,680	k1,630	121	141	71	231	63
4	13	1,000	176	485	602	1,250	815	136	118	56	251	34
5	14	319	174	394	537	761	654	337	104	45	215	39
6	16	334	168	332	589	k946	628	235	97	44	119	444
7	14	235	161	293	k2,320	k11,100	628	k1,500	82	41	67	563
8	17	k1,360	156	267	k10,400	k7,260	k1,630	381	77	27	49	275
9	13	734	154	254	k10,800	k1,580	1,110	181	71	k386	36	148
10	8.0	274	308	246	k11,400	k2,430	628	141	80	85	37	72
11	30	k2,910	1,080	225	k3,250	1,330	459	121	73	293	38	50
12	30	k5,910	1,190	209	k3,240	923	615	131	59	1,460	27	41
13	28	k1,500	k1,360	k1,850	k5,290	734	485	368	58	705	28	38
14	26	420	k1,660	k2,410	3,400	615	368	303	52	174	23	34
15	22	k1,300	k962	788	2,220	550	355	191	102	207	26	34
16	17	k1,600	k2,650	472	1,140	576	329	126	222	191	87	25
17	30	707	1,080	394	869	k5,970	295	106	109	118	368	27
18	78	k596	589	368	761	k2,280	261	93	77	82	135	25
19	98	k2,830	485	324	654	977	233	80	56	64	82	27
20	62	1,170	453	420	589	761	225	75	52	55	67	24
21	42	563	k2,090	1,740	537	654	215	69	48	55	128	20
22	30	420	k4,610	1,030	k1,820	563	207	64	187	49	63	19
23	23	654	1,140	628	1,360	k2,190	196	64	190	43	45	17
24	k425	k1,950	654	550	761	k3,050	191	53	100	39	39	17
25	1,140	k2,420	k1,880	550	615	1,140	178	58	75	34	36	17
26	319	761	k2,640	524	602	680	174	954	52	27	28	16
27	134	433	1,060	1,170	550	615	166	355	46	27	26	23
28	85	321	641	1,710	498	923	154	196	129	51	22	24
29	66	269	498	1,440	485	641	144	k468	761	25	22	56
30	69	230	407	k1,900	-	485	131	k2,290	734	52	19	107
31	67	-	368	k6,630	-	524	-	950	-	52	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,955.0	1,140	8.0	95.3	0.175	0.20
November	35,628	5,910	58	1,188	2.18	2.43
December	29,371	4,610	154	947	1.74	2.01
Calendar year 1947	176,471.0	9,490	8.0	489	0.897	12.19
January	30,721	6,630	209	991	1.82	2.10
February	69,080	11,400	485	2,382	4.37	4.71
March	54,675	11,100	407	1,764	3.24	3.74
April	24,644	6,200	131	821	1.51	1.68
May	10,397	2,290	53	335	.615	.71
June	4,524	761	46	151	.277	.31
July	4,835	1,460	25	156	.286	.33
August	2,417	368	19	78.0	.143	.16
September	2,435	563	16	81.2	.149	.17
Water year 1947-48	271,682.0	11,400	8.0	742	1.36	18.55

Peak discharge (base, 6,000 sec.-ft.).- Nov. 12 (4:30 a.m.) 8,360 sec.-ft.; Dec. 22 (4:45 a.m.) 6,750 sec.-ft.; Jan. 31 (10:30 a.m.) 8,110 sec.-ft.; Feb. 10 (5:30 a.m.) 14,200 sec.-ft.; Feb. 13 (4:30 a.m.) 7,080 sec.-ft.; Mar. 7 (10 p.m.) 13,000 sec.-ft.; Mar. 17 (3:15 p.m.) 7,690 sec.-ft.; Apr. 1 (10 p.m.) 7,940 sec.-ft.

k Computed using rate of change of stage as a factor.

Augusta Canal near Augusta, Ga.

Location.- Two water-stage recorders near upper end of Augusta Canal. Lower gage, lat. 33°30'50", long. 82°00'15", 1.6 miles northwest of Augusta, Richmond County, and 4.6 miles downstream from Stevens Creek power dam; auxiliary gage, 1,000 feet downstream from diversion dam and 3.4 miles upstream from lower gage. Datum of each gage is 46.58 feet above city of Augusta datum or 148.92 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Records available.- November 1930 to September 1948.

Average discharge.- 17 years (1931-48), 2,636 second-feet.

Extremes.- Maximum daily discharge during year, 4,380 second-feet Jan. 2, 28; minimum daily, 1,300 second-feet Sept. 18.
1930-48: Maximum daily discharge, that of Jan. 2, 28, 1948; no flow Apr. 8 to May 10, 1936.

Remarks.- Records good except those for periods of fragmentary gage-height record, which are fair. Discharge computed by using fall as determined by auxiliary water-stage recorder as a factor. Canal diverts water from Savannah River at dam 1 mile downstream from Stevens Creek Dam for power and municipal supply. Waste water from power houses returned to river by three channels above Thirteenth Street Bridge. Water is pumped from canal for municipal supply of Augusta, and a small amount entering Beaverdam ditch is discharged into river about 13 miles below Augusta.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,440	2,600	f3,270	4,170	1,840	3,340	3,930	2,560	3,350	3,020	1,700	3,310
2	1,790	1,940	f3,850	4,380	3,550	3,670	2,950	1,890	3,030	2,740	2,930	3,870
3	1,690	3,310	4,070	2,690	4,290	3,850	2,540	3,240	3,390	1,790	3,480	3,780
4	1,730	3,530	3,970	1,900	4,050	3,950	1,680	3,410	3,250	1,580	3,610	2,580
5	1,640	3,710	3,890	3,670	4,050	3,890	3,680	f3,400	2,350	1,450	3,420	1,960
6	1,680	3,790	2,850	4,210	4,010	2,920	4,050	f3,400	1,820	2,660	3,320	1,910
7	1,490	3,810	2,130	4,270	2,830	1,650	4,130	f3,400	3,020	2,790	2,320	3,410
8	1,440	2,550	3,670	4,150	1,870	2,670	4,130	f2,400	3,050	2,730	1,420	4,110
9	1,740	2,090	3,920	3,850	2,360	3,000	4,130	f1,700	3,130	2,750	2,900	3,950
10	1,860	3,270	4,190	2,750	2,020	3,230	2,830	f3,000	2,990	2,360	3,380	3,860
11	1,800	3,770	4,210	2,260	1,910	3,660	2,160	f3,400	3,080	1,760	3,610	2,250
12	1,750	3,070	4,030	3,650	2,670	3,890	3,890	f3,400	2,130	2,880	3,720	1,760
13	1,820	3,230	2,840	4,110	2,810	2,710	3,950	f3,400	1,620	3,230	3,750	3,000
14	1,760	3,580	1,850	4,190	2,380	1,860	3,940	f3,400	2,810	3,080	2,490	3,270
15	1,790	2,930	3,610	4,270	1,770	3,570	3,940	f2,600	3,080	3,120	1,770	3,310
16	1,740	1,970	4,170	f4,070	3,410	3,850	3,880	f1,900	3,200	2,840	3,400	3,820
17	1,770	3,510	4,110	f3,030	3,570	4,070	2,780	3,060	3,280	2,130	3,930	3,250
18	1,750	3,580	3,910	f2,290	3,510	3,370	2,110	3,260	3,210	1,570	3,830	f1,300
19	1,820	3,730	3,840	3,510	3,770	3,510	3,650	3,350	2,480	2,750	3,930	2,050
20	1,760	3,680	2,940	f3,890	3,790	2,630	3,890	3,370	1,810	3,020	3,830	3,130
21	1,810	f3,100	2,160	f4,020	2,950	1,880	3,990	3,390	2,870	3,330	2,450	2,520
22	1,840	1,430	3,730	f3,940	2,120	3,620	4,040	2,290	2,950	3,130	1,960	3,040
23	1,930	f1,390	3,730	4,010	3,580	3,910	4,040	1,770	2,850	3,140	3,140	3,700
24	1,960	2,640	2,250	2,950	3,560	3,590	3,020	3,070	3,180	2,120	3,480	3,690
25	2,030	3,540	1,860	2,250	3,360	3,490	1,880	3,240	3,140	1,700	3,730	2,420
26	1,840	f3,320	1,960	3,580	3,610	4,050	3,720	3,470	2,320	2,810	3,770	2,010
27	1,740	3,620	2,000	4,110	3,590	2,900	3,920	3,390	1,680	2,770	3,710	2,930
28	2,580	3,620	2,000	4,380	2,610	2,300	3,830	3,390	2,770	3,020	2,460	3,030
29	3,780	2,710	3,660	4,290	1,920	3,750	3,480	2,340	3,050	2,950	1,950	3,520
30	3,910	2,050	4,110	4,030	-	3,930	3,450	1,410	3,200	2,890	3,040	3,730
31	3,580	-	4,170	2,800	-	4,090	-	2,970	-	2,100	2,690	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	61,260	3,910	1,440	1,976		
November	91,070	3,810	1,390	3,036		
December	102,950	4,210	1,850	3,321		
Calendar year 1947	1,053,530	4,210	1,200	2,886		
January	111,670	4,380	1,900	3,602		
February	87,760	4,290	1,770	3,026		
March	102,800	4,090	1,650	3,316		
April	103,610	4,130	1,680	3,454		
May	90,270	3,470	1,410	2,912		
June	84,090	3,390	1,620	2,803		
July	80,210	3,330	1,450	2,587		
August	95,120	3,930	1,420	3,068		
September	90,470	4,110	1,300	3,016		
Water year 1947-48	1,101,280	4,380	1,300	3,009		

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

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. Datum of gage is 95.88 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 656 square miles.

Records available.- April 1937 to September 1948.

Average discharge.- 11 years, 673 second-feet.

Extremes.- Maximum discharge during year, 4,980 second-feet Sept. 11 (gage height, 11.6 feet, from graph based on gage readings); minimum observed, 266 second-feet Oct. 6.

1937-48: Maximum discharge, 25,400 second-feet Aug. 16, 1940 (gage height, 17.4 feet, from graph based on gage readings); minimum observed, 110 second-feet June 30, July 2, 1945.

Maximum stage known, 25.1 feet in September or October 1929, from information by Georgia State Highway Department.

Remarks.- Records good. Gage read twice daily. Slight diurnal fluctuation at low flow caused by grist mills above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 27 to Dec. 17, Dec. 28 to Apr. 18)

2.5	266	7.0	1,340
3.5	405	8.5	2,160
4.5	591	10.0	3,220
6.0	997	11.3	4,560

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	455	710	1,210	1,870	1,870	1,660	2,830	762	1,460	359	389	359
2	455	933	1,380	1,820	1,820	1,560	4,320	736	1,510	345	389	331
3	421	1,380	1,290	1,660	1,820	1,600	4,440	710	1,210	317	405	331
4	359	1,210	1,180	1,510	1,820	1,600	4,200	710	965	317	455	389
5	290	1,180	1,060	1,460	2,040	1,560	4,000	873	845	303	762	438
6	266	1,180	965	1,380	2,160	1,600	3,700	903	762	303	903	491
7	278	1,140	903	1,340	1,870	1,980	3,140	933	710	303	736	789
8	303	1,460	873	1,340	1,700	2,340	2,550	933	614	548	614	736
9	303	1,980	873	1,420	1,980	2,900	2,220	965	548	548	548	637
10	303	1,920	997	1,380	2,760	3,060	2,100	965	509	569	528	3,020
11	317	1,760	1,460	1,290	2,900	3,900	2,040	873	491	528	685	4,560
12	331	1,560	1,870	1,210	2,900	3,800	2,220	873	473	509	817	3,220
13	345	1,420	1,980	1,180	3,220	3,220	2,040	933	455	491	685	2,160
14	359	1,380	2,100	1,250	3,800	2,620	1,820	933	473	528	528	1,380
15	374	1,380	2,160	1,250	3,700	2,340	1,820	873	455	548	455	1,100
16	421	1,460	2,620	1,380	3,060	2,100	1,600	817	473	637	473	933
17	491	2,280	2,760	1,460	3,400	2,480	1,560	789	455	710	473	817
18	491	2,340	2,830	1,460	3,400	2,760	1,460	736	438	762	438	710
19	491	2,160	2,620	1,510	2,760	3,060	1,420	685	421	873	389	661
20	491	1,980	2,410	1,760	2,280	2,900	1,340	661	405	1,340	374	591
21	491	1,760	2,410	1,870	1,980	3,800	1,180	637	405	1,760	389	548
22	491	1,760	2,980	1,660	1,920	3,600	1,100	614	421	1,560	438	509
23	491	1,700	2,690	1,510	1,820	2,760	1,060	548	438	1,140	455	491
24	591	1,700	2,480	1,460	1,760	2,620	1,030	528	438	873	548	473
25	1,460	1,980	2,340	1,460	1,760	2,220	965	528	421	710	710	438
26	1,600	1,980	2,410	1,420	1,920	2,280	933	548	405	509	661	421
27	1,290	1,700	2,830	1,460	2,160	3,500	873	569	455	473	548	421
28	1,140	1,460	2,620	1,600	2,100	4,100	845	569	455	455	528	473
29	965	1,340	2,220	1,560	2,220	3,140	817	873	421	473	455	528
30	845	1,210	1,920	1,510	-	2,410	789	1,420	374	438	389	661
31	789	-	1,820	1,760	-	2,220	-	1,460	-	405	374	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	17,697	1,600	266	571	0.870	1.00
November	47,403	2,340	710	1,580	2.41	2.69
December	60,261	2,980	873	1,944	2.96	3.41
Calendar year 1947	333,322	3,700	223	913	1.39	18.90
January	46,200	1,870	1,180	1,490	2.27	2.62
February	68,900	3,800	1,700	2,376	3.62	3.90
March	81,690	4,100	1,560	2,635	4.02	4.64
April	60,412	4,440	789	2,014	3.07	3.42
May	24,957	1,460	528	805	1.23	1.42
June	17,905	1,510	374	597	.910	1.02
July	19,634	1,760	303	633	.965	1.11
August	16,541	903	374	534	.814	.94
September	28,616	4,560	331	954	1.45	1.62
Water year 1947-48	490,216	4,560	266	1,339	2.04	27.79

Peak discharge (base, 2,000 sec.-ft.).- Nov. 17 (11 p.m.) 2,550 sec.-ft.; Dec. 22 (6 a.m.) 3,060 sec.-ft.; Feb. 14 (11 p.m.) 3,900 sec.-ft.; Mar. 11 (10 p.m.) 4,400 sec.-ft.; Mar. 21 (6 p.m.) 4,100 sec.-ft.; Mar. 28 (1 a.m.) 4,400 sec.-ft.; Apr. 3 (3 a.m.) 4,700 sec.-ft.; Sept. 11 (3 a.m.) 4,980 sec.-ft.

Ogeechee River near Louisville, Ga.

Location.- Water-stage recorder, lat. 32°58', long. 82°23', at bridge on U. S. Highway 1, 1 mile downstream from Louisville & Wadley Railroad bridge, 2 miles south of Louisville, Jefferson County, 2 miles downstream from Rocky Comfort Creek, and 2 miles upstream from Big Creek. Datum of gage is 199.24 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 800 square miles.

Records availalbe.- April 1937 to September 1948.

Average discharge.- 11 years, 832 second-feet.

Extremes.- Maximum discharge during year, 7,500 second-feet Feb. 12 (gage height, 14.8 feet); minimum daily, 164 second-feet Oct. 6.

1937-48: Maximum discharge, 20,600 second-feet Aug. 16, 1940 (gage height, 17.6 feet, from graph based on gage readings); minimum daily, 86 second-feet June 29, 1945.

Flood of October 1929 reached a stage of 21.3 feet, from information by Central of Georgia Railway Co.

Remarks.- Records good except those for period of no gage-height record, which are fair. Some diurnal fluctuation during low flow caused by small hydroelectric plant on Little Ogeechee River.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.1	164	8.0	860	12.5	3,170
3.9	250	9.5	1,240	13.5	4,480
5.0	390	11.0	1,860	14.0	5,400
7.0	680	11.5	2,200	14.6	6,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	298	a390	1,700	1,980	2,120	1,800	3,060	716	752	348	530	334
2	238	a450	1,480	1,800	2,280	1,700	3,760	680	734	362	605	322
3	194	a600	1,300	1,650	3,280	1,700	3,630	650	752	418	680	310
4	179	a900	1,150	1,560	3,510	1,700	4,480	680	665	446	716	362
5	169	a1,200	1,050	1,520	2,750	1,700	4,320	752	560	432	716	376
6	164	a1,100	1,000	1,600	2,200	1,800	3,510	860	488	362	716	767
7	169	a1,100	975	1,560	1,920	2,550	3,390	1,000	446	298	788	2,480
8	204	a1,200	925	1,480	1,860	2,850	3,390	1,020	418	432	900	3,890
9	268	a1,300	880	1,330	2,050	3,620	4,480	1,000	404	446	925	3,390
10	322	1,210	1,150	1,240	2,550	5,850	4,030	950	432	376	806	2,550
11	362	1,120	1,400	1,150	3,900	4,640	3,280	925	575	418	635	1,860
12	404	1,210	1,600	1,100	6,900	3,510	2,950	880	680	474	474	1,440
13	390	1,360	1,860	1,180	6,600	2,950	2,750	824	620	516	390	1,150
14	348	1,650	2,370	1,440	5,000	2,650	2,460	770	460	575	362	880
15	334	2.740	3,170	1,480	5,600	2,370	2,280	752	390	680	390	734
16	376	3,630	3,510	1,480	5,400	2,120	2,050	842	418	770	376	635
17	474	2,850	3,630	1,700	4,320	2,280	1,750	925	432	842	376	575
18	502	2,200	3,390	1,980	3,510	2,280	1,600	824	446	1,150	390	545
19	516	2,200	3,280	1,860	2,850	5,000	1,480	734	446	1,440	474	502
20	a500	2,460	3,170	1,600	2,460	5,000	1,360	605	432	1,600	698	460
21	a450	2,460	2,850	1,520	2,200	3,890	1,270	530	446	1,360	950	432
22	a400	2,750	2,850	1,480	2,120	2,950	1,180	488	620	1,020	1,000	418
23	a350	3,390	2,550	1,400	2,120	2,550	1,100	460	575	698	900	404
24	a370	2,950	2,850	1,520	2,280	2,650	1,020	446	530	575	698	390
25	a400	2,370	4,030	1,700	2,750	3,630	975	488	474	545	545	390
26	a420	1,980	3,760	1,750	2,950	3,890	900	474	418	460	488	390
27	a450	1,800	3,060	1,700	2,550	4,030	880	502	362	390	432	404
28	a450	1,750	2,550	1,800	2,120	3,280	842	545	322	404	376	530
29	a430	1,920	2,750	1,800	1,920	2,550	788	605	304	390	334	716
30	a410	1,920	2,850	1,800	-	2,280	752	880	316	432	310	975
31	a400	-	2,370	2,050	-	2,200	-	880	-	488	334	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,941	516	164	353	0.441	0.51
November	54,160	3,630	390	1,805	2.26	2.52
December	71,460	4,030	880	2,305	2.88	3.32
Calendar year 1947	395,171	9,900	134	1,083	1.35	18.39
January	49,210	2,050	1,100	1,587	1.98	2.28
February	92,070	6,900	1,860	3,175	3.97	4.28
March	90,270	5,850	1,700	2,912	3.64	4.20
April	69,717	4,480	752	2,324	2.90	3.24
May	22,687	1,020	446	732	.915	1.05
June	14,917	752	304	497	.621	.69
July	19,147	1,600	298	618	.772	.89
August	18,314	1,000	310	591	.739	.85
September	28,611	3,890	310	954	1.19	1.33
Water year 1947-48	541,504	6,900	164	1,480	1.85	25.16

Peak discharge (base, 4,000 sec.-ft.).- Dec. 25 (6 p.m.) 4,320 sec.-ft.; Feb. 12 (10 p.m.) 7,500 sec.-ft.; Mar. 10 (11 a.m.) 6,100 sec.-ft.; Mar. 20 (11 a.m.) 5,200 sec.-ft.; Mar. 27 (7 a.m.) 4,170 sec.-ft.; Apr. 4 (8 p.m.) 4,820 sec.-ft.; Sept. 8 (6 p.m.) 4,170 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

Ogeechee River at Scarboro, Ga.

Location.- Water-stage recorder, 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. Datum of gage is 111.81 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 1,940 square miles.

Records available.- April 1937 to September 1948.

Average discharge.- 11 years, 1,802 second-feet.

Extremes.- Maximum discharge during year, 15,500 second-feet Apr. 4 (gage height, 11.2 feet); minimum, 476 second-feet Oct. 7.
1937-48: Maximum discharge, 24,600 second-feet Aug. 17, 1940, Mar. 27, 1944 (gage height, 12.8 feet); minimum observed, 146 second-feet Sept. 28, 1938.

Remarks.- Records good except those for period of no gage-height record, which are fair.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	970	1,430	5,420	6,400	5,290	5,420	8,140	1,650	1,650	785	1,100	602
2	910	1,550	4,780	5,970	5,690	5,160	10,700	1,550	1,770	700	1,000	565
3	885	1,950	4,300	5,690	5,970	4,910	13,900	1,510	1,950	680	910	a550
4	860	2,260	3,960	5,560	5,970	4,780	15,500	1,470	2,020	640	885	a550
5	760	2,260	3,740	5,290	5,690	4,660	14,400	1,470	2,020	621	910	a550
6	621	2,490	3,640	4,910	5,560	4,660	12,400	1,430	1,830	602	970	a600
7	511	2,770	3,420	4,540	5,560	5,040	10,500	1,510	1,550	602	1,030	a700
8	511	3,030	3,120	4,190	6,110	5,970	10,000	1,600	1,350	621	1,130	a800
9	547	3,030	2,940	3,960	6,540	6,840	9,850	1,650	1,240	660	1,160	a1,000
10	602	2,940	3,030	3,740	7,640	8,320	8,870	1,710	1,100	720	1,160	a1,500
11	660	3,320	3,530	3,530	9,250	9,650	8,140	1,710	1,000	910	1,130	a2,500
12	660	4,080	4,660	3,420	10,500	10,500	8,140	1,770	910	1,100	1,100	a5,000
13	660	4,420	6,250	3,320	10,300	11,400	8,140	1,830	835	1,310	1,130	a4,500
14	660	4,420	7,800	3,320	9,650	11,400	7,640	1,830	810	1,350	1,130	a3,800
15	680	4,420	8,500	3,320	9,850	9,650	6,840	1,770	810	1,310	1,100	a3,000
16	720	4,420	9,450	3,320	11,000	8,140	6,250	1,650	860	1,270	970	2,430
17	785	4,420	9,850	3,420	10,500	7,640	5,690	1,600	885	1,270	835	2,090
18	885	4,190	10,000	3,960	9,650	8,680	5,160	1,510	860	1,270	760	1,770
19	1,000	4,660	10,000	4,300	9,450	10,000	4,660	1,430	810	1,350	740	1,510
20	1,100	5,690	9,650	4,420	8,870	11,000	4,190	1,350	785	1,390	835	1,270
21	1,130	6,540	9,250	4,420	7,800	10,000	3,740	1,310	785	1,430	835	1,100
22	1,160	6,540	9,250	4,420	7,150	8,500	3,420	1,270	810	1,390	760	940
23	1,130	6,540	8,870	4,660	6,840	8,500	2,860	1,270	810	1,470	740	835
24	1,130	6,400	8,870	4,910	6,250	9,250	2,620	1,200	835	1,600	740	740
25	1,240	6,250	9,650	4,910	5,970	8,680	2,370	1,130	835	1,710	810	700
26	1,390	6,400	9,650	4,910	5,690	7,470	2,220	1,060	860	1,710	885	660
27	1,470	6,840	8,870	4,660	5,420	6,690	2,090	1,000	940	1,650	970	640
28	1,600	6,840	8,140	4,420	5,160	6,690	1,950	1,000	970	1,510	1,000	640
29	1,650	6,540	8,140	4,420	5,290	7,470	1,890	1,100	970	1,350	940	680
30	1,650	5,970	7,800	4,420	-	7,800	1,770	1,350	885	1,310	810	740
31	1,550	-	7,150	4,910	-	7,800	-	1,600	-	1,200	700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	30,087	1,650	511	971	0.500	0.58
November	132,610	6,840	1,430	4,420	2.28	2.54
December	213,680	10,000	2,940	6,893	3.55	4.09
Calendar year 1947	927,433	10,000	350	2,541	1.31	17.79
January	137,640	6,400	3,320	4,440	2.29	2.64
February	214,610	11,000	5,160	7,400	3.81	4.11
March	242,670	11,400	4,660	7,828	4.04	4.66
April	204,040	15,500	1,770	6,801	3.51	3.92
May	45,290	1,830	1,000	1,461	.753	.87
June	33,745	2,020	785	1,125	.580	.65
July	35,491	1,710	602	1,145	.590	.68
August	29,175	1,160	700	941	.485	.56
September	42,962	5,000	550	1,432	.738	.82
Water year 1947-48	1,362,000	15,500	511	3,721	1.92	26.12

Peak discharge (base, 4,000 sec.-ft.).- Nov. 27-28, 6,840 sec.-ft.; Dec. 18-19, 10,000 sec.-ft.; Feb. 16, 11,000 sec.-ft.; Mar. 13-14, 11,400 sec.-ft.; Mar. 20, 11,000 sec.-ft.; Apr. 4, 15,500 sec.-ft.; Sept. 12, about 5,000 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations near Louisville and near Eden.

Ogeechee River near Eden, Ga.

Location.- Water-stage recorder, lat. 32°10', long. 81°25', 600 feet downstream from bridge on U. S. Highways 25, 80, and 280, 2 miles west of Eden, Effingham County, 2 miles upstream from Seaboard Air Line Railroad bridge, and 3 miles upstream from Black Creek. Datum of gage is 19.64 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 2,650 square miles.

Records available.- April 1937 to September 1948.

Average discharge.- 11 years, 2,319 second-feet.

Extremes.- Maximum discharge during year, 20,900 second-feet Apr. 3 (gage height, 13.3 feet); minimum, 720 second-feet July 9, Sept. 6.

1937-48: Maximum discharge, 26,300 second-feet Mar. 31, 1944 (gage height, 14.7 feet); minimum, 258 second-feet June 5, 6, 7, 1941.

Maximum stage known, 20.0 feet in October 1929, from data furnished by Central of Georgia Railway Co.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 11 to Sept. 30)

2.0	720	8.0	3,700	12.0	13,700
4.0	1,400	8.5	4,320	12.6	16,600
5.5	2,030	10.0	7,100	13.2	20,200
7.0	2,850	11.0	9,800		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,080	3,600	7,600	10,500	6,500	7,600	10,500	3,240	3,240	1,020	2,180	885
2	1,930	4,040	7,600	9,800	6,500	7,100	15,100	2,990	3,150	1,020	2,130	951
3	1,800	5,360	7,600	9,200	6,500	6,900	20,200	2,850	3,070	1,050	1,880	918
4	1,680	6,500	7,600	8,900	6,700	6,900	20,200	2,730	2,920	1,050	1,760	885
5	1,520	7,100	7,100	8,600	6,700	7,100	19,600	2,610	2,850	1,050	1,640	786
6	1,360	6,700	6,700	8,100	6,900	7,600	19,000	2,430	2,730	951	1,520	786
7	1,330	6,500	6,300	7,600	6,900	7,850	18,400	2,490	2,610	819	1,360	1,020
8	1,360	6,300	5,720	7,100	7,100	8,100	18,400	2,490	2,550	753	1,220	1,220
9	1,440	5,720	5,360	6,700	7,350	8,600	17,200	2,490	2,550	720	1,080	1,640
10	1,520	5,180	5,540	6,500	7,850	9,800	15,600	2,380	2,490	786	1,020	1,980
11	1,560	4,820	6,100	6,100	8,900	10,800	13,200	2,330	2,430	852	1,020	2,030
12	1,480	5,000	7,350	5,900	10,800	12,400	12,400	2,550	2,280	918	1,020	1,640
13	1,330	5,180	8,350	5,540	12,000	13,700	11,600	2,790	2,030	1,050	1,080	1,360
14	1,220	5,360	8,350	5,360	12,400	14,600	10,500	2,990	1,800	1,190	1,120	1,220
15	1,220	5,540	8,100	5,000	12,400	14,600	9,800	2,990	1,600	1,360	1,160	1,160
16	1,300	5,720	8,600	4,820	12,400	14,600	9,500	2,990	1,440	1,640	1,160	1,190
17	1,400	6,100	9,500	4,640	12,400	15,100	9,200	2,850	1,360	1,800	1,160	1,400
18	1,520	6,300	10,500	4,640	11,600	15,100	8,900	2,730	1,300	1,800	1,160	1,840
19	1,680	6,500	11,600	4,640	11,600	14,200	8,350	2,670	1,220	1,760	1,190	2,490
20	1,880	6,500	12,000	4,640	12,000	13,700	7,600	2,550	1,190	1,680	1,220	2,850
21	2,030	6,500	12,400	4,820	12,000	13,200	6,700	2,430	1,120	1,600	1,160	2,850
22	2,080	6,700	13,200	5,180	11,600	12,800	6,300	2,230	1,120	1,520	1,020	2,670
23	1,980	6,900	14,200	5,540	11,200	12,800	5,900	2,080	1,080	1,520	885	2,330
24	1,980	7,100	14,600	6,300	11,200	13,200	5,540	1,980	1,080	1,520	852	2,030
25	2,180	7,850	14,200	6,500	10,800	13,200	5,180	1,930	1,080	1,560	852	1,720
26	2,490	8,600	13,200	6,700	10,200	12,800	4,480	1,880	1,050	1,600	819	1,400
27	2,920	8,900	12,400	6,700	9,500	12,400	4,180	2,180	1,050	1,600	753	1,190
28	3,600	8,600	12,000	6,900	8,900	12,000	3,920	2,550	1,050	1,600	753	1,050
29	3,920	8,350	11,600	6,700	8,100	11,200	3,600	2,730	1,020	1,680	753	1,050
30	3,920	8,100	11,200	6,700	-	10,200	3,420	2,730	1,020	1,880	786	1,050
31	3,800	-	10,800	6,700	-	9,500	-	2,990	-	2,030	852	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	61,510	3,920	1,220	1,984	0.749	0.86
November	191,620	8,900	3,600	6,387	2.41	2.69
December	297,370	14,600	5,360	9,593	3.62	4.17
Calendar year 1947	1,339,865	14,600	512	3,671	1.39	18.82
January	203,020	10,500	4,640	6,549	2.47	2.85
February	279,000	12,400	6,500	9,621	3.63	3.92
March	349,650	15,100	6,900	11,280	4.26	4.91
April	324,470	20,200	3,420	10,820	4.08	4.55
May	79,850	3,240	1,880	2,576	.972	1.12
June	55,480	3,240	1,020	1,849	.698	.78
July	41,379	2,030	720	1,335	.504	.58
August	36,565	2,180	753	1,180	.445	.51
September	45,591	2,850	786	1,520	.574	.64
Water year 1947-48	1,965,505	20,200	720	5,370	2.03	27.58

Peak discharge (base, 5,000 sec.-ft.).- Nov. 5, 7,100 sec.-ft.; Nov. 27, 8,900 sec.-ft.; Dec. 24, 14,600 sec.-ft.; Feb. 14-17, 12,400 sec.-ft.; Mar. 17 (7 p.m.) 15,600 sec.-ft.; Apr. 3 (9 p.m.) 20,900 sec.-ft.

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 1948.

Average discharge.- 11 years, 447 second-feet.

Extremes.- Maximum discharge during year, 12,100 second-feet Apr. 2 (gage height, 13.9 feet, from graph based on gage readings), from rating curve extended above 5,100 second-feet by logarithmic plotting; minimum daily, 8.0 second-feet Sept. 25-27.

1937-48: Maximum discharge, that of Apr. 2, 1948; minimum observed, 1.2 second-feet June 2, 3, 1941.

Revisions.- The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede those published in the water-supply papers indicated.

Water-Supply Paper	Water year	Date	Gage height (feet)	Discharge (second-feet)
872..........	1938-39	Feb. 28, Mar. 1	*13.8	‡11,600
892..........	1939-40	Aug. 16-17	g12.9	7,690
922..........	1940-41	July 21	†12.2	5,200
1002..........	1943-44	Mar. 25	g13.3	‡9,350

* From floodmark.
† Observed.
‡ From rating curve extended above 5,100 second-feet by logarithmic plotting.
g From graph based on gage readings.

Remarks.- Records fair. Gage read twice daily.

Revisions.- Revised figures of discharge for high-water periods in the water years 1939-41 and 1944 are given herewith. They supersede those published in Water-Supply Papers 872, 892, 922, and 1002.

Day (water year)	Discharge (second-feet)	Day (water year)	Discharge (second-feet)
1938-39		1943-44	
Feb. 28......	10,700	Mar. 25.....	7,300
Mar. 1.......	11,200	26.....	8,090
2.......	8,920	27.....	6,190
3.......	7,300	28.....	4,160
4.......	5,510	29.....	3,440
5.......	4,160	30.....	3,440
		Apr. 17.....	5,200
1939-40		18.....	3,760
Aug. 16......	5,530	23.....	3,440
17......	6,880	24.....	3,760
18......	4,170	25.....	4,160
		26.....	4,160
1940-41		27.....	4,390
July 21......	5,200	28.....	4,640
		29.....	4,910
1943-44		30.....	3,950
Mar. 24......	4,160		

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
February 1939......	27,322	10,700	118	976	1.76	1.83
March..............	68,069	11,200	342	2,196	3.96	4.56
Water year 1938-39	124,038.5	11,200	3.0	340	.613	8.31
Calendar year 1939	122,641.5	11,200	3	336	.605	8.22
August 1940........	33,949	6,880	46	1,095	1.97	2.27
Water year 1939-40	91,563	6,880	3	250	.450	6.13
Calendar year 1940	94,909.5	6,880	5	259	.467	6.35
July 1941..........	53,620	5,200	826	1,730	3.12	3.60
Water year 1940-41	103,223.7	5,200	1.4	283	.510	6.91
Calendar year 1941	104,426.2	5,200	1.4	286	.515	6.99
March 1944.........	73,660	8,090	489	2,376	4.28	4.93
April..............	79,396	5,200	777	2,647	4.77	5.32
Water year 1943-44	260,432.8	8,090	2.6	712	1.28	17.45
Calendar year 1944	283,797.5	8,090	6.5	775	1.40	19.01

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-16)

1.4	8.0	2.0	90	6.5	1,040	11.6	3,760
1.5	18	2.3	156	8.5	1,570	12.1	4,910
1.6	29	2.7	267	9.5	1,930	12.8	7,300
1.7	42	3.2	399	10.5	2,520	13.7	11,200
1.8	56	4.0	564	11.0	2,940		

Discharge, in second-feet, of Canoochee River near Claxton, Ga., water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	169	1,600	1,510	1,600	1,780	1,370	3,590	252	1,890	169	123	28
2	156	1,680	1,370	1,710	2,070	1,340	11,200	196	1,740	182	132	21
3	149	1,850	1,270	1,640	1,890	1,340	11,200	196	1,570	169	209	39
4	139	2,380	1,200	1,510	1,780	1,400	8,920	169	1,170	137	375	41
5	132	2,750	1,070	1,480	1,740	1,370	6,550	182	940	94	351	43
6	128	2,130	980	1,570	1,570	1,640	4,390	196	783	69	297	52
7	123	1,820	860	1,540	1,420	1,970	3,440	351	604	59	267	72
8	156	1,890	802	1,370	1,340	2,250	2,940	746	375	56	237	252
9	209	1,970	980	1,200	1,480	3,440	2,520	660	209	53	223	223
10	209	1,780	1,480	980	2,310	5,510	2,310	422	132	50	182	146
11	223	1,640	2,250	860	4,390	8,090	2,070	445	110	55	134	169
12	209	1,740	3,300	840	5,200	5,510	1,930	660	98	72	104	196
13	209	2,070	3,590	920	4,160	3,950	1,820	880	90	196	69	267
14	237	2,590	3,440	920	2,840	3,440	1,820	860	90	375	58	311
15	252	2,380	3,440	900	2,520	3,440	1,640	711	88	543	56	237
16	282	2,590	3,300	940	2,130	4,160	1,450	677	86	746	56	106
17	564	2,310	3,300	1,040	1,890	3,950	1,420	501	86	764	56	50
18	746	2,070	3,300	1,040	1,680	3,300	1,370	351	100	711	67	35
19	604	1,890	3,440	1,000	1,570	3,170	1,270	237	98	501	98	25
20	489	1,890	4,160	1,040	1,540	3,590	1,170	182	85	282	121	19
21	422	1,970	4,160	1,240	1,450	4,160	1,070	146	90	196	156	16
22	623	2,190	3,950	1,370	1,450	3,170	960	132	351	169	169	16
23	746	2,310	3,300	1,450	1,570	2,380	860	110	522	169	182	16
24	860	2,380	2,670	1,450	1,740	1,970	783	94	501	169	156	12
25	920	2,380	2,450	1,480	1,890	1,890	711	79	338	169	139	8.0
26	1,370	2,310	2,450	1,540	2,250	1,930	642	132	267	156	92	8.0
27	1,540	2,190	2,070	1,680	2,020	2,310	604	489	267	142	58	8.0
28	1,540	1,970	1,850	1,850	1,600	2,380	543	940	146	114	52	12
29	1,740	1,820	1,820	1,820	1,420	1,850	467	1,420	114	86	46	32
30	1,680	1,680	1,740	1,680	-	1,780	351	2,310	128	98	38	108
31	1,570	-	1,640	1,600	-	1,850	-	2,450	-	114	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	18,396	1,740	123	593	1.07	1.23
November	62,220	2,750	1,600	2,074	3.74	4.17
December	73,142	4,160	802	2,359	4.25	4.90
Calendar year 1947	306,852.7	4,160	5.0	841	1.52	20.55
January	41,260	1,850	840	1,331	2.40	2.77
February	60,690	5,200	1,340	2,093	3.77	4.07
March	89,900	8,090	1,340	2,900	5.23	6.03
April	80,011	11,200	351	2,667	4.81	5.37
May	17,176	2,450	79	554	.998	1.15
June	13,068	1,890	85	436	.786	.88
July	6,865	764	50	221	.398	.46
August	4,336	375	33	140	.252	.29
September	2,568.0	311	8.0	85.6	.154	.17
Water year 1947-48	469,632.0	11,200	8.0	1,283	2.31	31.49

Peak discharge (base, 1,800 sec.-ft.).- Nov. 5 (8 a.m.) 2,840 sec.-ft.; Nov. 14 (6 p.m.) 2,750 sec.-ft.; Dec. 20-21, 4,160 sec.-ft.; Feb. 2 (10 a.m.) 2,190 sec.-ft.; Feb. 12 (2 a.m.) 5,510 sec.-ft.; Feb. 26 (6 p.m.) 2,310 sec.-ft.; Mar. 11 (10 a.m.) 8,500 sec -ft.; Apr. 2 (7 p.m.) 12,100 sec.-ft.; May 31 (2 a.m.) 2,590 sec.-ft..

South River near McDonough, Ga.

Location.- Water-stage recorder, lat. 33°30', long. 84°01', at Butler Bridge, a quarter of a mile upstream from Beech Creek, 2 miles downstream from Big Walnut Creek, 4½ miles downstream from Cotton River, and 9 miles northeast of McDonough, Henry County.

Drainage area.- 436 square miles.

Records available.- October 1939 to September 1948.

Extremes.- Maximum discharge during year, 10,800 second-feet Mar. 24 (gage height, 17.7 feet); minimum daily, 134 second-feet Oct. 6, 7.
1939-48: Maximum discharge, 34,500 second-feet Jan. 7, 1946 (gage height, 24.7 feet), from rating curve extended above 20,000 second-feet by logarithmic plotting; minimum daily, 70 second-feet Oct. 25-27, 1941.

Remarks.- Records good above 1,000 second-feet and fair below. Figures of daily discharge include flow diverted from Chattahoochee River (averaging about 12 second-feet) for Atlanta municipal supply.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	205	468	591	1,340	680	3,740	591	923	279	442	253
2	138	1,540	455	725	923	1,210	1,960	606	860	268	606	250
3	140	764	442	576	800	1,800	1,440	591	680	257	800	250
4	140	430	430	534	740	1,340	1,200	770	606	250	1,440	393
5	138	405	430	507	725	1,020	1,100	1,240	534	238	1,020	956
6	134	418	430	494	725	1,270	2,830	800	494	279	591	770
7	134	690	418	481	860	5,120	3,560	800	455	279	481	405
8	181	2,210	405	481	4,040	3,340	1,760	635	455	242	442	393
9	381	800	455	468	6,000	1,680	2,080	591	455	257	405	334
10	233	494	850	468	6,740	1,720	1,520	562	418	381	381	312
11	199	2,850	1,300	455	2,430	1,300	1,270	562	405	3,090	381	312
12	197	5,900	956	442	2,680	1,130	1,130	548	393	2,760	393	301
13	185	1,520	891	665	2,080	1,020	1,020	562	381	1,060	381	279
14	179	860	923	800	2,130	956	990	520	369	3,010	418	279
15	179	1,800	1,180	548	1,640	923	1,020	494	418	5,850	430	290
16	268	1,410	3,130	494	1,240	1,190	923	494	562	1,560	650	279
17	576	860	1,380	507	1,100	4,280	860	481	418	1,270	430	266
18	312	923	923	507	900	1,760	830	468	381	770	381	257
19	227	1,520	770	494	923	1,200	770	455	381	665	357	253
20	209	956	695	494	891	1,060	770	442	418	1,440	346	246
21	201	740	800	520	860	990	740	442	369	891	334	246
22	197	650	1,020	534	956	923	725	430	369	620	369	240
23	191	635	770	494	891	4,790	710	418	357	548	323	253
24	195	740	680	665	770	9,500	710	418	334	494	334	257
25	209	891	923	680	740	2,280	695	418	312	455	312	244
26	213	665	990	548	740	1,240	665	405	301	442	301	236
27	207	576	770	534	710	1,760	650	405	301	418	290	229
28	205	534	665	606	740	1,800	635	1,430	312	442	279	438
29	229	507	606	635	800	1,240	606	2,480	301	680	279	591
30	205	481	576	904	-	1,100	591	4,980	301	562	259	346
31	197	-	562	2,480	-	2,060	-	1,540	-	468	264	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,544	576	134	211	0.484	0.56
November	32,974	5,900	205	1,099	2.52	2.81
December	25,293	3,130	405	816	1.87	2.16
Calendar year 1947	253,070	8,240	134	693	1.59	21.57
January	19,331	2,480	442	624	1.43	1.65
February	46,204	6,740	710	1,593	3.65	3.94
March	61,682	9,500	680	1,990	4.56	5.26
April	37,500	3,740	591	1,250	2.87	3.20
May	25,578	4,980	405	825	1.89	2.18
June	13,263	923	301	442	1.01	1.13
July	30,225	5,850	238	975	2.24	2.58
August	14,119	1,440	259	455	1.04	1.20
September	10,158	956	229	339	.778	.87
Water year 1947-48	322,871	9,500	134	882	2.02	27.54

Peak discharge (base, 5,000 sec.-ft.).- Nov. 12 (2 p.m.) 6,600 sec.-ft.; Feb. 10 (7 a.m.) 7,520 sec.-ft.; Mar. 7 (9 p.m.) 6,000 sec.-ft.; Mar. 24 (10 a.m.) 10,800 sec.-ft.; May 30 (7 p.m.) 5,800 sec.-ft.; July 15 (11 a.m.) 6,600 sec.-ft.

Ocmulgee River near Jackson, Ga.

Location.- Water-stage recorder, lat. 33°18', long. 83°50', 500 feet upstream from bridge on State Highway 16, half a mile upstream from Yellow Water Creek, 1 mile downstream from Lloyd Shoals Dam, and 7 miles east of Jackson, Butts County. Datum of gage is 419.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,420 square miles.

Records available.- May 1906 to September 1915, August 1939 to September 1948.

Extremes.- Maximum discharge during year, 20,900 second-feet Feb. 10 (gage height, 12.9 feet); minimum daily, 545 second-feet Oct. 5.

1906-15, 1939-48: Maximum discharge, 45,500 second-feet Mar. 16, 1912, Mar. 21, 1942 Jan. 8, 1946 (gage height, 20.8 feet); minimum daily, 18 second-feet Nov. 20, 1910.

Maximum stage known, 26.8 feet Dec. 11, 1919, from graph based on gage readings (discharge, 69,000 second-feet, by computation of flow over dam).

Remarks.- Records good. Flow regulated by Lloyd Shoals Reservoir and power plant. Lloyd Shoals Reservoir, completed in 1910, has usable capacity of 77,000 acre-feet.

Cooperation.- Records of monthly reservoir contents furnished by Georgia Power Co.

Revisions (water years).- W 892: Drainage area. W 952: 1912(M). W 972: 1942.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

4.1	480	5.5	2,680
4.3	670	9.5	12,200
4.6	1,050	12.6	20,100
5.0	1,680		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	642	1,150	1,920	2,980	3,100	3,020	10,500	902	3,650	928	698	900
2	555	902	2,100	2,800	2,980	3,030	9,560	1,120	2,190	850	1,970	875
3	552	1,600	2,140	2,970	1,840	3,070	5,290	2,260	2,160	625	2,990	832
4	550	1,640	2,050	2,780	2,940	3,130	3,420	2,200	2,140	632	3,060	708
5	545	1,600	2,060	2,940	2,980	3,120	3,760	2,270	2,100	748	3,010	755
6	638	1,580	822	2,920	3,000	3,180	6,000	2,970	790	618	2,920	770
7	565	1,680	622	2,360	3,050	8,100	9,560	2,840	1,570	582	1,930	870
8	560	1,540	2,260	2,420	2,660	12,000	8,360	1,030	2,050	610	732	1,320
9	562	1,230	2,570	2,230	8,780	9,560	4,890	1,200	1,980	622	2,180	990
10	610	1,880	2,690	2,880	20,100	5,370	4,860	2,180	1,960	570	2,150	938
11	598	2,320	2,210	1,050	18,000	3,720	5,160	2,120	1,970	632	2,040	710
12	555	8,300	2,130	2,160	13,700	4,410	2,750	1,830	1,860	2,220	1,650	792
13	758	11,000	2,250	2,240	10,800	4,230	3,250	2,100	698	2,620	1,230	762
14	740	5,620	2,330	2,060	8,360	4,050	3,250	1,970	1,630	2,890	638	858
15	825	3,570	2,780	2,060	6,860	3,640	3,250	1,390	1,260	9,080	638	812
16	790	6,630	3,160	2,190	4,320	3,460	3,220	695	1,780	8,120	1,050	780
17	1,450	4,780	3,100	2,240	3,360	10,700	3,200	1,740	1,540	4,300	1,340	868
18	570	3,280	3,070	929	3,350	9,300	3,200	1,630	1,660	2,690	1,200	730
19	565	3,360	3,060	2,160	3,360	6,570	3,130	1,660	1,460	2,580	988	680
20	1,650	3,450	3,070	2,160	3,340	3,210	3,080	848	670	2,550	1,630	1,090
21	1,480	3,410	3,100	2,250	3,300	2,280	3,060	778	955	2,380	692	1,180
22	1,360	3,330	3,110	2,210	2,640	3,110	3,010	942	1,540	2,440	682	1,060
23	1,550	3,240	3,040	1,660	3,000	4,500	2,650	770	762	2,350	1,120	1,180
24	1,420	3,210	3,020	2,240	3,230	16,200	1,340	1,740	750	685	1,020	1,380
25	805	3,100	3,040	1,920	3,200	15,500	940	710	898	700	795	755
26	560	3,080	3,030	1,990	3,020	6,290	2,040	730	668	1,480	868	660
27	950	3,040	3,020	2,180	3,160	3,460	2,220	1,380	585	1,130	920	1,160
28	905	3,000	3,010	1,840	3,130	5,480	2,090	1,390	1,060	1,030	692	822
29	755	2,860	2,900	1,900	2,750	5,200	2,240	2,020	855	1,900	665	708
30	862	1,040	2,980	2,130	-	3,940	1,920	2,680	1,110	1,080	1,040	908
31	1,130	-	2,950	2,320	-	3,280	-	7,960	-	675	975	-

Month	Observed				Change in contents in Lloyd Shoals Reservoir (acre-feet)	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	26,057	1,650	545	841	-10,900	664	0.468	0.54
November	94,422	11,000	902	3,214	+18,500	3,526	2.48	2.77
December	79,594	3,160	622	2,568	+8,200	2,701	1.90	2.19
Calendar year 1947	768,147	21,200	512	2,105	+37,000	2,156	1.52	20.60
January	69,169	2,980	929	2,231	-13,000	2,020	1.42	1.64
February	154,310	20,100	1,840	5,321	+11,600	5,523	3.89	4.20
March	176,110	16,200	2,280	5,681	+13,000	5,892	4.15	4.78
April	121,200	10,500	940	4,040	-15,800	3,774	2.66	2.97
May	56,055	7,960	695	1,808	+11,800	2,000	1.41	1.63
June	44,309	3,650	585	1,477	-11,800	1,279	.901	1.01
July	60,317	9,080	570	1,946	+4,200	2,014	1.42	1.64
August	43,513	3,060	638	1,404	-8,600	1,264	.890	1.03
September	26,853	1,380	660	895	-7,200	774	.545	.61
Water year 1947-48	953,909	20,100	545	2,606	0	2,606	1.84	25.01

Ocmulgee River at Macon, Ga.

Location.- Water-stage recorder, lat. 32°51', long. 83°34', at Fifth Street Bridge in Macon, Bibb County, 1½ miles upstream from Walnut Creek. Datum of gage is 269.80 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,240 square miles.

Records available.- January 1893 to September 1913, October 1931 to September 1948. Gage-height records collected at same site since 1895 are contained in reports of U. S. Weather Bureau.

Average discharge.- 35 years (1893-1911, 1931-48), 2,807 second-feet.

Extremes.- Maximum discharge during year, 24,000 second-feet Feb. 11 (gage height, 20.1 feet); minimum daily, 700 second-feet Oct. 4, 5.

1893-1913, 1931-48: Maximum discharge, 70,000 second-feet Mar. 22, 1942 (gage height, 26.1 feet); minimum daily, 192 second-feet Nov. 9, 16, 23, 1931; minimum gage height observed, -1.0 foot Oct. 5, 1904, July 27, 1914.

Maximum stage known, 26.1 feet Feb. 28, 1929, Mar. 22, 1942 (discharge, 70,000 second-feet). A stage 1 inch lower, as determined from floodmarks, was reached on Jan. 19, 1925, at Central of Georgia Railroad bridge 500 feet downstream.

Remarks.- Records good except those for periods of fragmentary or no gage-height record, which are fair. Flow regulated by Lloyd Shoals Reservoir (see p. 232 for change in monthly contents) and power plant above station.

Revisions.- W 822: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.5	675	15.0	9,340
5.5	1,740	16.0	11,200
10.0	4,370	17.0	13,500
12.0	5,820	18.0	16,300
14.0	7,860	20.0	23,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	752	1,400	1,960	3,950	6,360	4,010	12,300	2,640	6,940	1,400	1,010	1,200
2	780	3,780	2,530	4,310	5,180	4,130	16,300	f1,680	3,710	1,250	1,100	1,200
3	725	2,990	2,700	4,010	4,610	4,610	12,200	f1,910	2,870	1,200	2,810	940
4	700	2,240	2,700	3,890	4,130	4,610	6,180	2,810	2,760	f935	3,900	940
5	700	2,190	2,580	3,650	4,070	4,490	5,420	2,930	2,700	940	4,200	1,100
6	725	2,190	2,580	3,710	4,130	5,050	5,740	3,470	2,360	990	f3,770	1,200
7	780	2,080	1,520	3,350	4,070	12,500	10,800	3,710	1,400	940	2,930	1,300
8	780	2,640	1,400	3,050	6,400	16,000	12,800	2,930	f2,080	980	2,190	1,500
9	830	2,240	2,990	3,050	10,500	14,000	9,840	f1,630	2,420	1,400	1,220	1,700
10	880	1,860	4,010	3,290	20,900	11,800	5,820	f1,740	2,360	1,400	2,470	1,400
11	1,090	6,700	4,430	3,110	23,600	6,640	6,940	2,640	2,360	1,400	2,530	1,200
12	1,010	12,800	5,500	1,910	20,900	6,000	6,360	2,760	2,140	1,700	2,360	960
13	830	13,000	5,420	3,710	19,000	5,820	4,880	2,580	2,020	2,900	1,960	940
14	908	10,400	6,450	3,950	13,500	5,500	4,550	2,760	1,100	5,900	1,570	940
15	935	6,450	5,500	3,230	10,600	5,180	4,370	2,580	1,910	11,000	985	940
16	1,090	8,280	9,340	2,930	7,860	4,880	4,370	f1,860	1,860	11,000	985	940
17	2,140	7,620	6,640	2,990	5,580	11,200	4,310	1,300	2,140	7,100	1,860	960
18	2,190	6,200	5,260	2,990	4,950	14,500	4,190	2,140	1,960	4,200	1,960	1,060
19	985	9,340	4,670	1,860	4,740	10,000	4,190	2,190	2,080	3,700	1,520	880
20	855	6,270	4,370	2,870	4,610	7,260	4,070	2,240	1,800	3,300	1,300	830
21	1,740	5,100	5,910	3,050	4,610	4,310	4,010	1,500	1,090	3,100	1,800	1,200
22	1,740	4,610	10,400	3,470	4,880	4,130	3,890	1,400	1,460	3,000	1,090	1,300
23	1,630	4,550	6,090	2,930	4,550	6,360	3,950	1,400	1,910	3,000	1,010	1,250
24	1,680	4,740	4,880	5,350	4,490	11,300	3,170	1,400	1,280	2,600	1,400	1,330
25	1,740	5,820	5,340	5,520	4,370	17,200	2,240	2,080	1,200	1,400	1,330	1,460
26	1,120	4,740	5,820	3,950	4,310	13,800	1,910	1,400	1,250	1,200	1,170	908
27	880	4,190	4,880	3,410	4,190	5,840	2,640	1,300	1,060	1,700	f1,140	855
28	1,220	3,950	4,430	3,470	4,250	5,580	2,990	f1,860	935	1,600	1,220	1,460
29	1,250	3,770	4,190	3,350	4,130	6,360	2,870	2,300	f1,300	1,800	f960	1,280
30	1,140	3,170	3,950	3,350	-	5,910	2,930	5,100	1,360	2,240	f908	1,040
31	1,200	-	3,950	6,810	-	5,180	-	5,020	-	f1,400	f1,250	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	35,025	2,190	700	1,130	0.504	0.58
November	155,310	13,000	1,400	5,177	2.31	2.58
December	142,390	10,400	1,400	4,593	2.05	2.36
Calendar year 1947	1,207,639	28,500	693	3,309	1.48	20.04
January	110,470	6,810	1,860	3,564	1.59	1.83
February	225,470	23,600	4,070	7,775	3.47	3.74
March	244,150	17,200	4,010	7,876	3.52	4.06
April	176,230	16,300	1,910	5,874	2.62	2.92
May	73,260	5,100	1,300	2,363	1.05	1.21
June	61,815	6,940	935	2,060	.920	1.03
July	86,675	11,000	935	2,796	1.25	1.44
August	55,908	4,200	908	1,803	.805	.93
September	34,213	1,700	830	1,140	.509	.57
Water year 1947-48	1,400,916	23,600	700	3,828	1.71	23.25

Peak discharge (base, 14,000 sec.-ft.).- Nov. 12 (3 a.m.) 15,400 sec.-ft.; Feb. 11 (1 a.m.) 24,000 sec.-ft.; Mar. 8 (2 p.m.) 16,900 sec.-ft.; Mar. 18 (4 a.m.) 15,700 sec.-ft.; Mar. 25 (8 p.m.) 17,900 sec.-ft.; Apr. 1 (11 p.m.) 18,200 sec.-ft.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Note.- No gage-height record May 17, 21-24, 26, 27, June 7, 14, July 1, 3, 5-28, Aug. 2, 4, 5, Sept. 1-16; discharge computed on basis of U. S. Weather Bureau readings and records for station near Jackson.

Ocmulgee River at Hawkinsville, Ga.

Location.- Wire-weight gage, lat. 32°17', long. 83°28', at bridge or U. S. Highway 341 at Hawkinsville, Pulaski County, a quarter of a mile downstream from Southern Railway bridge and 2¼ miles downstream from Jordon Creek. Datum of gage is 189.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 3,800 square miles.

Records available.- January 1944 to September 1948 in reports of Geological Survey. January 1929 to December 1931 in House Document 68, 74th Congress, 1st Session. Gage-height records collected at same site since 1908 are contained in reports of U. S. Weather Bureau.

Extremes.- Maximum discharge during year, 28,200 second-feet Feb. 15 (gage height, 24.4 feet, from graph based on gage readings); minimum daily, 1,300 second-feet Oct. 6-8.

1944-48: Maximum discharge observed, 46,600 second-feet Mar. 26, 1944 (gage height, 29.6 feet); minimum daily, 1,210 second-feet June 16, Sept. 4-6, 11, 12, 1945.

Maximum stage known since 1908, 36.5 feet Jan. 20, 1925 (discharge, 79,000 second-feet).

Remarks.- Records fair. Flow regulated by Lloyd Shoals Reservoir (see p. 232 for change in monthly contents) and power plant above station. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 4)

2.2	1,300	17.0	13,600
6.0	3,710	20.0	18,200
11.0	7,250	23.0	24,500
14.0	10,000	24.3	27,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,360	2,020	7,170	8,280	8,190	7,090	12,100	3,780	3,780	2,150	3,260	1,660
2	1,360	2,800	6,780	7,840	7,920	6,780	14,300	3,970	4,100	2,340	3,320	1,840
3	1,360	3,520	6,270	7,410	7,660	6,780	15,600	3,970	4,380	2,280	3,320	1,780
4	1,360	4,040	5,710	7,010	8,100	6,930	17,400	3,580	4,730	2,020	3,190	1,720
5	1,360	4,450	5,010	6,700	8,740	6,930	19,900	3,450	5,360	1,780	3,640	1,780
6	1,300	4,520	4,660	6,560	8,840	7,250	19,900	3,710	5,520	1,660	4,040	1,900
7	1,300	4,520	4,450	6,480	8,560	8,740	17,500	3,900	4,800	1,540	4,310	2,020
8	1,300	4,450	4,310	6,340	8,280	9,840	15,000	4,040	4,040	1,600	4,590	1,960
9	1,480	4,170	4,100	6,200	8,460	10,700	13,000	4,240	2,930	1,600	4,800	1,900
10	1,480	4,040	4,040	5,920	10,600	13,100	12,800	4,380	3,000	2,150	4,800	1,960
11	1,600	4,170	5,430	5,640	12,400	19,200	14,700	4,240	3,120	2,670	4,100	2,080
12	1,660	4,520	6,480	5,430	14,000	22,400	15,200	3,640	3,190	3,000	3,450	2,020
13	1,720	4,590	7,500	5,500	20,300	21,200	13,500	3,640	3,120	3,580	3,450	1,840
14	1,660	4,940	8,840	6,060	26,000	18,400	11,500	3,780	3,000	3,780	3,320	1,660
15	1,540	5,920	9,840	6,200	27,900	15,300	10,300	3,840	2,670	3,840	2,930	1,600
16	1,600	9,530	11,400	6,060	27,300	12,700	9,430	3,780	2,280	4,040	2,480	1,660
17	1,840	12,700	12,600	6,130	24,800	11,800	8,650	3,780	2,540	5,080	1,960	1,720
18	2,410	13,500	12,800	6,270	21,400	11,700	7,750	3,190	2,670	5,780	2,020	1,660
19	3,120	12,700	12,600	6,270	17,900	11,100	7,090	2,740	2,740	8,100	2,670	1,600
20	3,380	12,000	12,700	6,130	14,900	12,100	6,630	2,860	2,860	10,500	2,860	1,600
21	2,540	11,600	12,600	6,130	12,000	15,400	6,340	3,060	2,860	10,400	2,480	1,540
22	2,150	11,400	11,700	6,060	10,500	16,500	6,130	2,930	2,540	8,840	2,340	1,480
23	2,540	11,500	10,800	5,990	9,530	15,000	5,920	2,410	2,150	7,090	2,340	1,600
24	2,600	11,700	9,530	6,270	9,030	13,200	5,780	2,220	2,220	5,920	1,960	1,720
25	2,540	11,100	9,740	6,930	8,560	11,500	5,640	2,150	2,410	5,080	1,780	1,780
26	2,670	10,200	11,200	7,250	8,190	9,840	5,550	2,280	2,020	4,730	2,020	1,840
27	2,600	9,130	11,600	7,250	7,920	11,400	5,290	2,740	1,900	3,710	1,960	1,840
28	2,150	8,280	10,900	7,500	7,660	16,200	4,730	2,670	1,840	2,600	1,780	1,600
29	1,960	7,660	10,000	8,190	7,410	17,500	4,240	2,740	1,720	2,670	1,780	1,660
30	2,080	7,410	9,430	8,460	-	15,300	3,970	3,120	1,840	2,860	1,780	2,080
31	2,020	-	8,940	8,370	-	12,800	-	3,380	-	3,060	1,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	60,040	3,380	1,300	1,937	0.510	0.59
November	223,080	13,500	2,020	7,436	1.96	2.19
December	268,930	12,800	4,040	8,675	2.28	2.63
Calendar year 1947	1,954,910	35,900	1,300	5,356	1.41	19.14
January	206,830	8,460	5,430	6,672	1.76	2.03
February	373,050	27,900	7,410	12,860	3.38	3.64
March	394,680	22,400	6,780	12,730	3.35	3.86
April	315,840	19,900	3,970	10,530	2.77	3.09
May	104,210	4,380	2,150	3,362	.885	1.02
June	92,330	5,520	1,720	3,078	.810	.90
July	126,450	10,500	1,540	4,079	1.07	1.23
August	90,330	4,800	1,600	2,914	.767	.88
September	53,100	2,080	1,480	1,770	.466	.52
Water year 1947-48	2,308,870	27,900	1,300	6,308	1.66	22.58

Peak discharge (base, 15,000 sec.-ft.).- Feb. 15 (10 p.m.) 28,200 sec.-ft.; Mar. 12 (8 p.m.) 22,400 sec.-ft.; Mar. 22 (7 a.m.) 16,700 sec.-ft.; Mar. 29 (7 a.m) 17,700 sec.-ft.; Apr. 6 (1 a.m.) 20,500 sec.-ft.

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. Datum of gage is 87.48 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 5,180 square miles.

Records available.- October 1936 to September 1948. Gage-height records collected at same site since 1908 are contained in reports of U. S. Weather Bureau.

Average discharge.- 12 years, 5,706 second-feet.

Extremes.- Maximum discharge during year, 48,200 second-feet Apr. 3 (gage height, 18.9 feet); minimum, 1,870 second-feet Oct. 6.
1936-48: Maximum discharge, 60,500 second-feet Mar. 31, 1944 (gage height, 20.5 feet); minimum, 1,310 second-feet Oct. 21, 1938 (gage height, 0.07 foot).
Maximum stage known, 26.3 feet Jan. 21, 1925.

Remarks.- Records good. Flow regulated by Lloyd Shoals Reservoir (see p.232 for monthly change in contents) and power plant above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 18 to Sept. 30)

1.3	1,930	11.5	12,900
3.0	3,030	13.0	16,600
5.0	4,500	14.5	21,900
7.0	6,400	16.0	29,200
10.0	10,200	18.8	47,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,240	3,380	15,400	14,000	11,900	13,300	23,200	6,640	3,800	2,700	4,860	2,500
2	2,110	4,590	14,400	14,200	12,100	12,500	40,500	6,300	4,030	2,760	4,340	2,500
3	1,990	6,200	13,500	14,400	12,100	12,100	47,500	5,900	4,100	2,700	4,260	2,370
4	1,990	7,120	12,500	14,200	12,100	13,100	44,700	5,500	4,180	2,760	4,340	2,370
5	1,930	7,600	11,600	13,700	12,100	13,500	36,600	5,220	4,260	2,820	4,680	2,440
6	1,930	7,600	10,900	13,100	12,100	13,500	29,800	5,130	4,340	2,820	4,770	2,500
7	2,560	7,120	10,100	12,300	11,900	13,500	27,100	5,220	4,420	2,700	4,590	2,500
8	3,380	6,760	9,540	11,600	11,600	14,000	25,600	5,220	4,590	2,560	4,420	2,560
9	4,100	6,760	8,840	10,700	11,700	14,700	24,600	5,130	4,860	2,560	4,420	2,630
10	4,950	7,000	9,400	10,200	12,300	17,200	24,600	5,040	5,040	2,700	4,500	2,700
11	4,420	7,600	12,100	9,680	12,900	18,500	24,100	5,040	5,040	3,380	4,590	2,630
12	3,450	9,540	16,300	9,260	13,300	19,900	23,200	5,130	4,860	4,100	4,770	2,560
13	3,030	10,700	17,800	9,120	13,700	20,300	21,100	5,500	4,180	4,420	4,950	2,630
14	2,760	11,400	17,500	9,120	14,200	20,700	19,200	5,700	3,800	4,770	5,040	2,700
15	2,700	11,000	16,600	8,980	14,700	21,500	18,800	5,800	3,730	4,660	4,860	2,630
16	3,170	10,600	16,900	8,840	15,400	23,600	19,200	5,500	3,660	5,220	4,590	2,560
17	5,220	9,820	17,200	8,700	16,900	28,600	18,800	5,040	3,660	5,500	4,420	2,440
18	5,400	9,400	16,900	8,700	19,200	31,500	17,500	4,770	3,450	5,500	4,680	2,370
19	4,770	9,680	16,900	8,840	23,200	29,800	15,700	4,590	3,240	5,400	4,950	2,300
20	4,030	10,700	16,900	8,980	27,100	25,600	14,400	4,500	3,170	5,400	4,500	2,300
21	3,730	11,900	16,900	9,540	29,200	21,900	13,100	4,340	3,170	5,500	3,880	2,240
22	3,800	13,100	17,200	9,960	29,200	19,600	11,900	4,100	3,240	5,600	3,660	2,240
23	3,880	14,400	17,800	10,100	27,600	18,200	10,900	3,730	3,310	6,000	3,590	2,180
24	4,340	16,900	17,800	10,400	25,100	17,500	10,100	3,660	3,310	6,760	3,450	2,110
25	5,400	19,200	17,500	10,700	21,900	17,500	9,120	3,660	3,170	7,720	3,310	2,110
26	5,600	20,300	17,200	10,700	19,600	17,800	8,560	3,450	2,960	8,560	3,170	2,180
27	5,310	20,300	16,900	10,700	17,200	18,500	7,960	3,240	2,960	8,980	2,960	2,240
28	4,860	19,200	16,300	10,700	15,400	18,500	7,720	3,030	2,960	8,700	2,760	2,300
29	4,500	17,800	15,400	10,700	14,400	18,200	7,360	3,100	2,760	7,960	2,760	2,370
30	4,180	18,600	14,700	11,000	-	17,200	7,120	3,310	2,700	6,760	2,700	2,370
31	3,730	-	14,200	11,600	-	16,300	-	3,590	-	5,800	2,630	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	115,460	5,600	1,930	3,724	0.719	0.83
November	334,270	20,300	3,380	11,140	2.15	2.40
December	463,180	17,800	8,840	14,940	2.88	3.32
Calendar year 1947	2,752,680	32,700	1,930	7,542	1.46	19.77
January	334,720	14,400	8,700	10,800	2.08	2.40
February	490,100	29,200	11,600	16,900	3.26	3.52
March	578,600	31,500	12,100	18,660	3.60	4.15
April	610,040	47,500	7,120	20,330	3.92	4.37
May	146,080	6,640	3,030	4,712	.910	1.05
June	112,950	5,040	2,700	3,765	.727	.81
July	153,970	8,980	2,560	4,967	.959	1.10
August	127,400	5,040	2,630	4,110	.793	.91
September	72,530	2,700	2,110	2,418	.467	.52
Water year 1947-48	3,539,300	47,500	1,930	9,670	1.87	25.38

Peak discharge (base, 15,000 sec.-ft.).- Nov. 26-27, 20,300 sec.-ft.; Dec. 13 (3 p.m.) 18,200 sec.-ft.; Feb. 21-22, 29,200 sec.-ft.; Mar. 18, 31,500 sec.-ft.; Apr. 3 (4 p.m.) 48,200 sec.-ft.

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, 4½ miles northeast of Jesup. Datum of gage is 28.48 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 13,600 square miles.

Records available.- October 1931 to September 1948. Gage-height records collected at same site since 1925 are contained in reports of U. S. Weather Bureau.

Average discharge.- 17 years, 13,240 second-feet.

Extremes.- Maximum discharge during year, 92,500 second-feet Apr. 4, 5 (gage height, 10.0 feet); minimum, 3,730 second-feet Sept. 27, 28.

1931-48: 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.

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 below 10,000 second-feet and fair above.

Revisions.- W 822: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 29 to June 24)

Oct. 1-26		Oct. 27 to Sept. 30					
0.1	4,430	0.0	3,730	4.8	12,100	8.0	46,000
2.0	6,650	1.5	5,420	5.4	15,700	9.0	66,700
3.0	8,070	3.0	7,640	6.2	22,400	10.0	92,500
4.3	10,400	4.2	10,200	7.2	34,000		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,180	12,100	47,800	46,000	29,000	46,000	51,700	16,400	11,000	6,230	13,100	4,920
2	6,280	11,400	44,300	44,300	30,200	41,100	73,800	15,000	12,100	5,950	12,100	4,800
3	5,560	11,400	41,100	42,700	31,400	39,600	89,600	14,300	13,100	5,680	10,700	4,680
4	4,980	12,600	39,600	42,700	32,700	39,600	92,500	13,700	13,100	5,680	10,200	4,570
5	4,650	15,000	36,700	41,100	32,700	36,700	92,500	13,100	12,600	5,810	9,700	4,460
6	4,430	16,400	34,000	39,600	32,700	35,300	89,600	12,600	13,100	5,950	9,900	4,460
7	4,430	18,000	31,400	38,100	32,700	36,700	86,800	12,100	12,600	6,090	9,900	4,460
8	4,650	19,600	29,000	36,700	32,700	36,700	81,400	11,700	12,600	6,090	10,200	4,570
9	5,320	19,600	26,700	34,000	34,000	28,100	76,300	11,700	12,100	5,680	9,900	4,680
10	6,040	20,500	25,600	31,400	34,000	41,100	71,400	12,100	11,300	5,420	9,900	5,040
11	6,650	20,500	24,500	29,000	35,300	49,600	69,000	12,100	10,400	5,420	10,200	5,550
12	7,180	21,400	26,700	27,800	36,700	53,700	66,700	12,600	9,990	5,550	10,400	6,090
13	7,040	22,400	31,400	25,600	39,600	55,800	62,200	12,600	9,400	6,230	10,400	6,230
14	6,400	23,400	39,600	24,500	42,700	57,900	60,000	13,100	9,000	7,140	9,900	5,950
15	6,160	26,700	42,700	22,400	44,300	60,000	55,800	13,700	8,600	8,000	9,400	5,810
16	6,400	29,000	46,000	21,400	46,000	62,200	51,700	14,300	8,000	9,000	9,000	5,550
17	7,760	30,200	49,700	21,400	47,800	62,200	49,700	15,000	7,470	9,700	8,800	5,290
18	8,900	30,200	49,700	21,400	49,700	64,400	47,800	14,300	7,140	10,200	8,400	4,920
19	9,800	31,400	51,700	20,500	53,700	66,700	46,000	13,700	6,980	10,700	8,200	4,680
20	10,400	31,400	51,700	21,400	60,000	69,000	44,300	13,100	6,670	11,000	8,200	4,460
21	10,400	31,400	53,700	22,400	64,400	69,000	41,100	11,700	6,520	11,700	8,400	4,350
22	10,000	31,400	53,700	23,400	66,700	66,700	38,100	10,700	6,520	12,100	8,600	4,240
23	9,260	34,000	53,700	24,500	69,000	64,400	35,300	9,900	6,520	12,600	8,600	4,130
24	8,730	36,700	51,700	26,700	69,000	60,000	31,400	9,200	6,820	13,700	7,820	4,030
25	9,260	39,600	51,700	26,700	66,700	55,800	29,000	8,800	7,470	14,300	7,140	3,930
26	10,200	44,300	51,700	26,700	64,400	51,700	25,600	8,400	7,640	14,300	6,670	3,830
27	11,000	47,800	49,700	26,700	60,000	49,700	23,400	8,400	7,470	15,000	6,090	3,730
28	12,100	49,700	49,700	27,800	55,800	49,700	21,400	8,600	7,140	14,300	5,810	3,830
29	13,100	49,700	47,800	27,800	49,700	49,700	19,600	8,800	6,820	14,300	5,550	3,930
30	13,700	47,800	47,800	27,800	-	47,800	18,000	9,200	6,520	14,300	5,290	3,930
31	13,100	-	46,000	29,000	-	47,800	-	10,200	-	13,700	5,040	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	251,060	13,700	4,430	8,099	0.596	0.69
November	835,600	49,700	11,400	27,850	2.05	2.29
December	1,327,100	53,700	24,500	42,810	3.15	3.63
Calendar year 1947	6,926,520	71,000	3,600	18,980	1.40	18.96
January	921,500	46,000	20,500	29,730	2.19	2.52
February	1,343,600	69,000	29,000	46,330	3.41	3.68
March	1,604,700	69,000	35,300	51,760	3.81	4.39
April	1,641,700	92,500	18,000	54,720	4.02	4.48
May	371,100	16,400	8,400	11,970	.880	1.01
June	276,690	13,100	6,520	9,223	.678	.76
July	291,820	15,000	5,420	9,414	.692	.80
August	273,510	13,100	5,040	8,823	.649	.75
September	141,100	6,230	3,730	4,703	.346	.39
Water year 1947-48	9,279,480	92,500	3,730	25,350	1.86	25.39

Peak discharge (base, 30,000 sec.-ft.).- Nov. 28-29, 49,700 sec.-ft.; Dec. 21-23, 53,700 sec.-ft.; Feb. 23-24, 69,000 sec.-ft.; Mar. 20-21, 69,000 sec.-ft.; Apr. 4-5, 92,500 sec.-ft.

Yellow River near Snellville, Ga.

Location.- Staff gage, lat. 33°51', long. 84°05', at county highway bridge 3¼ miles west of Snellville, Gwinnett County, 4 miles downstream from Sweetwater Creek, 6½ miles northeast of town of Stone Mountain, and 7½ miles upstream from Stone Mountain Creek.

Drainage area.- 144 square miles.

Records available.- October 1942 to September 1948.

Extremes.- Maximum discharge during year, 2,690 second-feet Mar. 23 (gage height, 9.6 feet, from graph based on gage readings); minimum observed, 15 second-feet Oct. 7 (gage height, 0.72 foot).

1942-48: Maximum discharge, 4,370 second-feet Jan. 20, 1947; minimum observed, that of Oct. 7, 1947.

Revisions.- The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede those published in the water-supply papers indicated.

Water-Supply Paper	Water year	Date	Gage height (feet)	Discharge (second-feet)
1002........	1943-44	Mar. 29	9.8	2,760
1032........	1944-45	Apr. 25	10.5	3,000

Remarks.- Records good. Gage read twice daily.

Revisions (water years).- W 1032: 1943(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 17 to Aug. 2, Aug. 7 to Sept. 30)

0.7	14	1.1	43	2.2	267
.8	19	1.3	70	3.0	502
.9	25	1.5	104	4.5	1,020
1.0	33	1.8	169	8.5	2,320

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	51	124	169	295	180	1,050	128	108	59	104	43
2	17	632	116	180	241	534	566	124	137	51	180	41
3	18	337	116	158	204	440	380	126	128	50	502	43
4	18	180	112	144	180	351	309	158	112	45	632	86
5	18	142	112	137	180	281	281	180	104	41	840	137
6	16	112	112	133	192	385	700	169	97	76	416	108
7	15	340	108	128	607	1,310	471	192	100	44	180	78
8	58	632	120	126	2,320	875	380	146	99	39	139	73
9	88	228	128	126	2,320	502	366	133	86	50	116	66
10	37	169	450	124	1,720	380	281	122	80	110	106	62
11	37	1,640	380	116	805	323	267	118	76	805	106	63
12	28	1,770	309	118	805	281	254	116	75	599	104	57
13	27	471	241	216	770	254	241	114	73	241	90	53
14	27	267	204	192	840	228	254	106	78	652	88	53
15	27	632	399	146	534	216	241	102	267	1,050	86	56
16	144	351	875	142	380	447	216	100	180	366	93	51
17	770	241	410	142	323	910	192	97	126	204	95	45
18	216	241	267	137	281	410	192	90	93	158	83	43
19	100	323	216	128	254	309	180	88	102	204	80	44
20	75	241	192	128	228	267	180	86	93	120	81	43
21	62	204	204	142	216	241	180	84	88	99	67	40
22	53	169	204	137	351	241	169	78	81	90	72	39
23	48	180	180	128	267	2,090	169	73	76	80	70	41
24	57	241	169	169	228	1,380	169	80	67	76	66	44
25	90	216	216	137	216	502	169	76	62	70	63	39
26	69	180	204	135	204	366	158	75	57	67	59	37
27	62	158	180	137	192	700	146	81	53	64	56	36
28	62	142	169	180	204	599	139	309	52	114	53	73
29	60	133	158	169	192	351	133	910	90	95	51	70
30	53	128	146	216	-	281	128	735	70	144	53	59
31	51	-	142	440	-	632	-	241	-	142	50	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October..........................	2,421	770	15	78.1	0.542	0.62
November.........................	10,751	1,770	51	358	2.49	2.78
December.........................	6,963	875	108	225	1.56	1.80
Calendar year 1947	63,010	3,380	15	173	1.20	16.26
January..........................	4,880	440	116	157	1.09	1.26
February.........................	15,549	2,320	180	536	3.72	4.01
March............................	16,266	2,090	180	525	3.65	4.21
April............................	8,561	1,050	128	285	1.98	2.21
May..............................	5,237	910	73	169	1.17	1.35
June.............................	2,910	267	52	97.0	.674	.75
July.............................	6,005	1,050	39	194	1.35	1.56
August...........................	4,781	840	50	154	1.07	1.23
September........................	1,723	137	36	57.4	.399	.45
Water year 1947-48	86,047	2,320	15	235	1.63	22.23

Peak discharge (base, 2,100 sec.-ft.).- Nov. 12 (4 a.m.) 2,520 sec.-ft.; Feb. 8 (2 p.m.) 2,520 sec.-ft.; Mar. 23 (9 p.m.) 2,690 sec.-ft.

Yellow River near Covington, Ga.

Location.- Water-stage recorder, lat. 33°37', long. 83°55', at bridge on State Highway 12, a quarter of a mile downstream from Georgia Railroad bridge, half a mile downstream from Gum Creek, and 3½ miles northwest of Covington, Newton County.

Drainage area.- 396 square miles.

Records available.- July 1944 to September 1948. September to December 1897 at approximately same site and May 1899 to December 1901 at site 1 mile upstream, published as Yellow River at Almon.

Extremes.- Maximum discharge during year, 6,820 second-feet Feb. 10 (gage height, 15.2 feet); minimum daily, 51 second-feet Oct. 4.

1944-48: Maximum discharge, 12,000 second-feet (revised) Jan. 7, 1946 (gage height, 18.6 feet); minimum daily, that of Oct. 4, 1947.

Revisions.- The figures of maximum discharge for some water years have been revised as shown in the following table. They supersede those published in the Water-Supply Papers indicated.

Water-Supply Paper	Water year	Date	Gage height (feet)	Discharge (second-feet)
1032........	1944-45	Apr. 26	16.4	8,180
1052........	1945-46	Jan. 7	18.6	12,000

Remarks.- Records good except those for period of backwater from return of overbank flow, which are fair. Diurnal fluctuation caused by mill dam above station.

Revisions.- Revised figures of discharge, in second-feet, for the high-water period in the water year 1946, superseding those published in Water-Supply Paper 1052, are given herewith:

Jan. 7 11,000

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January.............	49,942	11,000	530	1,611	4.07	4.69
Water year 1945-46	219,368	11,000	92	601	1.52	20.60
Calendar year 1946	196,743	11,000	94	539	1.36	18.47

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	174	394	483	1,110	603	2,520	405	667	196	352	145
2	f73	996	373	566	816	816	2,390	394	554	177	405	131
3	f68	1,410	352	518	680	1,240	1,480	405	438	162	542	133
4	51	667	352	460	616	1,140	1,080	472	384	141	1,140	245
5	63	460	352	449	590	900	960	680	342	156	1,410	394
6	73	405	342	416	590	960	1,990	518	332	167	1,110	373
7	80	584	322	416	760	2,630	2,340	530	322	190	628	282
8	106	1,580	342	405	3,010	3,300	1,480	472	312	153	427	245
9	150	1,210	352	394	5,820	2,030	1,240	416	302	160	384	222
10	189	578	554	394	c6,300	1,510	1,020	394	282	192	342	199
11	156	1,700	960	373	c3,800	1,140	900	384	254	826	322	189
12	112	4,100	844	373	c2,100	960	844	362	245	1,320	312	194
13	140	3,390	733	506	c1,800	844	760	362	241	960	302	190
14	112	1,120	641	628	c1,630	788	760	342	243	900	282	179
15	111	1,140	706	483	c1,500	733	760	322	282	1,620	254	174
16	165	1,310	1,620	427	c1,160	788	706	312	427	1,480	282	170
17	840	872	1,650	416	c980	1,580	654	322	342	706	273	156
18	1,020	733	930	416	c880	1,800	603	292	292	494	254	146
19	405	990	706	416	816	1,080	590	282	292	427	239	151
20	292	816	616	394	760	872	566	273	332	518	224	163
21	239	628	616	405	706	788	554	264	292	427	210	141
22	204	554	706	416	816	733	530	254	252	332	210	143
23	190	518	603	405	816	2,520	518	233	233	302	226	138
24	187	616	542	472	706	5,180	506	254	237	273	217	138
25	206	706	680	472	667	3,240	494	250	217	254	201	131
26	221	578	760	438	654	1,370	472	239	190	248	190	128
27	219	506	616	427	628	1,310	460	237	194	235	180	141
28	208	449	554	472	654	1,510	438	470	248	233	158	187
29	221	416	518	506	680	1,180	416	1,050	192	302	165	231
30	201	405	494	616	-	930	405	1,580	215	282	174	210
31	185	-	472	1,180	-	1,330	-	1,240	-	405	158	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October........................	6,557	1,020	51	212	0.535	0.62
November........................	29,611	4,100	174	987	2.49	2.78
December........................	19,702	1,650	322	636	1.61	1.86
Calendar year 1947	187,001	6,260	51	512	1.29	17.58
January........................	14,742	1,180	373	476	1.20	1.38
February........................	42,045	6,300	590	1,450	3.66	3.95
March........................	45,805	5,180	603	1,478	3.73	4.30
April........................	28,436	2,520	405	948	2.39	2.67
May........................	14,010	1,580	233	452	1.14	1.31
June........................	9,155	667	190	305	.770	.86
July........................	14,238	1,820	141	459	1.16	1.34
August........................	11,573	1,410	158	373	.942	1.09
September........................	5,669	394	128	189	.477	.53
Water year 1947-48	241,543	6,300	51	660	1.67	22.69

Peak discharge (base, 5,400 sec.-ft.).- Feb. 10 (3 a.m.) 6,820 sec.-ft.; Mar. 24 (12 m.) 5,420 sec.-ft.

c Backwater from return of overbank flow.

f Computed on basis of partly estimated gage-height record.

Alcovy River below Covington, Ga.

Location.- Water-stage recorder, lat. 33°31', long. 83°49', 500 feet downstream from Henderson Mill Bridge, 4 miles downstream from Central of Georgia Railway bridge, and 7 miles southeast of Covington, Newton County.

Drainage area.- 251 square miles.

Records available.- July 1944 to September 1948 in reports of Geological Survey. November 1928 to April 1932 in House Document 68, 74th Congress, 1st Session.

Extremes.- Maximum discharge during year, 3,980 second-feet Feb. 10 (gage height, 13.8 feet); minimum daily, 44 second-feet Oct. 5.

1944-48: Maximum discharge, 7,520 second-feet (revised) Jan. 8, 1946 (gage height, 20.2 feet, from floodmark); minimum daily, that of Oct. 5, 1947.

Maximum stage known, 27.2 feet July 30, 1887 (discharge, 12,400 second-feet), from floodmarks and dates in Henderson Mill.

Revisions.- The maximum discharge for the water year 1946 has been revised to 7,520 second-feet Jan. 8, 1946 (gage height, 20.2 feet, from floodmark), superseding figure published in Water-Supply Paper 1052.

Remarks.- Records good. Diurnal fluctuation and some regulation at low flow by Henderson Mill.

Revisions.- Revised figures of discharge, in second-feet, for high-water period in the water year 1946, superseding those published in Water-Supply Paper 1052, are given herewith:

Jan. 8.........7,100

Month	Second-foot days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January.................	36,397	7,100	380	1,174	4.68	5.40
Water year 1945-46....	149,063	7,100	61	411	1.64	22.22
Calendar year 1946....	138,188	7,100	68	379	1.51	20.48

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	127	293	350	744	440	956	266	612	121	179	76
2	50	275	284	370	700	491	1,290	266	470	115	203	72
3	50	330	266	350	612	524	1,320	257	320	104	248	67
4	51	320	257	350	568	557	1,030	284	284	96	284	76
5	44	360	257	320	502	568	788	420	284	84	284	146
6	51	370	248	302	460	656	880	420	240	84	340	193
7	50	340	248	284	480	956	1,230	400	203	80	470	222
8	50	430	248	275	832	1,470	1,120	360	185	88	440	208
9	96	460	257	266	1,950	1,660	1,090	320	172	88	330	193
10	116	440	330	266	3,520	1,470	788	302	162	107	231	179
11	124	700	430	257	3,520	1,150	678	266	154	166	187	148
12	110	1,120	480	248	2,620	880	612	240	146	198	172	134
13	97	1,350	535	284	1,880	744	568	248	144	231	162	124
14	91	1,320	546	370	1,470	656	524	240	138	460	154	115
15	85	1,200	612	360	1,260	568	502	222	205	612	156	111
16	101	956	700	340	1,120	724	470	214	222	634	162	108
17	204	810	788	311	956	982	460	203	222	904	148	103
18	214	656	722	293	832	810	440	192	257	700	146	98
19	204	656	700	284	700	832	410	184	266	410	139	93
20	196	678	634	275	634	880	370	174	257	275	131	92
21	166	590	546	275	590	722	370	168	240	214	121	88
22	130	502	535	275	612	612	360	164	193	192	115	81
23	114	460	480	275	568	904	340	158	170	174	116	81
24	111	440	440	350	535	1,700	340	156	152	158	114	81
25	124	450	491	370	513	1,910	330	155	141	145	111	76
26	145	430	568	350	502	1,500	320	163	130	135	103	73
27	156	410	513	330	480	1,010	311	178	121	128	98	78
28	148	380	460	350	460	880	302	212	116	124	92	96
29	139	350	420	350	440	788	284	370	118	135	86	141
30	145	320	390	450	-	722	275	513	119	152	81	158
31	135	-	360	678	-	766	-	656	-	174	75	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October.........................	3,549	214	44	114	0.454	0.52
November.........................	17,230	1,350	127	574	2.29	2.56
December.........................	14,038	788	248	453	1.80	2.08
Calendar year 1947	129,718	3,310	44	355	1.41	19.21
January.........................	10,208	678	248	329	1.31	1.51
February.........................	30,060	3,520	440	1,036	4.13	4.45
March.........................	28,532	1,910	440	920	3.66	4.22
April.........................	18,758	1,320	275	625	2.49	2.78
May.........................	8,371	656	155	270	1.08	1.24
June.........................	6,443	612	116	215	.856	.96
July.........................	7,288	904	80	235	.936	1.08
August.........................	5,678	470	75	183	.729	.84
September.........................	3,511	222	67	117	.466	.52
Water year 1947-48	153,666	3,520	44	420	1.67	22.76

Peak discharge (base, 2,500 sec.-ft.).- Feb. 10 (9 p.m.) 3,980 sec.-ft.

Towaliga River near Forsyth, Ga.

Location.- Water-stage recorder, lat. 33°07', long. 83°57', at bridge on State Highway 42, a quarter of a mile downstream from Rocky Creek, 1¼ miles downstream from Little Towaliga River, and 6 miles north of Forsyth, Monroe County.

Drainage area.- 315 square miles.

Records available.- July 1944 to September 1948 in reports of Geological Survey. February 1929 to April 1932 at site half a mile downstream in House Document 68, 74th Congress, 1st Session.

Extremes.- Maximum discharge during year, 4,110 second-feet Feb. 10 (gage height, 11.4 feet); minimum daily, 40 second-feet Oct. 1, 2, 4.
1944-48: Maximum discharge, 7,900 second-feet Mar. 7, 1947 (gage height, 16.4 feet); minimum daily, 33 second-feet Sept. 12, 1945.

Remarks.- Records good. Flow from 130 square miles regulated by High Falls Dam.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 10, Feb. 16 to Mar. 15, July 24 to Sept. 30)

0.4	40	2.5	437
.6	65	3.5	720
.9	108	5.0	1,200
1.3	175	8.0	2,400
1.9	295	10.9	3,840

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	105	306	463	1,390	450	1,660	342	476	127	100	130
2	40	421	306	570	840	570	2,220	132	463	87	241	135
3	41	238	363	476	675	780	1,470	258	450	82	314	132
4	40	295	295	424	556	750	870	424	437	78	370	76
5	41	284	328	387	528	645	720	437	356	73	585	92
6	41	274	295	375	515	948	870	437	116	90	354	90
7	42	295	340	363	528	3,350	2,600	412	184	71	119	142
8	107	317	363	363	1,580	2,580	2,260	140	284	164	106	144
9	204	284	363	387	3,080	1,470	1,280	124	274	100	280	139
10	210	268	463	387	3,840	1,430	934	260	264	208	412	138
11	204	1,700	437	306	1,970	1,060	840	424	250	216	320	78
12	82	2,170	556	328	1,660	840	720	437	90	334	159	72
13	64	966	966	528	2,130	720	720	437	83	1,130	167	131
14	56	528	1,130	502	1,620	645	515	387	146	1,320	94	140
15	102	1,050	1,180	412	1,200	615	542	126	268	1,470	89	141
16	259	1,280	2,050	375	934	828	600	111	306	934	240	136
17	270	735	1,280	375	810	2,360	528	210	274	645	314	128
18	98	746	780	375	705	2,010	542	412	274	660	155	65
19	75	1,350	630	352	645	1,060	528	412	214	600	153	62
20	113	902	528	363	585	810	502	375	96	556	142	124
21	214	600	966	412	585	660	366	114	187	542	149	124
22	161	502	1,130	412	705	600	570	100	270	528	85	122
23	78	489	780	375	660	902	570	96	272	476	140	118
24	201	630	600	840	556	1,390	458	207	266	322	194	125
25	78	780	705	840	528	966	162	400	227	100	194	62
26	78	528	750	570	515	675	276	346	86	216	140	55
27	121	424	600	502	489	615	424	210	83	301	180	122
28	226	375	515	528	528	615	424	212	183	150	83	239
29	218	340	463	528	515	489	412	464	295	257	72	185
30	216	328	437	721	-	476	412	274	274	212	129	149
31	199	-	424	1,770	-	870	-	318	-	111	123	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,919	270	40	126	0.400	0.46
November	19,204	2,170	105	640	2.03	2.26
December	20,329	2,050	295	656	2.08	2.40
Calendar year 1947	176,921	6,210	40	485	1.54	20.89
January	15,609	1,770	306	504	1.60	1.84
February	30,872	3,840	489	1,065	3.38	3.64
March	32,179	3,350	450	1,038	3.30	3.80
April	24,995	2,600	162	833	2.64	2.94
May	9,038	464	96	292	.927	1.07
June	7,448	476	83	248	.787	.88
July	12,160	1,470	71	392	1.24	1.43
August	6,203	585	72	200	.635	.73
September	3,596	239	55	120	.381	.43
Water year 1947-48	185,552	3,840	40	507	1.61	21.88

Peak discharge (base, 3,800 sec.-ft.).- Feb. 10 (3 a.m.) 4,110 sec.-ft.; Mar. 7 (6 p.m.) 3,840 sec.-ft.

Tobesofkee Creek near Macon, Ga.

Location.- Water-stage recorder, lat. 32°48', long. 83°46', at bridge on U. S. Highway 80, 8 miles west of Macon, Bibb County, and 14 miles upstream from mouth. Datum of gage is 309.98 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 182 square miles.

Records available.- March 1937 to September 1948.

Average discharge.- 11 years, 194 second-feet.

Extremes.- Maximum discharge during year, 2,450 second-feet Nov. 12 (gage height, 11.6 feet); minimum, 34 second-feet Oct. 7.

1937-48: Maximum discharge, 9,830 second-feet Mar. 21, 1944 (gage height, 23.2 feet), from rating curve extended above 5,600 second-feet; minimum observed, 6.5 second-feet Sept. 24, 1941.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.5	32	3.0	108	7.0	1,140
2.6	42	3.2	160	9.0	1,610
2.7	54	4.0	400	10.7	2,130
2.8	69	5.0	680		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	73	196	325	641	295	1,510	181	149	214	132	60
2	38	704	187	385	430	307	1,720	181	135	104	132	62
3	37	460	178	292	358	394	1,010	175	125	83	149	60
4	37	193	175	262	319	352	615	178	118	74	280	58
5	36	190	172	244	301	319	490	223	110	66	391	74
6	36	175	166	232	292	620	475	202	104	62	229	95
7	35	166	160	226	343	1,640	1,140	214	102	60	152	82
8	47	292	160	217	872	1,270	1,070	184	102	182	132	82
9	74	193	175	211	1,510	800	588	172	104	403	139	82
10	56	146	526	211	1,670	848	460	166	98	920	132	62
11	63	1,040	654	202	1,050	654	546	160	93	615	113	60
12	69	2,130	964	196	986	532	532	154	91	340	110	62
13	56	1,040	896	475	1,380	445	400	169	87	352	102	60
14	53	364	896	430	1,010	394	355	166	85	460	95	58
15	49	504	800	286	704	364	340	146	87	1,430	89	57
16	62	654	1,270	247	532	445	319	140	87	1,070	87	57
17	196	394	872	235	460	1,410	301	132	87	316	139	53
18	149	616	475	232	415	1,050	277	127	82	229	115	52
19	87	1,430	394	220	376	602	262	120	83	178	91	50
20	104	896	340	223	352	490	256	115	85	152	83	50
21	76	430	750	295	340	430	247	113	102	132	83	50
22	64	343	1,210	286	532	400	241	110	93	118	80	49
23	62	364	728	250	445	1,120	232	108	82	108	83	48
24	60	373	460	986	349	776	229	106	71	100	79	47
25	63	532	680	824	325	504	229	108	64	93	74	48
26	82	388	641	445	316	415	220	110	64	91	69	46
27	85	295	445	355	304	460	211	113	69	83	69	46
28	74	256	358	355	316	400	202	140	73	93	69	83
29	69	229	319	355	346	340	196	226	66	286	65	140
30	66	211	295	430	-	319	187	460	106	349	64	87
31	62	-	274	824	-	415	-	190	-	172	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,087	196	35	67.3	0.370	0.43
November	15,081	2,130	73	503	2.76	3.08
December	15,816	1,270	160	510	2.80	3.23
Calendar year 1947	105,330	3,700	35	289	1.59	21.50
January	10,756	986	196	347	1.91	2.20
February	17,274	1,670	292	596	3.27	3.53
March	18,810	1,640	295	607	3.34	3.85
April	14,860	1,720	187	495	2.72	3.04
May	5,089	460	106	164	.901	1.04
June	2,804	149	64	93.5	.514	.57
July	8,935	1,430	60	288	1.58	1.82
August	3,685	391	64	119	.654	.75
September	1,920	140	46	64.0	.352	.39
Water year 1947-48	117,117	2,130	35	320	1.76	23.93

Peak discharge (base, 1,900 sec.-ft.).- Nov. 12 (5 p.m.) 2,450 sec.-ft.; Feb. 9 (3 p.m.) 1,900 sec.-ft.; Apr. 2 (1 a.m.) 2,160 sec.-ft.

Oconee River at Athens, Ga.

Location.- Water-stage recorder, lat. 33°57', long. 83°22', at Cemetery Bridge in Athens, Clarke County, 1,600 feet downstream from Athens Manufacturing Co. dam, 2,200 feet downstream from bridge on U. S. Highway 78, and 3 miles downstream from Sandy Creek.

Drainage area.- 283 square miles.

Records available.- June 1944 to September 1948 in reports of Geological Survey. November 1928 to March 1932 in House Document 68, 74th Congress, 1st Session.

Extremes.- Maximum discharge during year, 3,390 second-feet Feb. 10 (gage height, 13.2 feet); minimum daily, 59 second-feet Oct. 4.

1944-48: Maximum discharge, 6,500 second-feet Jan. 6, 1946 (gage height, 21.0 feet), from rating curve extended above 4,000 second-feet by logarithmic plotting; minimum daily, 42 second-feet Sept. 6, 1947.

Maximum stage known, 23.0 feet Mar. 5, 1929, from gage readings furnished by Corps fo Engineers.

Remarks.- Records good. Diurnal fluctuation and some regulation caused by power plant above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 2 to July 15, July 20 to Sept. 5)

2.9	54	4.0	235	7.0	1,230
3.2	90	4.6	391	10.0	2,250
3.5	135	5.4	654	13.0	3,320

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	197	265	314	580	389	1,190	273	852	1,090	347	152
2	79	411	250	365	536	482	1,300	260	444	744	324	154
3	80	478	250	333	417	564	1,010	277	352	269	459	148
4	59	310	228	285	359	590	657	303	337	245	870	167
5	78	264	232	304	358	520	547	354	307	224	1,120	392
6	95	290	245	282	368	566	578	358	282	222	942	468
7	82	516	223	256	578	1,650	549	389	290	199	610	323
8	142	686	251	262	1,440	2,020	629	341	262	189	321	307
9	168	700	245	245	2,740	1,890	715	274	282	209	304	289
10	135	451	371	257	3,320	1,400	596	288	250	262	279	220
11	120	1,160	538	225	2,600	852	490	273	243	391	238	211
12	120	1,580	549	244	1,920	628	476	268	220	499	272	197
13	121	1,750	440	384	1,480	524	451	311	236	1,190	278	185
14	112	1,190	351	467	1,540	482	441	288	248	1,230	249	181
15	112	942	453	342	1,650	458	472	256	284	1,050	243	183
16	139	1,010	722	290	1,260	511	432	232	269	1,780	265	191
17	262	852	888	275	834	751	393	267	289	2,050	298	169
18	271	600	906	279	626	712	373	214	314	2,390	244	165
19	164	474	512	284	531	720	366	231	798	1,400	227	165
20	135	438	386	254	485	547	357	216	636	570	221	161
21	125	361	408	274	452	482	344	212	468	377	215	155
22	111	326	468	273	498	456	349	209	300	315	192	153
23	147	351	396	274	531	798	342	169	437	297	244	149
24	184	406	334	286	488	1,050	329	225	602	263	203	153
25	184	434	398	276	435	1,300	313	208	584	225	196	148
26	159	416	476	292	425	906	312	221	259	258	193	144
27	146	341	398	281	408	672	301	224	249	232	184	139
28	188	306	354	365	423	636	291	313	350	233	146	177
29	221	268	336	368	382	942	277	906	350	284	177	215
30	145	265	308	401	-	672	282	1,480	584	298	200	193
31	132	-	297	541	-	906	-	1,300	-	472	162	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,296	271	59	139	0.491	0.57
November	17,773	1,750	197	592	2.09	2.33
December	12,478	906	223	403	1.42	1.64
Calendar year 1947	125,301	3,880	42	343	1.21	16.46
January	9,578	541	225	309	1.09	1.26
February	27,664	3,320	358	954	3.37	3.64
March	25,076	2,020	389	809	2.86	3.30
April	15,162	1,300	277	505	1.78	1.99
May	11,140	1,480	169	359	1.27	1.46
June	11,378	852	220	379	1.34	1.50
July	19,457	2,390	189	628	2.22	2.56
August	10,223	1,120	146	330	1.17	1.35
September	6,054	468	139	202	. .714	.80
Water year 1947-48	170,279	3,320	59	465	1.64	22.40

Peak discharge (base, 2,500 sec.-ft.).- Feb. 10 (6 a.m.) 3,390 sec.-ft.; July 18 (8 a.m.) 2,560 sec.-ft.

Oconee River near Greensboro, Ga.

Location.- Water-stage recorder, lat. 33°35', long. 83°16', 300 feet downstream from bridge on State Highway 12, 1 mile downstream from Town Creek, 5 miles upstream from Apalachee River, 5 miles west of Greensboro, Green County, and 12 miles downstream from Barnett Shoals Dam. Datum of gage is 409.82 feet above mean sea level, unadjusted.

Correction.- On Nov. 8, 1938, the gage was changed from a wire-weight gage at the bridge to a water-stage recorder at site 300 feet downstream from bridge. The statements given in Water-Supply Paper 872 and subsequent reports are erroneous.

Drainage area.- 1,090 square miles.

Records available.- July 1903 to September 1923 and May 1937 to September 1948 in reports of Geological Survey. October 1903 to December 1931 (including revised records for October 1918 to September 1923) in House Document 68, 74th Congress, 1st Session.

Average discharge.- 38 years (1903-13, 1914-31, 1937-48), 1,504 second-feet.

Extremes.- Maximum discharge during year, 13,300 second-feet Feb. 10 (gage height, 19.7 feet); minimum daily, 247 second-feet Oct. 5.

1903-31, 1937-48: 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. Diurnal fluctuation and some regulation at low flow by Barnett Shoals power plant.

Revisions (water years).- W 262: 1908, 1909. W 822: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 4-10, Nov. 18 to Dec. 15, Dec. 19 to Jan. 30, Feb. 19 to Mar. 6)

0.9	240	12.0	5,000
1.5	386	14.0	6,250
2.5	682	16.0	8,100
4.0	1,230	18.0	10,700
8.0	3,040	19.2	12,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	299	497	1,000	1,230	3,090	1,530	5,000	1,110	2,850	1,840	1,440	540
2	283	1,080	962	1,440	2,430	1,800	6,410	1,110	1,800	1,750	1,230	511
3	283	1,980	926	1,360	1,930	2,340	6,090	1,080	1,320	1,150	1,400	441
4	269	1,750	890	1,190	1,660	2,430	3,510	1,150	1,150	750	2,620	497
5	247	1,080	854	1,110	1,530	2,160	2,520	1,570	1,080	716	3,320	767
6	278	926	854	1,110	1,530	2,060	3,320	1,440	1,000	666	3,040	1,480
7	271	1,000	854	1,040	1,880	4,630	3,180	1,480	962	649	1,930	1,110
8	373	2,340	854	1,040	5,360	6,490	2,660	1,440	926	601	1,320	872
9	733	2,390	890	1,000	8,550	7,280	3,130	1,230	926	601	1,080	890
10	649	1,750	1,080	1,000	12,500	6,330	3,040	1,150	926	750	962	818
11	540	2,710	1,880	962	12,500	4,730	2,570	1,080	854	1,040	908	716
12	497	4,840	2,200	962	10,700	2,900	2,200	1,080	784	1,980	836	649
13	441	5,380	1,980	1,360	9,550	2,390	2,060	1,110	801	2,900	908	649
14	427	5,110	1,700	1,800	8,100	2,160	1,930	1,110	784	2,850	854	601
15	400	4,040	1,700	1,530	6,410	2,020	1,930	1,000	890	3,230	767	585
16	413	3,610	3,510	1,190	5,330	2,160	1,880	1,000	962	3,420	784	585
17	540	2,950	3,420	1,110	3,890	4,730	1,750	962	890	4,090	836	585
18	801	2,200	3,090	1,110	2,760	3,990	1,620	926	854	4,530	890	540
19	801	2,290	2,200	1,080	2,290	2,990	1,530	890	1,440	4,180	784	525
20	601	1,980	1,660	1,040	2,060	2,430	1,480	890	1,620	2,290	750	525
21	483	1,620	1,750	1,080	1,930	2,160	1,480	818	1,400	1,360	716	540
22	400	1,400	2,060	1,080	2,200	2,020	1,440	784	1,040	1,150	649	511
23	413	1,360	1,700	1,040	2,250	3,370	1,400	818	908	1,000	733	469
24	497	1,570	1,480	1,110	2,060	5,330	1,360	767	1,080	926	716	497
25	617	1,880	2,060	1,190	1,800	5,500	1,360	818	1,190	872	649	497
26	682	1,620	2,430	1,150	1,750	4,230	1,320	908	962	784	617	483
27	633	1,400	1,880	1,190	1,660	2,900	1,270	836	716	784	585	483
28	601	1,230	1,570	1,480	1,660	2,990	1,230	926	1,040	818	585	497
29	617	1,110	1.400	1,660	1,660	3,180	1,190	1,980	1,190	908	497	617
30	716	1,040	1,320	1,880	-	2,760	1,150	3,750	1,480	962	540	716
31	555	-	1,230	3,940	-	2,850	-	3,940	-	1,480	585	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15,360	801	247	495	0.454	0.52
November	64,133	5,380	497	2,138	1.96	2.19
December	51,384	3,510	854	1,658	1.52	1.75
Calendar year 1947	510,833	14,500	236	1,400	1.28	17.41
January	40,464	3,940	962	1,305	1.20	1.38
February	121,020	12,500	1,530	4,173	3.83	4.13
March	104,840	7,280	1,530	3,382	3.10	3.57
April	71,010	6,410	1,150	2,367	2.17	2.42
May	39,153	3,940	767	1,263	1.16	1.34
June	33,825	2,850	716	1,128	1.03	1.15
July	51,027	4,530	601	1,646	1.51	1.74
August	33,531	3,320	497	1,082	.993	1.14
September	19,196	1,480	441	640	.587	.65
Water year 1947-48	644,943	12,500	247	1,762	1.62	21.98

Peak discharge (base, 6,000 sec.-ft.).- Feb. 10 (9 p.m.) 13,300 sec.-ft.; Mar. 9 (3 a.m.) 7,480 sec.-ft.; Apr. 2 (11 p.m.) 6,830 sec.-ft.

Oconee River at Milledgeville, Ga.

Location.- Water-stage recorder, lat. 33°05', long. 83°13', at Milledgeville, Baldwin County, 900 feet upstream from bridge on State Highway 24, half a mile upstream from Fishing Creek, and 4 miles downstream from partly completed Furmar Shoals Dam of Georgia Power Co. Datum of gage is 230.84 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,950 square miles.

Records available.- August 1903 to December 1905 (at Milledgeville), May 1906 to December 1908 and October 1909 to September 1923 (at Fraleys Ferry, 7 miles upstream), and April 1937 to September 1948 in reports of Geological Survey. May 1906 to December 1908 and October 1909 to December 1931 (at Fraleys Ferry) in House Document 68, 74th Congress, 1st session. Gage-height records collected since 1904 at site 900 feet downstream are contained in reports of U. S. Weather Bureau.

Average discharge.- 33 years (1906-8, 1909-16, 1918-31, 1937-48), 3,526 second-feet.

Extremes.- Maximum discharge during year, 32,100 second-feet Feb. 13 (gage height, 26.7 feet); minimum daily, 526 second-feet Oct. 6.

1903-31, 1937-48: Maximum discharge, 77,500 second-feet Aug. 16, 1928 (gage height, 38.8 feet, present site and datum), from rating curve extended above 54,000 second-feet; minimum daily, 90 second-feet on several days in August and September 1925.

Maximum stage known since 1904, that of Aug. 16, 1928.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are fair. Diurnal fluctuation and some regulation at low flow by Barnett Shoals power plant.

Revisions.- W 922: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 15 to July 13)

6.2	520	10.0	3,500	19.0	14,700	26.7	32,100
6.9	960	13.0	6,520	22.0	20,100		
8.0	1,770	16.0	10,200	24.0	24,500		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	580	1,100	2,300	3,900	12,500	4,100	15,200	2,300	6,500	2,250	2,330	1,170
2	604	2,320	2,200	4,500	9,030	4,300	22,200	2,200	4,500	2,420	2,420	1,060
3	574	4,500	2,200	4,000	6,410	5,600	19,000	2,200	3,000	2,170	2,510	1,030
4	580	4,300	2,100	3,800	5,100	6,000	13,400	2,200	2,500	1,690	3,140	960
5	574	3,320	2,000	3,500	4,600	5,700	7,580	2,800	2,400	1,320	5,200	1,140
6	526	2,780	2,000	3,200	4,300	5,700	9,040	2,800	2,300	1,240	5,200	2,010
7	538	2,330	2,000	3,000	4,200	18,100	13,400	3,500	2,300	1,170	4,100	2,330
8	598	3,230	2,000	2,900	10,600	18,600	9,940	3,300	2,200	1,170	2,780	1,850
9	790	4,900	2,100	2,900	22,500	16,800	9,030	3,000	2,100	1,320	2,170	1,620
10	1,320	4,400	2,500	2,800	31,500	16,600	8,540	2,900	2,000	1,320	1,930	1,770
11	1,390	8,040	4,200	2,700	29,700	13,300	7,100	2,400	1,900	1,500	1,770	1,540
12	2,330	18,800	7,800	2,600	28,800	9,420	6,000	2,300	1,800	2,010	1,650	1,350
13	1,390	14,700	8,000	2,700	29,400	6,520	5,200	2,600	1,700	3,230	1,620	1,240
14	1,030	11,200	7,000	5,300	23,300	5,600	4,700	2,700	1,700	5,640	1,690	1,200
15	925	11,300	8,000	5,700	18,400	5,000	4,500	2,300	1,620	9,030	1,540	1,140
16	925	11,900	11,000	4,500	13,900	5,200	4,300	2,200	1,810	7,580	1,460	1,100
17	1,320	8,420	10,000	3,600	10,800	14,500	4,100	2,100	2,010	5,700	3,630	1,060
18	1,730	7,700	8,300	3,100	7,580	17,500	3,800	1,900	1,900	6,520	2,690	1,030
19	1,770	11,500	6,520	3,000	6,000	11,600	3,500	1,800	1,930	6,520	1,850	960
20	1,580	7,700	5,000	3,000	5,400	7,460	3,410	1,800	2,600	6,000	1,580	960
21	1,240	5,600	4,200	3,900	5,500	5,900	3,400	1,800	2,780	3,410	1,500	925
22	1,030	4,300	7,000	3,500	7,100	5,200	3,200	1,800	2,420	2,420	1,390	925
23	890	4,500	6,400	3,400	6,740	10,100	3,000	1,800	1,930	2,090	1,350	890
24	890	5,000	6,000	3,500	5,800	16,900	3,000	1,700	1,690	1,890	1,430	855
25	1,030	6,000	5,700	5,900	5,100	15,400	3,000	1,700	1,770	1,770	1,320	855
26	1,280	5,000	9,000	5,600	4,700	12,500	2,900	2,100	1,810	1,690	1,200	820
27	1,390	3,500	6,600	4,500	4,500	8,540	2,800	3,000	1,620	1,580	1,140	820
28	1,320	2,800	5,400	4,100	4,400	6,860	2,700	2,300	1,430	1,620	1,060	960
29	1,200	2,500	4,800	5,000	4,400	6,630	2,600	3,000	1,770	1,970	1,100	1,170
30	1,170	2,400	4,200	6,000	-	6,300	2,500	6,200	2,010	2,510	995	1,320
31	1,240	-	3,900	7,200	-	5,900	-	8,100	-	1,970	1,030	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	33,754	2,330	526	1,089	0.369	0.43
November	186,040	18,800	1,100	6,201	2.10	2.34
December	160,420	11,000	2,000	5,175	1.75	2.02
Calendar year 1947	1,482,060	40,400	526	4,060	1.38	18.68
January	123,300	7,200	2,600	3,977	1.35	1.56
February	332,260	31,500	4,200	11,460	3.88	4.18
March	297,830	18,600	4,100	9,607	3.26	3.76
April	203,040	22,200	2,500	6,768	2.29	2.56
May	82,800	8,100	1,700	2,671	.905	1.04
June	67,910	6,500	1,430	2,264	.767	.86
July	92,720	9,030	1,170	2,991	1.01	1.16
August	64,775	5,200	995	2,090	.708	.82
September	36,060	2,330	820	1,202	.407	.45
Water year 1947-48	1,680,909	31,500	526	4,593	1.56	21.18

Peak discharge (base, 18,000 sec.-ft.).- Nov. 12 (10 a.m.) 19,900 sec.-ft.; Feb. 13 (2 a.m.) 32,100 sec.-ft.; Mar. 7 (8 p.m.) 20,900 sec.-ft.; Mar. 18 (2 a.m.) 18,600 sec.-ft.; Apr. 2 (5 a.m.) 23,100 sec.-ft.

Note.- No gage-height record Nov. 21 to Dec. 17, Dec. 21 to Feb. 1, May 13 to June 14; discharge computed on basis of U. S. Weather Bureau readings and records for nearby stations. Doubtful gage-height record Apr. 21 to May 12; discharge computed on same basis as for no gage-height record.

Oconee River at Dublin, Ga.

Location.- Water-stage recorder, lat. 32°32', long. 82°54', at bridge on U. S. Highway 80 at Dublin, Laurens County. Datum of gage is 149.08 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 4,400 square miles.

Records available.- January 1894 to January 1898 (gage heights only), February 1898 to December 1913, October 1931 to September 1948 in reports of Geological Survey. January 1929 to December 1931 in House Document 68, 74th Congress, 1st Session. Gage-height records collected at same site since 1893 are contained in reports of U. S. Weather Bureau.

Average discharge.- 31 years (1898-1912, 1931-48), 5,085 second-feet.

Extremes.- Maximum discharge during year, 39,000 second-feet Feb. 16 (gage height, 24.4 feet); minimum, 970 second-feet Oct. 6, 7 (gage height, 1.70 feet).

1898-1913, 1931-48: Maximum discharge, 96,700 second-feet Apr. 12, 13, 1936 (gage height, 32.97 feet); minimum, 422 second-feet Sept. 24, 1941 (gage height, 0.72 foot).

Maximum stage known, that of Apr. 12, 13, 1936.

Remarks.- Records good.

Revisions.- W 822: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 2, Apr. 11 to May 31, July 21 to Aug. 18)

1.8	970	14.0	12,100
2.5	1,440	18.0	18,800
4.0	2,600	20.0	23,600
9.0	6,520	22.0	29,500
12.0	9,500	24.3	38,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,160	1,940	5,480	9,280	9,860	8,000	15,500	3,600	7,130	2,680	3,290	1,670
2	1,090	2,520	4,920	7,800	10,800	7,700	16,700	3,440	7,600	2,830	3,210	1,710
3	1,030	3,600	4,600	7,600	11,700	7,600	17,200	3,370	7,040	3,060	3,670	1,670
4	1,030	5,320	4,360	7,700	13,000	8,200	19,200	3,370	5,320	2,980	3,750	1,630
5	1,000	5,880	4,130	7,130	14,000	8,730	23,100	3,750	4,060	2,520	4,290	1,710
6	970	5,640	4,060	6,520	13,600	9,060	24,600	4,130	3,670	2,060	5,640	2,140
7	970	4,840	3,900	5,960	11,400	10,900	22,800	4,840	3,370	1,790	6,360	3,140
8	1,030	4,290	3,830	5,560	9,620	12,200	19,600	5,000	2,980	1,750	6,120	3,600
9	1,160	4,440	3,830	5,320	10,500	13,300	16,900	4,680	2,750	1,830	4,760	3,210
10	1,300	5,640	4,840	5,080	13,200	16,400	15,500	4,210	2,680	1,980	3,600	2,830
11	1,590	6,040	7,310	4,920	14,200	21,400	15,000	3,750	2,600	2,210	2,980	2,680
12	1,830	6,680	9,390	4,760	19,200	24,100	14,400	3,830	2,520	3,210	2,680	2,600
13	2,370	8,100	10,900	5,080	29,200	23,800	13,600	4,210	2,370	3,670	2,520	2,290
14	2,370	9,060	12,400	6,770	35,500	22,100	12,400	4,210	2,290	4,060	2,450	1,980
15	1,790	10,000	13,600	8,400	38,200	19,600	11,000	3,900	2,370	5,240	2,520	1,980
16	1,670	11,800	15,000	8,840	38,600	16,700	9,170	3,600	2,290	6,600	2,370	1,790
17	1,830	13,400	15,900	8,620	35,500	15,200	7,900	3,210	2,370	7,310	2,290	1,750
18	1,940	14,400	16,200	7,400	30,900	14,700	7,220	2,980	2,680	7,600	3,210	1,670
19	2,370	14,700	15,900	6,360	26,000	14,400	6,600	2,830	2,680	7,500	4,130	1,630
20	2,450	14,700	15,500	5,960	21,600	15,700	6,120	2,680	2,750	7,400	3,060	1,550
21	2,370	14,400	15,400	6,200	18,000	18,000	5,640	2,520	3,140	7,400	2,680	1,510
22	2,060	13,900	15,000	6,680	15,400	18,800	5,320	2,450	3,750	6,440	2,450	1,480
23	1,830	13,800	14,400	6,860	13,200	17,200	5,080	2,370	3,520	4,520	2,210	1,440
24	1,750	13,200	14,000	7,130	11,800	15,200	4,920	2,290	3,140	3,440	2,060	1,440
25	1,830	11,300	15,400	8,300	11,300	13,800	4,680	2,290	2,600	2,910	2,060	1,400
26	1,900	9,860	17,200	9,280	11,000	13,400	4,520	2,520	2,520	2,680	1,980	1,370
27	2,140	9,500	17,100	9,620	10,200	15,000	4,360	2,600	2,450	2,450	1,860	1,370
28	2,290	8,840	15,500	9,390	9,170	17,600	4,210	3,370	2,370	2,370	1,750	1,510
29	2,290	7,500	14,200	8,730	8,400	18,200	3,980	3,370	2,060	2,370	1,710	g1,670
30	2,060	6,360	13,300	8,400	-	16,900	3,830	3,750	2,140	2,600	1,630	g1,900
31	1,940	-	11,700	9,060	-	15,400	-	5,800	-	3,290	1,590	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	53,410	2,450	970	1,723	0.392	0.45
November	261,750	14,700	1,940	8,725	1.98	2.21
December	339,250	17,200	3,830	10,940	2.49	2.87
Calendar year 1947	2,231,480	41,400	970	6,114	1.39	18.86
January	224,710	9,620	4,760	7,249	1.65	1.90
February	515,050	38,600	8,400	17,760	4.04	4.36
March	469,290	24,100	7,600	15,140	3.44	3.97
April	341,050	24,600	3,830	11,370	2.58	2.88
May	108,920	5,800	2,290	3,514	.799	.92
June	99,210	7,600	2,060	3,307	.752	.84
July	118,750	7,600	1,750	3,831	.871	1.00
August	94,880	6,360	1,590	3,061	.696	.80
September	58,320	3,600	1,370	1,944	.442	.49
Water year 1947-48	2,684,590	38,600	970	7,335	1.67	22.69

Peak discharge (base, 19,000 sec.-ft.).- Feb. 16 (1 a.m.) 39,000 sec.-ft.; Mar. 12 (11 p.m.) 24,400 sec.-ft.; Mar. 22 (6 a.m.) 19,000 sec.-ft.; Apr. 6 (9 a.m.) 24,800 sec.-ft.

g Computed from graph based on U. S. Weather Bureau gage readings.

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 Flat Creek (revised), 2 miles upstream from Okeewalkee Creek (revised), and 2 miles west of Mount Vernon, Montgomery County. Datum of gage is 103.34 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 5,110 square miles.

Records available.- November 1937 to September 1948.

Average discharge.- 11 years, 5,383 second-feet.

Extremes.- Maximum discharge during year, 37,800 second-feet Feb. 17 (gage height, 19.1 feet); minimum, 1,170 second-feet Oct. 6-9.

1937-48: Maximum discharge, 58,800 second-feet (revised) Mar. 28, 1944 (gage height, 21.8 feet); minimum, 618 second-feet Sept. 25, 1941.

Revisions.- The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede those published in the water-supply papers indicated.

Water-Supply Paper	Water year	Date	Gage height (feet)	Discharge (second-feet)
952.........	1941-42	Mar. 28	20.7	49,600
1002........	1943-44	Mar. 28	21.8	58,800

Remarks.- Records good.

Revisions.- Revised figures of discharge for high-water periods in water years 1942 and 1944 are given herewith. They supersede those published in Water-Supply Papers 952 and 1002.

Day (water year)	Discharge (second-feet)	Day (water year)	Discharge (second-feet)
1941-42		1943-44	
Mar. 27....	44,300	Mar. 26.....	48,800
28....	48,800	27.....	57,100
29....	45,800	28.....	58,800
30....	39,200	29.....	53,700
		30.....	47,300
		31.....	39,900

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
March 1942..........	610,340	48,800	8,580	19,690	3.85	4.44
Water year 1941-42	2,214,709	48,800	755	6,068	1.19	16.13
Calendar year 1942	2,189,640	48,800	1,140	5,999	1.17	15.93
March 1944..........	607,800	58,800	8,560	19,610	3.84	4.43
Water year 1943-44	2,263,750	58,800	1,140	6,185	1.21	16.48
Calendar year 1944	2,267,250	58,800	1,170	6,195	1.21	16.51

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 16 to Sept. 30)

2.8	1,170	10.0	6,550	16.5	22,500
4.0	1,840	11.5	8,550	17.5	27,700
6.0	3,140	13.0	11,300	19.0	37,100
8.0	4,660	15.0	16,700		

Discharge, in second-feet, of Oconee River near Mount Vernon, Ga., water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,490	2,260	9,940	16,100	11,300	12,000	23,000	4,660	5,340	2,200	2,860	1,600
2	1,380	2,860	8,550	15,200	11,300	11,100	26,000	4,500	6,110	2,590	3,140	1,600
3	1,300	4,100	7,030	13,300	11,800	10,500	25,000	4,260	6,670	2,720	3,070	1,660
4	1,240	4,580	6,220	10,900	12,500	10,900	24,500	4,180	6,910	2,930	3,350	1,660
5	1,220	5,430	5,610	9,760	13,500	10,500	24,500	4,100	6,550	3,000	3,500	1,600
6	1,170	6,110	5,340	9,230	14,600	10,500	25,000	4,340	5,170	2,660	3,720	1,660
7	1,170	6,330	5,170	8,890	15,500	12,000	26,500	4,740	4,180	2,200	4,420	1,960
8	1,170	6,220	5,000	8,250	15,500	13,300	27,700	5,170	3,800	1,960	5,000	2,660
9	1,200	5,800	4,830	7,540	15,500	14,900	26,000	5,340	3,420	1,900	5,260	3,280
10	1,240	5,430	5,260	7,030	16,400	17,600	24,000	5,340	3,140	1,900	4,830	3,210
11	1,320	6,000	6,790	6,550	16,400	19,600	21,200	4,920	3,000	2,020	3,720	2,930
12	1,490	7,670	8,400	6,220	18,000	23,000	19,200	4,580	2,860	2,260	3,000	2,720
13	1,720	8,100	9,400	6,110	20,400	27,100	18,400	4,830	2,790	3,280	2,660	2,590
14	2,020	8,100	10,700	6,330	24,000	28,300	17,600	5,080	2,660	3,720	2,460	2,400
15	2,260	8,400	13,000	6,910	30,100	27,700	17,000	5,000	2,520	4,020	2,330	2,140
16	1,960	9,230	15,800	7,800	35,200	26,000	15,800	4,740	2,590	4,660	2,330	1,960
17	1,960	10,100	17,300	8,550	37,100	25,000	14,100	4,340	2,520	5,260	2,400	1,840
18	1,960	11,500	18,800	9,400	37,100	23,500	12,000	3,940	2,520	6,000	2,260	1,780
19	2,020	14,100	19,200	9,760	35,200	21,600	10,500	3,640	2,720	6,440	2,790	1,720
20	2,330	15,800	19,600	9,400	31,900	20,400	9,230	3,350	2,790	6,790	3,640	1,660
21	2,460	16,400	19,600	8,720	28,900	19,600	8,400	3,210	2,860	6,910	3,140	1,600
22	2,400	17,000	19,200	8,250	26,000	20,000	7,540	3,070	3,350	6,910	2,720	1,540
23	2,200	17,000	18,800	7,950	23,000	21,200	7,030	2,930	3,870	6,790	2,460	1,490
24	2,080	17,000	18,400	8,400	20,000	22,500	6,440	2,790	3,640	5,610	2,260	1,440
25	2,140	16,700	17,600	8,890	17,300	21,200	6,110	2,790	3,350	4,020	2,080	1,440
26	2,330	16,100	17,300	9,060	15,800	19,200	5,900	3,070	2,930	3,140	2,020	1,380
27	2,460	15,200	17,600	9,580	14,600	17,600	5,610	3,210	2,720	2,790	1,960	1,320
28	2,520	13,500	18,800	10,500	13,800	17,300	5,340	3,210	2,590	2,520	1,900	1,380
29	2,660	12,000	19,600	11,300	13,300	17,600	5,170	3,640	2,460	2,400	1,780	1,380
30	2,590	11,100	18,800	11,500	-	19,600	4,920	5,260	2,260	2,330	1,720	1,540
31	2,460	-	17,300	11,500	-	20,800	-	4,920	-	2,460	1,660	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	57,920	2,660	1,170	1,868	0.366	0.42
November	300,120	17,000	2,260	10,000	1.96	2.19
December	404,940	19,600	4,830	13,060	2.56	2.95
Calendar year 1947	2,578,210	41,600	1,170	7,064	1.38	18.78
January	288,880	16,100	6,110	9,319	1.82	2.10
February	596,000	37,100	11,300	20,550	4.02	4.34
March	582,100	28,300	10,500	18,780	3.68	4.24
April	469,690	27,700	4,920	15,660	3.06	3.41
May	129,150	5,340	2,790	4,166	.815	.94
June	108,290	6,910	2,260	3,610	.706	.79
July	114,390	6,910	1,900	3,690	.722	.83
August	90,440	5,260	1,660	2,917	.571	.66
September	57,140	3,280	1,320	1,905	.373	.42
Water year 1947-48	3,199,060	37,100	1,170	8,741	1.71	23.29

Peak discharge (base, 20,000 sec.-ft.).- Feb. 17 (6 p.m.) 37,800 sec.-ft.; Mar. 14 (5 p.m.) 28,300 sec.-ft.; Apr. 8 (6 a.m.) 28,300 sec.-ft.

Middle Oconee River near Athens, Ga.

Location.- Water-stage recorder, lat. 33°58', long. 83°25', half a mile upstream from U. S. Highway 29, 2 miles west of Athens, Clarke County, and 5 miles upstream from Barber Creek. Datum of gage is 555.66 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 398 square miles.

Records available.- October 1901 to October 1902 (at site 1 mile upstream), April 1937 to September 1940 (at site 4 miles downstream), October 1940 to September 1948 in reports of Geological Survey. January 1929 to March 1932 at site 4 miles downstream, in House Document 68, 74th Congress, 1st Session.

Average discharge.- 11 years (1937-48), 478 second-feet.

Extremes.- Maximum discharge during year, 5,230 second-feet Feb. 10 (gage height, 10.5 feet); minimum daily, 108 second-feet Oct. 3, 4.

1901-2, 1929-32, 1937-48: Maximum discharge observed, 19,600 second-feet Feb. 28, 1902 (gage height, 25.5 feet, site and datum then in use); minimum daily, 42 second-feet Sept. 23, 1941.

Remarks.- Records good. Diurnal fluctuation and slight regulation at times caused by power plants above station.

Rating table, water year 1947-84 (gage height, in feet, and discharge, in second-feet)

0.9	97	1.6	379	3.5	1,750
1.0	120	1.8	519	5.0	2,240
1.1	148	2.1	785	6.0	2,640
1.2	182	2.5	1,130	8.0	3,630
1.4	268	3.0	1,500	10.0	4,880

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	113	194	367	412	977	560	1,900	425	690	543	432	190
2	111	679	355	489	709	766	1,710	405	568	338	700	182
3	108	994	350	432	592	1,040	1,100	432	475	263	1,170	175
4	108	489	338	405	535	943	909	452	445	259	2,000	210
5	111	355	332	379	512	785	821	527	399	236	1,900	420
6	111	425	332	367	535	866	960	512	373	245	857	399
7	111	598	326	361	938	2,550	934	609	355	214	527	315
8	168	1,170	320	355	2,310	2,680	1,000	504	367	206	452	326
9	268	960	344	350	4,030	2,060	1,360	445	367	240	405	332
10	214	445	558	350	4,880	1,250	1,250	419	355	304	350	289
11	198	1,520	968	338	3,600	1,010	875	399	310	900	332	240
12	172	2,350	803	332	2,000	884	803	399	310	2,060	332	240
13	158	2,730	618	445	1,930	794	747	405	294	1,420	320	222
14	151	926	527	645	2,200	738	709	392	304	1,310	299	218
15	148	1,060	715	432	1,840	690	756	367	294	1,930	294	222
16	162	1,320	1,400	379	1,320	839	672	355	355	2,470	299	222
17	259	900	1,560	379	1,000	1,320	636	350	326	1,810	350	210
18	361	627	857	386	866	1,290	592	344	326	1,560	304	198
19	250	766	636	373	785	892	560	332	535	803	278	198
20	186	645	551	355	728	803	560	304	576	519	268	198
21	175	535	519	367	690	738	543	310	379	425	259	190
22	165	482	543	373	812	690	535	299	310	386	254	190
23	155	489	489	361	857	1,710	527	289	399	350	254	179
24	198	568	460	379	709	2,200	512	294	320	332	250	182
25	304	690	519	399	663	1,670	504	299	263	299	231	186
26	284	543	600	367	654	994	489	294	236	289	231	186
27	227	482	504	392	636	986	475	294	265	284	222	179
28	231	438	460	460	627	1,670	460	656	806	294	210	214
29	310	392	432	504	592	1,170	445	2,030	627	432	210	310
30	222	379	419	519	-	857	432	1,960	943	698	202	259
31	206	-	405	943	-	1,500	-	1,460	-	954	194	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,945	361	108	192	0.482	0.56
November	24,151	2,730	194	805	2.02	2.25
December	17,607	1,560	320	568	1.43	1.65
Calendar year 1947	180,784	6,140	97	495	1.24	16.91
January	13,028	943	332	420	1.06	1.22
February	38,527	4,880	512	1,329	3.34	3.60
March	36,945	2,680	560	1,192	2.99	3.45
April	23,776	1,900	432	793	1.99	2.22
May	16,562	2,030	289	534	1.34	1.54
June	12,572	943	236	419	1.05	1.17
July	22,373	2,470	206	722	1.81	2.09
August	14,386	2,000	194	464	1.17	1.35
September	7,081	420	175	236	.593	.66
Water year 1947-48	232,953	4,880	108	636	1.60	21.76

Peak discharge (base, 3,800 sec.-ft.).- Feb. 10 (3 a.m.) 5,230 sec.-ft.

Apalachee River near Bostwick, Ga.

Location.- Water-stage recorder, lat. 33°47', long. 83°28', 500 feet upstream from Price Mill Bridge, 4 miles downstream from High Shoals, 4 miles upstream from Jacks Creek, and 4 miles northeast of Bostwick, Morgan County.

Drainage area.- 176 square miles.

Records available.- July 1944 to September 1948.

Extremes.- Maximum discharge during year, 3,640 second-feet Feb. 9 (gage height, 5.62 feet); minimum daily, 38 second-feet Oct. 5.

1944-48: Maximum discharge, 8,500 second-feet Jan. 6, 1946 (gage height, 8.9 feet); minimum daily, that of Oct. 5, 1947.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Diurnal fluctuation caused by small power plant at High Shoals.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	90	170	217	518	273	1,300	190	300	130	160	69
2	45	395	164	255	374	407	1,100	190	250	110	180	66
3	50	533	159	221	300	476	700	190	200	110	230	66
4	45	311	159	200	264	462	500	190	180	100	400	92
5	38	181	159	184	255	381	450	330	160	100	500	167
6	50	156	156	184	268	474	700	300	150	95	400	167
7	54	328	156	184	1,200	2,090	900	250	150	95	300	148
8	52	595	159	181	2,220	1,550	800	220	140	90	210	264
9	88	420	170	181	3,290	910	650	190	140	90	190	154
10	85	236	328	178	2,740	734	546	180	130	100	170	111
11	77	1,240	448	173	1,490	553	462	180	120	250	160	101
12	69	1,500	414	170	1,290	448	394	180	120	500	150	92
13	71	902	338	278	1,100	394	322	170	110	350	150	88
14	68	462	278	286	986	355	333	170	110	300	140	84
15	70	618	457	221	790	333	333	170	110	600	140	85
16	77	581	798	191	609	388	316	170	160	450	170	84
17	172	394	574	191	490	862	291	173	140	300	154	76
18	159	350	420	194	414	702	273	164	130	250	107	79
19	118	420	300	187	368	525	260	159	150	200	103	64
20	90	338	255	184	344	394	255	156	170	180	85	74
21	84	255	260	191	322	355	250	150	140	160	90	69
22	77	225	278	197	394	328	250	140	120	150	94	71
23	77	217	247	187	381	1,620	250	130	110	140	82	65
24	112	278	221	214	328	1,610	240	130	110	130	65	69
25	176	282	344	217	300	854	230	140	100	120	74	64
26	148	232	344	210	296	532	230	160	94	110	74	64
27	118	204	273	217	291	581	220	150	98	100	71	57
28	109	191	236	255	350	511	210	150	110	110	70	111
29	129	181	225	264	316	441	200	250	100	130	58	148
30	107	173	214	403	-	388	190	680	140	120	66	118
31	94	-	204	670	-	450	-	500	-	170	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,763	176	38	89.1	0.506	0.58
November	12,288	1,500	90	410	2.33	2.60
December	8,908	798	156	287	1.63	1.88
Calendar year 1947	91,017	3,500	38	249	1.41	19.21
January	7,085	670	170	229	1.30	1.50
February	22,288	3,290	255	769	4.37	4.71
March	20,381	2,090	273	657	3.73	4.30
April	13,155	1,300	190	438	2.49	2.78
May	6,502	680	130	210	1.19	1.37
June	4,242	300	94	141	.801	.89
July	5,850	600	90	189	1.07	1.23
August	4,919	500	65	159	.903	1.04
September	2,967	264	57	98.9	.562	.63
Water year 1947-48	111,348	3,290	38	304	1.73	23.51

Peak discharge (base, 3,300 sec.-ft.).- Feb. 9 (9 a.m.) 3,640 sec.-ft.

Note.- No gage-height record Mar. 31 to Apr. 9, Apr. 21 to May 16, May 21 to June 25, June 28 to Aug. 16; discharge computed on basis of recorded range in stage and records for station near Buckhead.

Apalachee River near Buckhead, Ga.

Location.- Water-stage recorder, lat. 33°36', long. 83°21', at bridge on State Highway 12, 2 miles downstream from Hard Labor Creek, 3 miles northeast of Buckhead, Morgan County, and 9 miles upstream from mouth. Datum of gage is 424.07 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 436 square miles.

Records available.- March 1901 to December 1908, May 1937 to September 1948.

Average discharge.- 11 years (1937-48), 558 second-feet.

Extremes.- Maximum discharge during year, 9,790 second-feet Feb. 10 (gage height, 18.7 feet); minimum daily, 86 second-feet Oct. 6.

1901-8, 1937-48: Maximum gage height observed, 27.5 feet, datum then in use, Aug. 25, 1908 (discharge not determined); minimum daily discharge observed, 43 second-feet Oct. 24, 1904, caused by regulation at High Shoals Dam, 23 miles above station.

Remarks.- Records good. Moderate diurnal fluctuation at low flow caused by mill dams above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.9	75	5.0	840	13.0	4,050
1.3	127	7.5	1,490	16.0	6,550
2.0	232	9.0	1,990	18.3	9,270
3.0	410	11.0	2,840		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	106	188	440	572	2,110	748	2,940	470	748	308	282	160
2	104	460	420	660	1,430	816	3,770	470	530	248	308	167
3	96	912	410	638	984	1,080	2,310	460	490	216	362	147
4	99	840	400	550	816	1,080	1,410	480	510	200	770	182
5	95	572	391	530	748	984	1,140	840	470	192	840	440
6	86	440	391	490	726	984	1,670	864	391	185	748	420
7	100	400	391	480	840	2,620	2,550	792	372	174	450	299
8	149	912	382	470	3,370	4,640	1,850	660	353	172	335	362
9	224	1,140	410	470	6,990	2,840	1,410	550	335	188	299	490
10	200	704	510	460	9,270	2,030	1,290	500	317	256	282	308
11	200	1,040	864	450	5,760	1,710	1,160	470	299	353	265	248
12	180	3,330	1,010	430	3,270	1,290	1,030	470	299	460	256	224
13	158	3,510	936	572	3,770	1,080	936	510	290	726	290	208
14	152	1,620	888	840	3,210	960	864	480	282	912	248	198
15	147	1,140	864	682	2,510	888	840	430	317	1,080	224	198
16	164	1,710	1,410	530	1,850	1,010	816	420	450	984	224	191
17	265	1,460	1,920	510	1,410	2,430	770	410	353	984	232	182
18	372	912	1,290	500	1,190	2,390	704	391	308	874	248	170
19	299	984	912	490	1,030	1,550	682	372	372	440	224	170
20	224	1,080	726	470	936	1,160	660	353	450	400	248	158
21	185	792	770	500	888	984	638	353	362	335	208	156
22	167	660	912	510	1,010	936	616	335	308	299	208	152
23	161	594	792	490	1,080	1,700	616	326	282	265	216	148
24	186	638	682	616	936	4,960	594	326	265	248	188	149
25	282	816	912	682	840	3,210	572	335	248	232	173	152
26	308	748	1,350	638	816	1,640	572	410	232	224	172	141
27	265	594	1,080	616	792	1,240	550	382	282	232	164	141
28	232	530	770	682	770	1,550	530	372	265	256	158	186
29	224	490	682	748	816	1,290	500	638	290	290	155	274
30	232	450	616	864	-	1,030	480	1,410	335	282	149	248
31	200	-	572	1,640	-	1,160	-	1,350	-	265	164	-

Month	Second-feet-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,862	372	86	189	0.433	0.50
November	29,666	3,510	188	989	2.27	2.53
December	24,103	1,920	382	778	1.78	2.05
Calendar year 1947	233,304	10,400	86	639	1.47	19.88
January	18,780	1,640	430	606	1.39	1.60
February	60,168	9,270	726	2,075	4.76	5.13
March	51,990	4,960	748	1,677	3.85	4.44
April	34,470	3,770	480	1,149	2.64	2.94
May	16,629	1,410	326	536	1.23	1.42
June	10,805	748	232	360	.826	.92
July	12,280	1,080	172	396	.908	1.05
August	9,090	840	149	293	.672	.77
September	6,669	490	141	222	.509	.57
Water year 1947-48	280,512	9,270	86	766	1.76	23.92

Peak discharge (base, 5,000 sec.-ft.).- Feb. 10 (9 a.m.) 9,790 sec.-ft.; Mar. 24 (5 p.m.) 5,400 sec.-ft.

Ohoopee River near Reidsville, Ga.

Location.- Water-stage recorder, lat. 32°04', long. 82°11', at Sheppard Bridge, half a mile downstream from Brazells Creek, 1½ miles downstream from Rocky Creek, 3½ miles west of Reidsville, Tattnall County, 6 miles downstream from Pendleton Creek, and 14 miles upstream from mouth.

Drainage area.- 1,110 square miles.

Records available.- June 1903 to December 1907, May 1937 to September 1948.

Average discharge.- 15 years (1903-7, 1937-48), 979 second-feet.

Extremes.- Maximum discharge during year, 13,500 second-feet Apr. 4 (gage height, 19.3 feet); minimum daily, 70 second-feet Sept. 2, 3.
1903-7, 1937-48: Maximum discharge observed, 15,100 second-feet Mar. 3, 1939 (gage height, 19.8 feet); minimum daily, 28 second-feet June 4, 1941.
Maximum stage known, 28.4 feet in January 1925, from information furnished by Georgia State Highway Department.

Remarks.- Records good. Occosional diurnal fluctuation during periods of low flow caused by gristmill a quarter of a mile above station.

Revisions (water years).- W 822: Drainage area. W 892: 1939(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 17 to May 30, June 1 to Sept. 30)

1.4	70	5.5	990	15.0	6,720
1.8	123	8.0	1,850	17.0	9,420
2.2	188	10.0	2,690	19.2	13,300
3.0	340	11.5	3,620		
4.0	570	13.5	5,220		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	428	1,250	3,340	3,550	3,550	3,030	6,800	728	2,440	167	154	71
2	330	1,700	3,030	3,340	3,690	2,850	10,800	648	2,080	149	149	70
3	270	2,540	2,790	3,270	3,830	2,850	12,100	596	1,480	135	151	70
4	224	3,150	2,590	3,410	3,830	3,210	13,300	522	960	121	183	74
5	192	3,410	2,440	3,340	3,690	3,820	11,500	522	756	112	204	78
6	174	3,340	2,320	3,030	3,480	3,760	9,720	596	674	110	224	90
7	174	3,340	2,200	2,740	3,210	4,130	8,680	728	570	99	204	120
8	183	3,210	2,040	2,540	3,030	4,690	7,320	840	474	99	175	106
9	211	3,030	1,930	2,360	3,090	5,490	6,280	812	384	98	187	86
10	242	2,850	2,320	2,240	4,130	8,260	5,490	728	320	98	159	98
11	270	2,790	3,340	2,160	6,610	9,120	4,770	674	280	109	156	382
12	280	3,410	4,890	2,040	8,400	9,120	4,210	756	242	144	159	251
13	270	4,130	5,130	2,000	8,540	9,270	3,760	1,180	224	184	160	144
14	251	4,530	5,670	2,040	7,840	9,120	3,480	1,310	201	222	156	134
15	242	4,610	6,720	2,080	6,720	7,710	3,410	1,280	179	384	143	158
16	280	4,290	7,840	2,120	5,670	6,280	3,270	1,280	170	373	135	186
17	474	3,830	8,400	2,160	4,950	5,970	3,090	1,250	165	330	143	193
18	648	3,480	8,280	2,240	4,050	6,070	2,970	1,020	159	300	174	168
19	784	3,550	7,710	2,240	4,050	6,280	2,790	812	146	280	164	151
20	870	3,830	6,840	2,320	3,830	7,200	2,540	648	143	351	149	151
21	812	4,210	6,070	2,690	3,890	7,840	2,320	522	138	406	138	143
22	700	4,290	5,770	3,150	3,690	6,960	2,120	406	162	340	123	126
23	583	4,290	5,310	3,270	3,970	5,870	1,890	340	233	300	110	109
24	583	4,530	4,860	3,270	4,210	5,040	1,700	310	170	300	102	96
25	840	4,610	4,770	3,410	4,370	4,610	1,520	290	152	260	94	87
26	1,340	4,530	5,040	3,690	4,370	4,450	1,310	330	156	220	82	80
27	1,740	4,450	5,310	3,620	3,970	4,450	1,180	384	201	192	88	77
28	1,850	4,290	5,130	3,480	3,620	4,130	1,050	498	167	167	82	96
29	1,810	3,970	4,770	3,340	3,270	3,970	980	840	157	151	80	129
30	1,660	3,690	4,370	3,210	-	3,830	812	1,770	157	143	76	151
31	1,450	-	3,900	3,270	-	3,760	-	2,690	-	141	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	20,165	1,850	174	650	0.586	0.68
November	109,130	4,610	1,250	3,638	3.28	3.66
December	144,900	8,400	1,930	4,674	4.21	4.85
Calendar year 1947	607,343	8,400	91	1,684	1.50	20.35
January	87,620	3,690	2,000	2,826	2.55	2.94
February	131,670	8,540	3,030	4,540	4.09	4.41
March	172,940	9,270	2,850	5,579	5.03	5.80
April	141,142	13,300	812	4,705	4.24	4.73
May	25,310	2,890	290	816	.735	.85
June	13,750	2,440	138	458	.413	.46
July	6,483	406	96	209	.188	.22
August	4,371	224	76	141	.127	.15
September	3,873	382	70	129	.116	.13
Water year 1947-48	881,354	13,300	70	2,353	2.12	28.88

Peak discharge (base, 3,800 sec.-ft.).- Nov. 15 (4 a.m.) 4,690 sec.-ft.; Dec. 17 (9 p.m.) 8,540 sec.-ft.; Feb. 13 (2 a.m.) 8,680 sec.-ft.; Mar. 14 (2 a.m.) 9,420 sec.-ft.; Apr. 4 (6 a.m.) 13,500 sec.-ft.

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 16 miles upstream from Alabama River. Datum of gage is 66.43 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,300 square miles.

Records available.- March 1937 to September 1948.

Average discharge.- 11 years, 1,002 second-feet.

Extremes.- Maximum discharge during year, 39,000 second-feet Apr. 4 (gage height, 22.4 feet, from floodmark); minimum observed, 34 second-feet July 9.

1937-48: Maximum discharge, that of Apr. 4, 1948; minimum observed, 12 second-feet Nov. 15, 16, 1942, Dec. 6-14, 1943.

Flood in September 1928 reached a stage of 22.2 feet, from information by pumping station operator (discharge, 37,000 second-feet).

Remarks.- Records good. Gage read twice daily. Atlantic Coast Line Railroad diverts 4 to 5 second-feet from pool at gage for use in shops.

Revisions (water years).- W 952: 1939.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1-18

6.7	634	11.5	2,160
8.0	960	12.5	2,740
10.5	1,760	13.2	3,270

Note.- Same as following table above 13.2 feet.

Oct. 19 to Sept. 30

3.0	32	7.2	620	15.5	6,260
3.4	54	9.0	1,100	17.0	10,000
4.0	100	11.0	1,770	18.5	15,400
4.6	163	12.0	2,300	20.0	21,900
5.2	245	13.5	3,540	21.0	27,700
6.0	370	14.5	4,680	22.2	37,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,360	3,640	4,550	2,600	1,940	1,220	3,710	470	80	125	645	150
2	2,950	4,550	4,180	2,300	2,000	1,160	9,540	410	76	115	770	130
3	2,210	4,300	3,840	2,000	2,060	1,190	23,500	370	68	110	920	125
4	1,440	4,300	3,360	1,810	2,120	2,300	37,000	322	68	88	1,040	150
5	900	5,560	2,920	1,740	2,180	3,180	35,000	306	68	68	1,190	125
6	634	6,460	2,370	1,700	2,180	5,400	24,700	260	68	54	1,420	105
7	1,740	6,460	1,850	1,630	2,060	8,800	17,400	354	57	45	1,770	92
8	2,740	6,080	1,560	1,560	1,890	10,300	12,000	275	54	40	2,000	80
9	2,810	5,720	1,350	1,420	1,810	10,300	8,800	290	51	34	2,120	72
10	2,810	5,250	1,320	1,280	1,770	11,300	6,860	338	48	110	2,240	88
11	2,810	4,820	1,460	1,160	1,700	11,300	5,560	370	45	110	1,850	100
12	2,810	4,680	2,000	1,070	1,740	12,400	4,550	470	45	470	1,320	92
13	2,880	4,550	2,680	1,010	1,850	13,000	3,740	620	42	695	870	88
14	2,880	4,960	3,640	1,010	2,000	13,400	3,180	695	42	795	620	84
15	3,110	6,860	6,860	980	2,180	12,400	2,840	895	42	670	490	80
16	4,550	7,770	11,300	980	2,370	10,300	2,600	1,040	45	770	390	68
17	6,860	7,770	12,700	1,040	2,600	8,800	2,370	1,100	80	1,070	470	68
18	11,000	7,300	12,400	1,190	2,680	7,300	2,300	1,070	84	1,220	570	68
19	15,400	6,860	11,000	1,350	2,600	6,260	2,180	920	92	1,010	920	64
20	14,200	6,080	9,400	1,520	2,370	5,250	2,180	720	150	770	1,040	54
21	11,600	5,560	8,800	1,740	2,120	4,550	2,240	510	163	595	950	48
22	9,400	5,250	7,770	1,850	1,850	4,060	2,370	354	140	595	895	48
23	8,020	5,100	6,860	1,850	1,630	3,740	2,300	260	100	490	795	45
24	7,080	5,100	6,080	1,850	1,490	3,450	2,060	215	80	470	795	42
25	6,460	5,400	5,560	1,810	1,380	3,180	1,600	176	64	450	770	42
26	5,900	5,400	5,100	1,810	1,350	2,840	1,190	150	57	470	695	40
27	5,250	5,250	4,550	1,810	1,280	2,600	920	125	48	530	510	40
28	4,820	4,960	4,180	1,810	1,250	2,520	745	110	45	530	338	42
29	4,420	4,820	3,740	1,810	1,250	2,520	645	105	45	510	245	45
30	4,180	4,680	3,360	1,770	-	2,370	530	92	105	720	202	42
31	3,950	-	3,000	1,850	-	2,240	-	88	-	570	163	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	159,174	15,400	634	5,135	3.95	4.55
November	165,490	7,770	3,640	5,516	4.24	4.73
December	159,740	12,700	1,320	5,153	3.96	4.56
Calendar year 1947	735,731	15,400	34	2,016	1.55	21.03
January	49,310	2,600	980	1,591	1.22	1.41
February	55,700	2,680	1,250	1,921	1.48	1.60
March	189,630	13,400	1,160	6,117	4.71	5.43
April	224,610	37,000	530	7,487	5.76	6.43
May	13,480	1,100	88	435	.335	.39
June	2,152	163	42	71.7	.055	.06
July	14,299	1,220	34	461	.355	.41
August	29,013	2,240	163	936	.720	.83
September	2,317	150	40	77.2	.059	.07
Water year 1947-48	1,064,915	37,000	34	2,910	2.24	30.47

Peak discharge (base, 2,700 sec.-ft.).- Oct. 19 (3 p.m.) 15,800 sec.-ft.; Nov. 16 (9 p.m.) 8,020 sec.-ft.; Dec. 17 (7 p.m.) 13,000 sec.-ft.; Mar. 13-14, 13,400 sec.-ft.; Apr. 4(12 p.m.) 39,000 sec.-ft.

Satilla River at Atkinson, Ga.

Location.- Water-stage recorder, lat. 31°13', long. 81°52', at bridge on U. S. Highway 84, 400 feet downstream from Atlantic Coast Line Railroad bridge and 1 mile west of Atkinson, Brantley County. Datum of gage is 14.79 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,880 square miles.

Records available.- October 1931 to September 1948.

Average discharge.- 17 years, 2,134 second-feet.

Extremes.- Maximum discharge during year, 68,100 second-feet Apr. 6 (gage height, 23.9 feet); minimum, 163 second-feet July 3.

1931-48: Maximum discharge, that of Apr. 6, 1948; minimum observed, 4.5 second-feet Nov. 19, 20, 1931.

Maximum stage known, 27.2 feet, from information by local residents, in September 1928 (discharge, 110,000 second-feet).

Remarks.- Records good.

Revisions.- W 822: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-10, Apr. 11 to July 31)

3.8	160	10.5	2,650	16.0	13,000
4.4	262	11.5	3,500	17.5	20,000
5.2	429	12.5	4,620	19.5	32,500
6.0	637	13.0	5,330	22.0	51,000
7.5	1,100	14.0	7,250	23.8	67,200
9.0	1,720	15.0	9,700		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,900	10,900	10,600	9,150	5,030	3,310	6,250	1,880	637	184	1,940	1,240
2	9,700	10,300	10,300	8,650	5,170	3,130	7,250	1,570	755	176	2,000	1,390
3	8,650	9,400	9,700	7,900	5,330	3,040	9,300	1,310	875	168	2,060	1,270
4	7,650	8,900	9,400	7,250	5,330	3,220	29,600	1,130	935	218	2,120	1,130
5	7,050	8,900	9,150	6,450	5,670	3,600	f54,600	965	815	272	2,440	1,060
6	6,050	9,400	8,900	5,850	5,670	4,020	f67,200	875	595	262	2,800	1,060
7	6,650	10,300	8,400	5,330	5,670	4,890	64,500	815	453	224	3,130	1,020
8	7,050	10,600	7,650	4,750	5,670	9,400	53,700	785	384	195	3,400	935
9	7,650	10,900	7,250	4,370	5,670	14,200	41,600	755	330	184	3,700	815
10	8,650	11,900	6,650	4,020	5,670	21,800	31,800	815	300	184	3,910	637
11	9,700	12,600	6,050	3,700	5,850	27,200	23,000	815	262	195	4,020	568
12	10,000	13,000	5,670	3,400	5,670	29,000	17,500	785	244	320	4,250	528
13	10,000	12,600	5,670	3,220	5,670	29,700	13,800	785	244	554	4,130	502
14	9,150	11,900	5,670	3,130	5,850	29,700	11,600	905	221	785	4,020	515
15	8,900	11,200	6,250	2,960	5,670	30,400	10,000	1,160	199	965	3,800	554
16	9,150	10,900	9,150	2,720	5,330	29,700	8,900	1,390	192	1,130	3,700	568
17	9,700	11,600	15,500	2,650	5,170	27,200	8,150	1,670	194	1,390	3,310	581
18	9,700	13,000	21,800	2,650	4,890	24,200	7,050	1,880	219	1,620	2,720	568
19	11,200	14,600	26,000	2,650	4,890	20,600	6,050	2,000	352	1,820	2,180	502
20	18,000	15,500	27,200	2,720	4,890	17,500	5,330	2,060	406	2,240	2,000	429
21	22,400	15,500	26,600	2,960	5,030	15,500	4,620	1,940	418	2,720	1,940	362
22	24,800	15,000	24,800	3,220	5,170	13,400	4,130	1,880	418	3,040	2,000	320
23	24,200	14,200	22,400	3,400	5,330	11,900	3,800	1,770	384	3,500	2,000	281
24	22,400	13,400	20,000	3,800	5,170	10,600	3,400	1,620	406	3,700	1,940	253
25	20,000	12,600	18,500	4,020	5,030	9,400	3,220	1,570	541	3,400	1,880	235
26	18,000	11,900	16,500	4,370	4,620	8,400	3,040	1,310	528	2,800	1,820	219
27	16,500	11,600	15,000	4,620	4,250	7,450	2,960	1,020	453	2,240	1,770	204
28	15,500	11,200	13,400	4,750	3,910	6,850	2,800	845	362	1,770	1,670	195
29	14,600	10,900	11,900	4,750	3,600	6,450	2,580	725	272	1,470	1,570	187
30	13,000	10,900	10,900	4,750	-	5,850	2,300	623	212	1,470	1,430	181
31	11,900	-	10,000	4,890	-	5,670	-	581	-	1,720	1,270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	388,800	24,800	6,050	12,540	4.35	5.02
November	355,600	15,500	8,900	11,850	4.11	4.59
December	406,960	27,200	5,670	13,130	4.56	5.26
Calendar year 1947	1,693,441	27,200	185	4,640	1.61	21.87
January	139,050	9,150	2,650	4,485	1.56	1.80
February	150,870	5,850	3,600	5,202	1.81	1.95
March	437,280	30,400	3,040	14,110	4.90	5.65
April	510,030	67,200	2,300	17,000	5.90	6.58
May	38,234	2,060	581	1,233	.428	.49
June	12,606	935	192	420	.146	.16
July	40,916	3,700	168	1,320	.458	.53
August	80,920	4,250	1,270	2,610	.906	1.04
September	18,309	1,390	181	610	.212	.24
Water year 1947-48	2,579,575	67,200	168	7,048	2.45	33.31

Peak discharge (base, 5,800 sec.-ft.).- Oct. 22 (5 p.m.) 25,400 sec.-ft.; Nov. 20 (11 p.m.) 16,000 sec.-ft.; Dec. 20 (7 a.m.) 27,800 sec.-ft.; Mar. 15 (3 p.m.) 31,100 sec.-ft.; Apr. 6 (5 p.m.) 68,100 sec.-ft.

f Computed on basis of partly estimated gage-height record.

St. Marys River near Macclenny, Fla.

Location.- Water-stage recorder, lat. 30°21'35", long. 82°04'55", in sec. 2, T. 2 S., R. 22 E., at Stokes Bridge, 1 mile downstream from confluence of North and South Prongs and 6 miles northeast of Macclenny. Datum of gage is 40.00 feet above mean sea level (levels by Mees & Mees).

Drainage area.- 859 square miles, watershed in Okefenokee Swamp is indeterminate.

Records available.- October 1926 to September 1948.

Average discharge.- 22 years, 721 second-feet.

Extremes.- Maximum discharge during year, 26,600 second-feet Apr. 3 (gage height, 21.97 feet); minimum, 25 second-feet June 8-11; minimum gage height, 1.91 feet June 9-11.

1926-48: Maximum discharge, 28,100 second-feet Sept. 25, 1947 (gage height, 22.29 feet); minimum observed, 12 second-feet May 22, 1932, minimum gage height observed, 0.04 foot June 4, 5, 1927.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions (water years).- W 727: Drainage area. W 1082: 1928(M), 1945(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 23 to Sept. 30)

1.9	23	6.3	651	16.0	7,390
2.3	38	9.0	1,270	18.0	11,200
2.6	55	10.0	1,600	19.2	14,400
3.0	87	11.2	2,260	20.8	20,700
3.6	150	12.6	3,260	21.8	25,600
4.1	217	14.0	4,650		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,480	5,140	1,330	1,520	3,430	566	8,350	174	54	53	a1,200	a600
2	5,140	4,310	1,160	1,390	3,340	526	20,700	156	33	75	a1,050	a550
3	4,000	3,710	1,070	1,270	3,010	526	25,600	139	30	180	a1,250	506
4	3,090	3,340	978	1,130	2,580	1,110	20,700	129	29	130	g1,600	477
5	2,450	2,930	891	1,020	2,260	2,260	15,000	118	28	72	g1,900	428
6	2,380	2,510	825	912	1,900	2,930	11,200	118	27	63	2,720	h408
7	2,790	2,020	760	847	1,600	2,930	8,780	110	26	56	3,180	h408
8	3,520	1,900	717	760	1,420	3,010	7,070	101	25	42	3,430	447
9	3,340	1,790	673	717	1,300	3,710	5,660	93	25	90	5,790	428
10	3,340	2,140	673	651	1,270	10,100	4,420	84	25	717	4,540	467
11	2,510	2,380	825	608	1,270	13,700	3,430	78	25	528	3,620	826
12	2,080	9,720	1,160	566	1,180	13,100	2,580	72	26	934	2,860	846
13	1,740	10,500	1,560	526	1,110	11,400	1,900	68	28	1,000	3,430	506
14	1,490	9,150	2,200	673	1,020	9,530	1,490	64	26	978	2,200	526
15	1,900	7,720	2,720	717	956	7,720	1,240	60	29	912	1,560	934
16	6,070	6,620	3,090	673	891	6,340	1,110	56	28	825	g1,360	847
17	9,910	5,660	3,520	608	804	5,140	1,040	52	28	760	g1,490	782
18	10,300	4,890	3,430	630	760	4,310	912	49	61	587	g1,850	760
19	9,530	4,650	3,090	760	695	3,620	804	45	68	418	g2,020	630
20	8,420	5,020	2,720	804	651	3,090	695	42	42	398	g1,900	487
21	6,340	4,650	2,930	1,070	587	2,650	608	40	36	418	g2,380	388
22	5,930	4,100	4,890	1,210	546	2,200	546	38	32	a300	g2,930	300
23	5,020	3,620	6,060	1,160	717	1,740	487	37	28	h310	g2,720	252
24	5,790	3,260	5,790	1,330	891	1,450	438	36	26	a460	g2,080	217
25	13,700	2,930	5,140	2,020	891	1,240	388	36	27	a720	1,520	187
26	16,100	2,580	4,540	2,200	825	1,070	340	34	36	a950	1,270	162
27	14,400	2,260	3,810	1,900	760	956	300	32	36	a750	1,110	144
28	11,900	1,960	3,260	1,740	673	1,040	262	30	34	a700	978	150
29	9,720	1,690	2,650	2,140	630	1,040	226	32	32	a820	847	156
30	7,720	1,490	2,260	2,580	-	912	194	34	38	a950	717	150
31	6,340	-	1,850	3,010	-	1,380	-	33	-	h1,070	608	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	193,440	16,100	1,490	6,240	7.26	8.37
November	124,640	10,500	1,490	4,155	4.84	5.40
December	76,572	6,060	673	2,470	2.88	3.32
Calendar year 1947	670,962	27,600	54	1,838	2.14	29.05
January	37,142	3,010	526	1,198	1.39	1.61
February	37,967	3,430	546	1,309	1.52	1.64
March	121,296	13,700	526	3,913	4.56	5.25
April	146,479	25,600	194	4,883	5.68	6.34
May	2,190	174	30	70.6	.082	.09
June	970	68	25	32.3	.038	.04
July	16,274	1,070	42	525	.611	.70
August	66,110	5,790	608	2,133	2.48	2.86
September	13,369	934	144	446	.519	.58
Water year 1947-48	836,449	25,600	25	2,285	2.66	36.20

Peak discharge (base, 1,600 sec.-ft.).- Oct. 8 (12 m.) 3,520 sec.-ft.; Oct. 18 (3 a.m.) 10,300 sec.-ft.; Oct. 26 (1:30 a.m.) 16,500 sec.-ft.; Nov. 12 (1 p.m.) 11,600 sec.-ft.; Dec. 23 (12:30 p.m.) 6,200 sec.-ft.; Feb. 1 (11:30 p.m.) 3,620 sec.-ft.; Mar. 11 (7:30 p.m.) 14,400 sec.-ft.; Apr. 3 (4 a.m.) 26,600 sec.-ft.; Aug. 9 (6:30 a.m.) 6,200 sec.-ft.; Aug. 22 (2 p.m.) 3,180 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for Suwannee River at White Springs.

g Computed from graph based on gage readings.

h Computed from staff-gage reading.

St. Johns River near Melbourne, Fla.

Location.- Water-stage recorder, lat. 28°05', long. 80°45', in sec. 6, T. 28 S., R. 36 E., at bridge on U. S. Highway 192, 2 miles upstream from Lake Washington and 9 miles west of Melbourne. Datum of gage is 11.22 feet above mean sea level, datum of 1929.

Drainage area.- About 1,000 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 8,070 second-feet Oct. 1; maximum gage height, 9.33 feet Sept. 30; minimum discharge, 36 second-feet June 7 (gage height, 4.75 feet).
1939-48: Maximum discharge, that of Oct. 1, 1947; maximum gage height, that of Sept. 30, 1948; minimum daily, 8.3 second-feet June 18, 19, 1945; minimum gage height, 3.54 feet June 19, 1945.

Remarks.- Records poor.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-14)

Oct. 1 to Apr. 15

5.4	104	8.0	3,760
5.5	175	8.8	5,680
6.8	1,600	9.5	8,270
7.3	2,350		

Apr. 16 to Sept. 30

4.8	37	5.4	104	6.7	984
4.9	40	5.5	136	7.0	1,370
5.0	45	5.6	175	7.5	2,220
5.1	52	5.8	273	8.1	3,520
5.2	63	6.0	590	9.0	5,880
5.3	80	6.3	601	9.3	6,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,070	4,340	1,870	1,100	1,350	683	259	85	45	38	104	668
2	7,870	4,220	1,790	1,080	1,340	651	270	80	46	38	117	668
3	7,670	4,100	1,730	1,070	1,350	640	291	77	43	38	133	660
4	7,670	3,990	1,680	1,040	1,340	662	280	75	42	38	152	643
5	7,670	3,880	1,630	1,030	1,300	705	248	68	40	40	163	626
6	7,470	3,760	1,600	998	1,280	662	228	65	39	43	171	618
7	7,470	3,650	1,560	987	1,260	662	217	62	39	43	189	609
8	7,080	3,540	1,540	966	1,240	662	196	61	41	44	237	618
9	6,700	3,430	1,500	955	1,220	651	161	60	41	51	263	601
10	6,340	3,320	1,480	934	1,220	629	161	59	42	53	284	586
11	6,170	3,220	1,460	912	1,170	596	154	78	44	54	353	601
12	5,840	3.110	1,420	890	1,140	607	147	82	44	54	347	578
13	5,680	3,010	1,410	880	1,100	618	125	75	45	55	372	586
14	5,540	2,910	1,400	934	1,060	585	118	72	45	55	396	563
15	5,390	2,910	1,370	901	1,040	552	125	68	44	56	416	540
16	5,140	2,820	1,380	859	1,020	542	133	65	44	56	455	601
17	5,020	2,720	1,380	847	998	531	133	62	44	56	490	677
18	4,910	2,620	1,350	890	976	531	128	62	44	59	504	668
19	4,800	2,620	1,330	880	923	520	130	65	46	55	511	635
20	4,560	2,530	1,300	869	912	498	123	65	44	60	540	626
21	4,450	2,350	1,290	912	890	454	114	62	44	60	563	685
22	4,220	2,350	1,290	912	880	422	114	60	44	60	578	1,290
23	4,100	2,260	1,260	923	869	378	107	51	44	62	578	a2,520
24	4,100	2,180	1,260	976	869	367	99	51	43	63	586	a3,750
25	4,100	2,180	1,240	1,030	847	334	92	50	42	75	618	a4,980
26	4,100	2,100	1,200	1,070	781	302	90	50	41	82	635	6,210
27	4,450	2,020	1,170	1,100	727	270	87	51	40	80	626	6,550
28	4,560	1,990	1,160	1,180	716	324	94	50	40	80	626	6,900
29	4,560	1,980	1,140	1,220	705	324	92	49	39	85	626	6,900
30	4,580	1,920	1,130	1,290	-	313	90	47	38	94	643	6,900
31	4,450	-	1,130	1,320	-	280	-	46	-	104	660	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	174,710	8,070	4,100	5,636		
November	88,030	4,340	1,920	2,934		
December	43,450	1,870	1,130	1,402		
Calendar year 1947	574,235	8,070	77	1,573	-	-
January	30,965	1,320	847	999		
February	30,523	1,350	705	1,053		
March	15,955	705	270	515		
April	4,604	291	87	153		
May	1,953	85	46	63.0		
June	1,277	46	38	42.6		
July	1,831	104	38	59.1		
August	12,936	660	104	417		
September	59,057	6,900	540	1,969		
Water year 1947-48	465,291	8,070	38	1,271		

Peak discharge (base, 1,400 sec.-ft.).- Oct. 1 (12 m.) 8,070 sec.-ft.; Sept. 28-30, 6,900 sec.-ft.

a No gage-height record; discharge interpolated.

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 50, 4 miles east of Christmas. Datum of gage is 1.62 feet above mean sea level, datum of 1929.
Drainage area.- About 1,500 square miles.
Records available.- December 1933 to September 1948.
Average discharge.- 14 years (1934-48), 1,290 second-feet.
Extremes.- Maximum discharge during year, 10,700 second-feet Oct. 12, 13 (gage height, 9.68 feet); minimum, 54 second-feet July 8 (gage height, 1.30 feet).

1933-48: Maximum discharge, that of Oct. 12, 13, 1947; no flow Mar. 22-27, Apr. 19, June 12, 13, 1939; minimum gage height, 0.48 foot June 19, 1945.

Flood of September 1926 reached a stage of 10.8 feet (discharge, 14,000 second-feet, from rating curve extended above 10,000 second-feet).
Remarks.- Records fair.
Revisions (water years).- W 892: Drainage area. W 1082: 1926(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,810	7,110	3,070	1,900	2,800	1,220	584	243	119	78	550	1,470
2	10,100	6,970	2,980	1,820	2.620	1,180	569	236	124	74	603	1,380
3	10,100	6,830	2,980	1,740	2,530	1,150	554	236	109	69	632	1,300
4	10,100	6,690	2,890	1,670	2,350	1,150	526	228	100	66	661	1,260
5	10,100	6,400	2,890	1,600	2,350	1,220	501	221	95	65	692	1,260
6	10,100	6,120	2,800	1,540	2,170	1,280	478	214	92	64	707	1,260
7	10,100	5,980	2,800	1,540	2,170	1,320	456	207	89	62	707	1,260
8	9,810	5,830	2,710	1,490	2,080	1,490	436	200	88	65	707	1,260
9	9,810	5,690	2,620	1,440	1,990	1,600	426	186	84	118	692	1,340
10	10,100	5,410	2,620	1,440	1,900	1,670	407	186	91	106	676	1,340
11	10,400	5,120	2,530	1,400	1,820	1,740	388	193	96	92	740	1,470
12	10,700	4,980	2,440	1,360	1,740	1,670	378	186	93	86	842	1,570
13	10,700	4,840	2,440	1,360	1,740	1,600	369	180	102	154	1,030	1,570
14	10,400	4,700	2,440	1,360	1,670	1,540	350	173	128	182	1,120	1,520
15	10,100	4,560	2,350	1,360	1,670	1,490	350	172	131	172	1,200	1,470
16	10,100	4,410	2,440	1,280	1,600	1,440	360	166	123	141	1,260	1,620
17	9,810	4,270	2,440	1,280	1,600	1,400	340	163	116	114	1,300	1,930
18	9,530	4,130	2,350	1,320	1,540	1,320	331	166	116	108	1,380	2,000
19	9,530	3,990	2,350	1,320	1,490	1,280	312	160	133	179	1,380	2,000
20	9,240	3,850	2,350	1,360	1,490	1,220	303	155	180	335	1,420	2,000
21	8,960	3,850	2,260	1,440	1,440	1,150	294	149	167	411	h1,470	2,070
22	8,670	3,720	2,260	1,490	1,400	1,090	294	145	151	402	1,520	2,930
23	8,390	3,580	2,260	1,670	1,360	1,040	285	140	138	354	1,520	5,230
24	8,110	3,460	2,260	2,350	1,360	983	276	138	126	316	1,570	6,180
25	8,110	3,350	2,170	2,980	1,360	956	268	136	114	298	1,570	6,310
26	7,820	3,350	2,170	3,350	1,320	876	268	133	106	262	1,620	6,440
27	7,820	3,350	2,080	3,350	1,280	800	259	132	100	244	h1,620	6,570
28	7,540	3,260	2,080	3,350	1,250	754	259	132	93	244	1,620	6,840
29	7,540	3,260	1,990	3,260	1,220	711	251	127	89	289	1,620	7,110
30	7,540	3,160	1,990	3,070	-	671	243	126	84	402	1,570	7,380
31	7,250	-	1,900	2,890	-	617	-	119	-	h502	1,570	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	288,390	10,700	7,250	9,303		
November	142,220	7,110	3,160	4,741		
December	75,910	3,070	1,900	2,449		
Calendar year 1947	925,313	10,700	111	2,535		
January	58,780	3,350	1,280	1,896		
February	51,310	2,800	1,220	1,769		
March	37,628	1,740	617	1,214		
April	11,115	584	243	370		
May	5,348	243	119	172		
June	3,377	180	84	113		
July	6,054	502	62	195		
August	35,569	1,620	550	1,147		
September	87,340	7,380	1,260	2,911		
Water year 1947-48	803,041	10,700	62	2,194		

Peak discharge (base, 1,900 sec.-ft.).- Oct. 12, 13, 10,700 sec.-ft.; Jan. 26-28, 3,350 sec.-ft.; Sept. 30 (12 p.m., stage rising) 7,650 sec.-ft.

h Computed from staff-gage reading.

Note.- No gage-height record July 30, Aug. 1-6, 15-20, 22-26, Aug. 28 to Sept. 2; discharge computed on basis of records for Poinsett Lake near Cocoa and St. Johns River above Lake Harney, near Geneva.

St. Johns River near Sanford, Fla.

Location.- Water-stage recorder, lat. 28°50', long. 81°19', in sec. 16, T. 19 S., R. 30 E., at bridge on U. S. Highways 17 and 92, near downstream end of Lake Monroe, 4 miles northwest of Sanford.
Records available.- August 1941 to September 1948 (discharge measurements only).
Extremes.- 1941-48: Maximum discharge measured, 13,000 second-feet Sept. 25, 1945; maximum reverse flow measured, 915 second-feet June 7, 1944 (affected by tide).
Remarks.- Measurements are made about once monthly from bridge on U. S. Highways 17 and 92 at outlet of Lake Monroe.

Discharge measurements, in second-feet, of St. Johns River near Sanford, Fla., water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 20	12,300	Dec. 19	4,050	Mar. 2	2,830	June 11	896	Aug. 24	4,170
Nov. 11	10,100	Jan. 27	3,730	Apr. 7	1,770	July 15	950	Sept.30	10,800

St. Johns River near De Land, Fla.

Location.- Water-stage recorder, lat. 29°01', long. 81°23', T. 17 S., R. 29 E., 1,000 feet downstream from Crows Bluff Bridge on State Highway 44 and 5 miles west of De Land. Datum of gage is 1.114 feet below mean sea level (levels by Corps of Engineers). Auxiliary water-stage recorder at St. Francis Landing, 4 miles downstream from Crows Bluff Bridge, at datum 0.398 foot higher.

Drainage area.- About 3,000 square miles.

Records available.- January 1934 to September 1948.

Average discharge.- 14 years, 3,024 second-feet.

Extremes.- Maximum daily discharge during year, 13,400 second-feet Oct. 23; minimum daily, 835 second-feet Apr. 20.
1934-48: Maximum daily discharge, 14,400 second-feet Sept. 30, 1945; minimum daily, 10 second-feet Apr. 24, 1938.

Remarks.- Records fair. Discharge determined by using ratio of lower gage height to upper gage height as a factor. Records of chemical analyses and water temperatures for the water year 1948 are given in Water-Supply Paper 1132.

Revisions.- W 892: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,210	12,200	7,220	4,660	a4,860	3,780	3,380	1,530	1,310	1,660	2,690	4,620
2	7,840	12,000	7,130	4,690	a5,020	3,910	3,070	1,820	1,150	1,690	2,950	4,480
3	8,600	11,500	7,030	4,530	a5,170	3,820	2,600	1,920	1,060	1,700	3,070	4,280
4	9,090	11,500	7,110	4,640	a5,320	3,570	2,560	2,140	1,210	1,610	3,160	3,970
5	9,490	11,400	7,150	4,490	a5,470	3,330	2,670	1,920	1,290	1,750	3,210	4,010
6	9,760	11,300	7,210	4,400	a5,630	3,300	2,640	1,860	1,400	1,930	3,310	3,880
7	10,200	11,100	7,200	4,330	5,780	3,330	2,720	1,640	1,480	1,760	3,200	3,790
8	10,700	10,900	7,200	4,280	5,830	3,210	2,700	1,650	1,610	1,940	2,910	3,770
9	11,100	10,700	7,030	4,230	5,880	3,480	2,680	1,700	1,640	1,870	2,830	3,790
10	11,400	10,500	7,010	4,180	5,560	3,270	2,610	1,640	1,770	1,710	2,810	3,860
11	11,400	10,600	6,840	3,940	5,330	2,910	2,600	1,420	1,580	1,510	3,010	3,920
12	11,500	10,200	6,560	3,840	5,110	2,780	2,470	1,580	1,500	1,480	3,110	3,790
13	11,300	10,100	6,050	3,940	5,260	2,330	2,520	1,700	1,500	1,650	3,290	3,520
14	11,800	9,740	5,470	a3,700	5,160	2,840	2,460	1,820	1,490	1,730	3,430	3,330
15	11,900	9,920	5,610	a3,550	5,060	3,250	2,300	1,730	1,550	1,790	3,560	3,260
16	12,400	9,470	5,610	a3,460	4,970	3,590	2,040	1,720	1,600	1,890	3,710	3,510
17	12,400	9,330	5,360	a3,400	4,960	3,700	1,540	1,590	1,590	1,920	3,730	3,540
18	12,500	9,500	5,420	a3,390	4,820	3,790	1,060	1,650	1,500	1,880	3,790	3,570
19	12,800	9,420	5,480	a3,390	4,920	4,040	856	1,270	1,430	2,050	3,810	3,570
20	12,800	9,030	5,340	a3,400	4,890	3,980	835	1,370	1,500	1,910	4,010	3,670
21	13,100	8,700	5,400	3,480	4,740	4,050	1,150	1,360	1,640	1,990	4,190	3,890
22	13,100	8,610	5,110	3,640	4,620	4,100	1,470	1,440	1,920	2,030	4,300	3,930
23	13,400	8,570	5,190	3,840	4,140	4,280	1,680	1,510	1,900	2,230	4,350	4,500
24	13,200	8,440	4,960	4,070	3,480	4,020	1,840	1,510	1,900	2,500	4,520	5,340
25	13,100	8,070	4,930	4,030	3,490	3,880	1,570	1,450	1,670	2,700	4,560	5,610
26	13,100	8,170	4,590	3,880	3,650	3,800	1,660	1,440	1,730	2,650	4,620	5,680
27	13,000	7,970	4,700	4,180	3,660	3,820	1,640	1,360	1,710	2,590	4,770	5,900
28	12,600	7,830	4,730	4,250	3,710	3,490	1,530	1,510	1,650	2,750	4,730	7,190
29	12,500	7,450	4,750	a4,400	3,760	3,200	1,620	1,580	1,730	2,870	4,690	8,120
30	12,000	7,360	4,750	a4,560	-	3,240	1,530	1,560	1,800	2,760	4,740	8,700
31	11,900	-	4,640	a4,710	-	3,410	-	1,410	-	2,710	4,530	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	357,190	13,400	7,210	11,520	3.84	4.43
November	291,580	12,200	7,360	9,719	3.24	3.61
December	182,780	7,220	4,590	5,896	1.96	2.27
Calendar year 1947	1,765,075	13,400	542	4,836	1.61	21.90
January	125,480	4,710	3,390	4,048	1.35	1.56
February	140,250	5,880	3,480	4,836	1.61	1.74
March	109,500	4,280	2,330	3,532	1.18	1.36
April	62,001	3,380	835	2,067	.689	.77
May	49,800	2,140	1,270	1,606	.535	.62
June	46,810	1,920	1,060	1,560	.520	.58
July	63,210	2,870	1,480	2,039	.680	.78
August	115,590	4,770	2,690	3,729	1.24	1.43
September	134,990	8,700	3,260	4,500	1.50	1.67
Water year 1947-48	1,679,181	13,400	835	4,588	1.53	20.82

a No gage-height record at upper gage; discharge computed on basis of records for station near Christmas.

Econlockhatchee Headwaters Canal near Wewahotee, Fla.

Location.- Staff gage, lat. 28°25', long. 81°07', in sec. 9, T. 24 S., R. 32 E., at bridge, 0.2 mile south of highway between Wewahotee and State Highway 15 and 1½ miles west of Wewahotee.

Records available.- July 1942 to July 1948 (discharge measurements only, discontinued).

Extremes.- 1942-48: Maximum discharge measured, 173 second-feet Sept. 19, 1945; no flow Mar. 31, 1944, May 24, 1945.

Remarks.- Measurements are made near bridge.

Discharge measurements, in second-feet, of Econlockhatchee Headwaters Canal near Wewahotee, Fla., water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 2	69.7	Jan. 5	1.80	Apr. 22	0.74
Oct. 30	44.8	Feb. 14	4.70	May 24	a.1
Dec. 11	4.45	Mar. 19	3.42	July 1	a.3

a Discharge estimated.

Econlockhatchee River near Chuluota, Fla.

Location.- Water-stage recorder, lat. 28°41', long. 81°07', on line between secs. 9 and 10, T. 21 S., R. 32 E., at highway bridge 3 miles northeast of Chuluota. Datum of gage is 2.135 feet above mean sea level (Corps of Engineers bench mark).

Auxiliary water-stage recorder on St. Johns River, at bridge on State Highway 46, 1 mile downstream from Econlockhatchee River and 7 miles downstream from base gage. Datum of gage is at mean sea level, datum of 1929 (Corps of Engineers bench mark).

Drainage area.- 296 square miles.

Records available.- November 1935 to September 1948.

Average discharge.- 12 years (1936-48), 262 second-feet.

Extremes.- Maximum discharge during year, 10,000 second-feet Sept. 24 (gage height, 18.09 feet), from rating curve extended above 4,300 second-feet; minimum, 11 second-feet June 8-11; minimum gage height, 0.80 foot June 27, 28.

1935-48: Maximum discharge, that of Sept. 24, 1948; minimum, 6.7 second-feet June 11-13, 15, 1945; minimum gage height, 0.44 foot June 15-17, 1945.

Maximum stage known, that of Sept. 24, 1948.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Discharge computed by using fall as determined by auxiliary water-stage recorder as a factor.

Revisions (water years).- W 892: 1939.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,670	585	178	109	723	82	41	17	18	14	807	491
2	1,920	615	183	106	a707	73	39	17	23	14	846	410
3	1,320	549	183	105	a692	65	37	17	16	14	1,000	383
4	961	476	166	106	a676	77	37	17	14	14	1,020	358
5	878	454	153	98	a661	205	36	18	12	14	1,040	314
6	793	424	144	93	a645	334	34	18	12	15	945	317
7	692	374	136	86	a629	397	32	18	12	14	793	261
8	617	325	128	82	a614	535	30	17	11	15	615	304
9	545	300	124	76	a598	583	28	16	11	16	469	276
10	476	267	115	73	a583	621	26	16	11	17	472	248
11	433	233	110	72	a567	655	26	16	11	20	515	219
12	500	225	106	68	a552	628	26	16	12	23	599	199
13	534	201	101	69	a536	552	26	15	12	53	685	195
14	508	187	105	91	a520	458	26	14	15	109	750	199
15	458	177	106	147	a505	389	25	14	20	77	1,380	184
16	410	169	100	168	a489	328	24	14	18	74	3,050	215
17	377	169	116	181	a474	283	23	13	16	72	2,910	296
18	343	173	117	342	h458	242	23	13	15	64	2,060	303
19	321	173	118	454	a429	213	21	13	14	71	1,062	297
20	304	177	116	468	a400	185	20	13	14	96	1,360	253
21	284	170	113	537	a371	161	20	12	14	115	1,180	256
22	277	166	118	537	a342	136	18	12	13	170	993	849
23	275	157	126	a868	a313	109	17	13	13	207	792	5,190
24	261	150	129	a1,200	a284	86	16	17	14	235	636	9,670
25	317	144	129	a1,530	a255	68	16	19	13	293	569	a8,390
26	392	139	131	a1,860	a226	59	16	15	13	a662	557	a7,120
27	563	135	134	f2,190	h197	54	18	15	13	1,030	639	a5,840
28	570	136	131	a1,810	a159	50	18	15	31	1,010	655	a4,570
29	566	150	123	a1,420	a120	45	15	13	15	870	648	3,290
30	528	164	119	1,040	-	45	16	13	15	798	570	3,490
31	520	-	113	854	-	43	-	13	-	793	469	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	19,613	2,670	261	633	2.14	2.46
November	7,764	615	135	259	.875	.98
December	3,971	183	100	128	.432	.50
Calendar year 1947	155,286	2,930	19	426	1.44	19.51
January	16,840	2,190	68	543	1.83	2.12
February	13,725	723	120	473	1.60	1.72
March	7,761	655	43	250	.845	.98
April	750	41	15	25.0	.084	.09
May	469	19	12	15.1	.051	.06
June	423	23	11	14.1	.048	.05
July	6,989	1,030	14	225	.760	.88
August	30,644	3,050	469	989	3.34	3.85
September	54,387	9,670	184	1,813	6.12	6.83
Water year 1947-48	163,336	9,670	11	446	1.51	20.52

Peak discharge (base, 1,200 sec.-ft.).- Oct. 1 (12:01 a.m., stage falling) 2,960 sec.-ft.; Jan. 27 (11 a.m.) 2,260 sec.-ft.; Aug. 16 (7 p.m.) 3,340 sec.-ft.; Sept. 24 (12 m.) 10,000 sec.-ft.

a No gage-height record; discharge either interpolated or computed on basis of records for stations on St. Johns River.

f Computed on basis of partly estimated gage-height record.

h Computed from staff-gage reading.

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 bridge on State Highway 46, 4½ miles downstream from Little Wekiva River and 9 miles west of Sanford.

Records available.- October 1931 to September 1935 (discharge measurements only), October 1935 to September 1948.

Average discharge.- 13 years (1935-48), 267 second-feet.

Extremes.- Maximum discharge observed during year, 671 second-feet Jan. 25 (gage height, 4.19 feet); minimum observed, 195 second-feet June 19 (gage height, 2.92 feet):
1935-48: Maximum discharge observed, 2,060 second-feet Sept. 17, 1945 (gage height, 5.60 feet), from rating curve extended above 900 second-feet; minimum observed, 105 second-feet June 5-13, 1939; minimum gage height observed, 2.51 feet June 4-6, 1941

Remarks.- Records fair. Gage read once daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	389	302	242	232	395	256	232	232	220	220	269	333
2	343	285	255	232	375	244	232	232	220	220	269	333
3	322	268	242	232	356	256	232	232	220	232	269	333
4	343	268	242	232	356	284	232	232	208	232	269	346
5	302	268	242	232	337	318	232	232	208	220	269	346
6	302	268	242	221	318	375	232	220	220	220	269	346
7	322	255	242	221	318	415	232	220	220	220	269	346
8	302	255	232	221	318	395	232	220	220	220	284	346
9	302	242	232	221	300	395	232	220	220	232	300	333
10	302	255	232	221	300	395	232	220	220	232	337	333
11	302	255	232	221	300	395	232	220	232	232	375	333
12	302	268	232	221	284	375	232	220	220	220	455	333
13	322	268	242	232	284	375	220	220	232	220	475	333
14	302	268	242	232	284	356	220	220	220	220	475	333
15	302	255	242	232	284	356	220	220	220	220	515	333
16	302	242	242	268	284	337	220	220	220	220	495	333
17	285	255	232	302	284	337	232	208	208	220	415	346
18	285	268	242	302	284	300	220	220	208	256	435	346
19	285	268	242	343	269	284	220	208	195	269	415	333
20	285	285	242	366	269	269	220	208	208	269	415	346
21	285	285	255	389	269	256	220	208	208	256	415	388
22	285	268	255	389	269	256	220	208	208	284	395	453
23	302	255	242	490	269	244	232	220	208	284	375	522
24	322	255	242	606	269	244	220	220	208	269	375	522
25	343	268	242	671	256	244	220	220	208	269	375	487
26	366	268	232	597	256	244	220	208	232	256	375	487
27	389	268	232	535	256	232	232	220	220	269	374	487
28	366	255	232	495	256	232	232	220	220	284	359	522
29	343	255	232	475	256	232	232	220	208	269	346	558
30	343	242	221	435	-	232	232	232	208	269	346	558
31	322	-	221	415	-	232	-	220	-	269	346	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,867	389	285	318		
November	7,917	302	242	264		
December	7,399	255	221	239		
Calendar year 1947	109,543	1,050	185	300		
January	10,481	671	221	338		
February	8,555	395	256	295		
March	9,365	415	232	302		
April	6,816	232	220	227		
May	6,820	232	208	220		
June	6,467	232	195	216		
July	7,572	284	220	244		
August	11,355	515	269	366		
September	11,748	558	333	392		
Water year 1947-48	104,362	671	195	285		

Blue Spring near Orange City, Fla.

Location.- Staff gage, lat. 28°56', long. 81°20', in sec. 8, T. 18 S., R. 30 E., about 2½ miles west of Orange City.

Records available.- March 1932 to September 1948 (discharge measurements only).

Extremes.- 1932-48: Maximum discharge measured, 190 second-feet Jan. 27, 1948; minimum measured, 62.7 second-feet Nov. 6, 1935, but may be inaccurate owing to adverse measuring conditions and abnormal amount of backwater from St. Johns River.

Remarks.- Measurements are made in the spring run above mouth, a quarter of a mile below spring.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Nov. 15	161	Mar. 2	169	June 10	171
Dec. 22	184	Apr. 7	168	July 15	162
Jan. 27	190	May 18	175	Aug. 24	146

Apopka-Beauclair Canal near Astatula, Fla.

Location.- Staff gage, lat. 28°45', long. 81°41', in sec. 15, T. 20 S., R. 26 E., at boat dock 200 feet upstream from bridge on State Highway 448, 1½ miles west of Lake Jem, 3½ miles northeast of Astatula, and 5 miles southwest of Mount Dora.
Records available.- July 1942 to June 1948 (discharge measurements only; discontinued).
Extremes.- 1942-48: Maximum discharge measured, 186 second-feet Apr. 2, 1948; minimum measured, 18.6 second-feet June 30, 1943.
Remarks.- Measurements are made about once monthly at bridge on State Highway 448.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 8	110	Feb. 4	162	Apr. 29	167
Dec. 2	91.6	Mar. 1	178	May 26	176
Jan. 5	120	Apr. 2	186	June 29	135

Haines Creek at Lisbon, Fla.

Location.- Staff gage, lat. 28°53', long. 81°47', in sec. 2, T. 19 S., R. 25 E., at bridge on State Highway 44, a quarter of a mile west of Lisbon and 8½ miles northeast of Leesburg. Datum of gage is 59.22 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark).
Records available.- July 1942 to September 1948.
Extremes.- Maximum discharge observed during year, 557 second-feet Sept. 30 (gage height, 3.76 feet); minimum observed, 242 second-feet June 24 to July 2, July 5, 9; minimum gage height observed, 2.46 feet June 30.
1942-48: Maximum discharge observed, 585 second-feet Oct. 3-10, 26, 1945; maximum gage height observed, that of Sept. 30, 1948; minimum discharge observed, 74 second-feet June 23-26, 1943; minimum gage height observed, 1.16 feet June 26, 1943.
Remarks.- Records good. Gage read once daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	379	429	429	404	480	454	454	379	288	242	305	416
2	379	429	404	429	480	454	454	379	272	242	323	416
3	379	429	429	429	480	454	454	379	272	257	323	416
4	379	429	429	429	480	454	429	379	272	257	343	416
5	379	429	429	404	480	480	429	379	272	242	343	416
6	379	429	429	404	480	480	429	355	272	257	343	416
7	379	429	429	404	480	480	429	355	272	257	343	416
8	404	454	429	404	480	480	429	355	272	257	343	447
9	404	429	429	404	480	480	429	333	257	242	343	447
10	404	429	429	404	480	507	429	333	257	257	343	447
11	404	429	429	404	480	507	429	333	257	257	343	447
12	379	429	429	404	480	507	429	333	257	257	365	447
13	379	429	429	404	480	507	429	323	257	257	365	447
14	379	429	429	404	480	480	429	323	257	257	365	447
15	379	429	429	404	480	480	429	323	257	257	365	447
16	404	429	429	379	480	480	429	323	257	257	365	481
17	404	429	429	379	480	480	404	323	257	257	365	481
18	404	429	429	404	480	480	404	323	257	257	389	487
19	404	429	429	404	480	480	404	323	257	288	389	487
20	404	429	429	404	480	480	404	305	257	288	389	487
21	404	429	429	429	480	480	379	305	257	288	389	481
22	404	429	429	429	480	480	379	305	257	288	389	481
23	404	429	429	429	480	480	404	305	257	288	389	481
24	429	429	429	480	454	480	379	288	242	288	416	518
25	429	454	429	480	454	480	379	288	242	305	416	518
26	429	429	429	480	454	480	379	288	242	305	416	481
27	429	429	429	480	454	480	379	288	242	288	416	481
28	429	429	429	480	454	480	379	288	242	305	416	518
29	429	429	429	480	454	454	379	288	242	288	416	518
30	429	429	404	480	-	454	379	288	242	305	416	557
31	429	-	404	480	-	454	-	288	-	323	416	-

Month	Second-feet-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,449	429	379	402		
November	12,920	454	429	431		
December	13,224	429	404	427		
Calendar year 1947	110,918	454	189	304	-	-
January	13,232	480	379	427		
February	13,764	480	454	475		
March	14,806	507	454	478		
April	12,370	454	379	412		
May	10,077	379	288	325		
June	7,741	288	242	258		
July	8,413	323	242	271		
August	11,547	416	305	372		
September	13,945	557	416	465		
Water year 1947-48	144,488	557	242	395		

Oklawaha River at Moss Bluff, Fla.

Location.- Water-stage recorder, lat. 29°05', long. 81°53', in sec. 22 or 23, T. 16 S., R. 24 E., 25 feet upstream from old channel, 50 feet upstream from highway bridge, 600 feet downstream from power plant, and 0.4 mile southwest of Moss Bluff. Datum of gage is at mean sea level (Corps of Engineers bench mark).

Records available.- February to September 1943 (discharge measurements only), October 1943 to September 1948.

Extremes.- Maximum discharge during year, 811 second-feet Aug. 19 (gage height, 48.42 feet); minimum, 228 second-feet June 10 (gage height, 43.63 feet); minimum daily, 254 second-feet June 28 to July 1.

1943-48: Maximum discharge, 988 second-feet Oct. 19, 1944 (gage height, 49.31 feet); minimum, 42 second-feet Nov. 26, 1943 (gage height, 40.90 feet); minimum daily, 90 second-feet Dec. 12, 1943.

Remarks.- Records good. Records include flow of old Oklawaha River channel. Flow regulated by power plant above station. Normal limits of regulation of reservoir insufficient to affect monthly figures of runoff.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 20-29)

Oct. 1 to Mar. 10		Mar. 11 to July 29		July 30 to Sept. 30	
45.8	436	43.9	254	46.5	478
47.4	660	45.5	426	48.2	773
		47.4	665		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	532	532	477	505	574	519	535	402	303	254	525	609
2	519	532	463	505	574	519	574	414	303	263	478	609
3	505	532	477	491	574	519	561	402	303	263	478	592
4	519	519	491	491	588	532	535	402	303	263	478	645
5	519	519	491	491	574	574	535	402	303	263	509	627
6	546	519	491	477	574	574	535	390	303	a263	509	609
7	560	519	491	463	574	588	535	379	303	a263	509	609
8	560	519	491	463	588	588	535	379	293	a263	493	627
9	532	519	491	463	588	602	510	357	283	a263	493	609
10	519	519	491	463	616	645	510	346	283	a263	493	592
11	519	519	491	436	574	665	510	346	283	a278	558	627
12	546	532	491	436	588	652	548	346	293	a294	609	609
13	463	532	491	463	602	639	522	346	293	313	681	575
14	477	546	491	436	602	626	522	346	283	303	663	575
15	477	546	519	422	574	626	510	346	283	313	627	592
16	532	546	546	436	560	626	510	346	283	303	609	592
17	532	546	519	436	560	626	486	346	283	313	627	592
18	519	546	519	450	560	613	462	346	283	324	681	575
19	463	546	505	450	574	613	462	346	273	273	773	575
20	505	532	505	463	560	613	450	346	283	324	754	558
21	491	532	532	519	560	613	438	335	283	324	735	558
22	519	532	532	546	560	600	438	346	283	324	699	575
23	546	532	519	546	546	587	438	346	273	368	717	645
24	574	532	532	660	632	574	438	346	283	357	681	663
25	660	546	519	645	519	587	438	346	283	368	663	645
26	630	532	505	616	632	574	414	346	273	379	681	627
27	602	519	505	602	532	574	402	313	273	438	681	627
28	574	519	505	602	532	561	414	303	254	414	645	663
29	560	505	505	588	519	536	414	313	254	414	627	663
30	546	491	505	574	-	522	414	313	254	478	609	681
31	532	-	505	602	-	535	-	303	-	592	609	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,578	660	463	535		
November	15,860	546	491	529		
December	15,595	546	463	503		
Calendar year 1947	150,734	797	185	413		
January	15,740	660	436	508		
February	16,410	616	519	566		
March	18,221	665	519	588		
April	14,595	574	402	486		
May	10,943	414	303	353		
June	8,533	303	254	284		
July	10,115	592	254	326		
August	18,894	773	478	609		
September	18,345	681	558	612		
Water year 1947-48	179,829	773	254	491		

a No gage-height record; discharge computed on basis of records for Oklawaha River near Ocala and Haines Creek at Lisbon.

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. Datum of gage is 36.52 feet above mean sea level, datum of 1929, supplementary adjustment of 1937 (Corps of Engineers bench mark).

Records available.- February 1930 to September 1948.

Average discharge.- 18 years, 390 second-feet.

Extremes.- Maximum discharge during year, 1,020 second-feet Aug. 19-22; maximum gage height, 3.43 feet Jan. 25; minimum discharge, 244 second-feet July 2 (gage height, 0.72 foot).

1930-48: Maximum discharge, 1,810 second-feet June 15, 1934; maximum gage height, 5.52 feet Sept. 6, 1933; minimum discharge, 41 second-feet May 7, 1939; minimum gage height, -1.76 feet Aug. 2, 1932.

Remarks.- Records good. Some diurnal fluctuation and slight regulation at low flow caused by power plant at Moss Bluff, 12 miles above station. Large seepage losses above station during prolonged periods of low flow.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 29				July 30 to Sept. 30	
0.7	244	2.8	655	2.6	634
1.8	401	3.4	918	3.3	1,020
2.3	500				

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	756	674	585	585	756	554	585	410	318	250	934	760
2	735	694	570	585	735	554	602	410	318	250	816	787
3	714	674	554	585	735	554	619	410	311	250	760	760
4	694	674	554	570	714	585	602	410	304	250	760	733
5	674	655	570	554	714	674	585	410	311	264	733	760
6	674	637	570	554	694	694	585	401	311	257	733	760
7	674	637	570	540	694	694	570	393	304	264	708	760
8	674	637	554	540	674	714	570	385	304	270	682	753
9	655	637	554	526	674	714	554	378	297	270	658	733
10	637	619	554	526	694	778	554	370	311	270	658	733
11	619	602	554	526	694	823	540	370	311	290	658	708
12	619	655	554	513	674	823	540	a365	297	304	733	733
13	602	655	585	513	674	800	540	a360	297	311	874	733
14	570	637	637	526	674	778	540	355	297	297	964	708
15	554	637	637	513	674	756	540	355	290	297	934	733
16	585	637	674	500	655	756	526	355	283	290	903	733
17	602	637	674	500	637	735	526	355	283	304	874	708
18	602	655	674	500	637	714	513	355	276	325	874	708
19	602	655	655	500	637	714	488	355	276	401	934	682
20	570	655	655	513	619	694	477	348	276	488	1,020	682
21	570	655	655	670	619	694	466	340	283	436	1,020	658
22	585	655	655	619	602	674	456	348	283	393	1,020	682
23	585	637	655	637	602	674	456	355	276	401	992	708
24	619	637	655	846	602	674	446	348	270	427	964	708
25	694	637	637	918	585	655	446	348	270	427	934	708
26	756	637	637	894	585	637	436	340	270	477	903	708
27	778	637	619	870	570	637	427	332	270	500	903	708
28	756	619	619	823	570	619	427	318	264	500	844	733
29	735	602	602	800	570	602	418	318	257	500	816	733
30	714	602	602	778	-	585	418	318	257	682	787	787
31	694	-	585	756	-	585	-	318	-	964	760	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	20,298	778	554	655		
November	19,281	694	602	643		
December	18,855	674	554	608	------	------
Calendar year 1947	183,588	1,160	168	503	------	------
January	19,180	918	500	619		
February	18,964	756	570	654		
March	21,144	823	554	682		
April	15,452	619	418	515		
May	11,233	410	318	362		
June	8,675	318	257	289		
July	11,609	964	250	374		
August	26,153	1,020	658	844		
September	21,780	787	658	726		
Water year 1947-48	212,624	1,020	250	581		

Peak discharge (base, 600 sec.-ft.).- Oct. 27 (7 p.m.) 800 sec.-ft.; Jan. 25 (1 a.m.) 918 sec.-ft.; Mar. 11 (11 p.m.) 846 sec.-ft.; July 31 (12 m.) 964 sec.-ft.; Aug. 19-22, 1,020 sec.-ft.

a No gage-height record; discharge interpolated.

Oklawaha River at Eureka, Fla.

Location.- Water-stage recorder, lat. 29°22', long. 81.54', in sec. 9, T. 13 S., R. 24 E., at bridge on State Highway 316 in Eureka, 3 miles downstream from Eaton Creek. Datum of gage is 15.44 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Records available.- February 1930 to June 1934, September 1943 to September 1948.

Extremes.- Maximum discharge during year, 2,580 second-feet Jan. 26 (gage height, 7.35 feet); minimum, 1,150 second-feet June 26-29, July 5, 6; minimum gage height, 5.28 feet July 6.

1930-34, 1943-48: Maximum discharge observed, 6,260 second-feet Sept. 7, 1933 (gage height, 11.00 feet); minimum observed, 626 second-feet Feb. 2, 1933 (gage height, 2.94 feet).

Remarks.- Records good.

Rating table, water year 1947-84 (gage height, in feet, and discharge, in second-feet)

5.3	1,150
5.7	1,310
6.3	1,670
7.3	2,490

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,150	2,080	a1,800	1,740	2,060	1,640	1,670	1,410	1,360	1,220	1,780	1,900
2	2,060	2,060	a1,780	1,740	1,980	1,640	1,740	1,410	1,360	1,180	1,860	1,900
3	1,980	2,060	a1,760	1,740	1,980	1,640	1,740	1,410	1,310	1,180	1,940	1,940
4	1,980	1,980	a1,750	1,700	1,940	1,740	1,740	1,360	1,260	1,180	1,940	1,980
5	1,940	1,940	1,740	1,700	1,900	1,490	1,740	1,360	1,260	1,150	1,900	1,940
6	1,940	1,940	1,740	1,700	1,900	2,230	1,700	1,360	1,260	1,150	1,860	1,900
7	1,940	1,900	1,700	1,700	1,900	2,320	1,670	1,360	1,220	1,180	1,820	1,860
8	1,940	1,980	1,700	1,670	1,860	2,230	1,670	1,360	1,220	1,180	1,860	1,860
9	1,900	1,980	1,700	1,670	1,860	2,150	1,640	1,360	1,220	1,180	1,780	1,860
10	1,860	2,060	1,700	1,640	1,900	2,150	1,640	1,360	1,260	1,180	1,740	1,820
11	1,860	1,980	1,700	1,640	1,900	2,400	1,600	1,360	1,260	1,180	1,740	1,820
12	1,860	1,980	1,700	1,640	1,900	2,490	1,600	1,360	1,260	f1,260	1,900	1,780
13	1,820	2,060	1,740	1,640	1,900	2,490	1,560	1,310	1,260	1,260	2,060	1,780
14	1,820	2,060	1,780	1,600	1,860	2,320	1,560	1,310	1,260	1,260	2,320	1,780
15	1,780	1,980	1,780	1,600	1,820	2,230	1,560	1,310	1,260	1,260	2,230	1,820
16	1,820	1,940	1,820	1,600	1,820	2,150	1,560	1,310	1,220	1,260	2,150	1,820
17	1,820	1,940	1,820	1,600	1,820	2,060	1,560	1,310	1,220	1,260	2,060	1,820
18	1,820	1,900	1,820	1,600	1,780	1,980	1,560	1,260	1,220	1,260	2,060	1,780
19	1,820	1,900	1,820	1,600	1,780	1,940	1,560	1,260	1,180	1,260	2,060	1,780
20	1,780	1,900	1,860	1,640	1,740	1,900	1,530	1,310	1,180	1,310	2,060	1,740
21	1,780	1,900	1,860	1,700	1,740	1,860	1,530	1,310	1,180	1,500	2,060	1,740
22	1,780	1,900	1,860	1,700	1,740	1,860	1,500	1,260	1,180	1,670	2,150	1,780
23	1,780	1,900	1,860	1,740	1,700	1,860	1,500	1,310	1,180	1,640	2,230	1,820
24	1,900	1 900	1,860	1,940	1,700	1,820	1,470	1,260	1,180	1,560	2,230	1,860
25	2,320	1,860	1,820	2,320	1,700	1,820	1,470	1,260	1,180	1,530	2,230	1,860
26	2,490	a1,850	1,820	2,490	1,700	1,780	1,440	1,260	1,150	1,560	2,150	1,820
27	2,490	a1,840	1,820	2,490	1,670	1,740	1,470	1,260	1,150	1,560	2,150	1,820
28	2,400	a1,830	1,780	2,320	1,670	1,780	1,500	1,260	1,150	1,530	2,060	1,820
29	2,230	h1,820	1,780	2,230	1,670	1,740	1,470	1,260	1,150	1,530	2,060	1,820
30	2,230	a1,810	1,780	2,150	-	1,700	1,440	1,260	1,180	1,600	1,980	1,860
31	2,230	-	1,740	2,060	-	1,700	-	1,260	-	1,670	1,940	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	61,520	2,490	1,780	1,985		
November	58,210	2,060	1,810	1,940		
December	55,190	1,860	1,700	1,780		
Calendar year 1947	577,530	2,940	1,150	1,582		
January	56,300	2,490	1,600	1,816		
February	52,890	2,060	1,670	1,824		
March	61,300	2,490	1,640	1,977		
April	47,390	1,740	1,440	1,580		
May	40,810	1,410	1,260	1,316		
June	36,730	1,360	1,150	1,224		
July	41,700	1,670	1,150	1,345		
August	62,360	2,320	1,740	2,012		
September	55,080	1,980	1,740	1,836		
Water year 1947-48	629,480	2,490	1,150	1,720		

Peak discharge (base, 1,500 sec.-ft.).- Oct. 26, 27, 2,490 sec.-ft.; Jan. 26 (4 p.m.) 2,580 sec.-ft.; Mar. 12, 13, 2,490 sec.-ft.; Aug. 14 (11 a.m.) 2,320 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations near Ocala and near Orange Springs.

f Computed on basis of partly estimated gage-height record.

h Computed from staff-gage reading.

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, 2 miles east of Orange Springs. Datum of gage is 7.12 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark.

Records available.- February 1930 to September 1948 (include flow of Orange Creek).

Average discharge.- 18 years, 1,656 second-feet.

Extremes.- Maximum discharge observed during year, 4,560 second-feet Mar. 12 (gage height, 9.35 feet); minimum, 1,370 second-feet June 28, 29, July 6-9; minimum gage height, 5.18 feet June 29.

1930-48: Maximum discharge, 9,760 second-feet Sept. 9, 1933 (gage height, 12.00 feet, from floodmarks); minimum observed, 741 second-feet on several days January to June 1933; minimum gage height observed, 2.46 feet Feb. 2, 1933.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

5.2	1,370	8.6	3,630
6.0	1,710	9.3	4,420
6.8	2,170		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,940	3,030	2,540	2,320	3,110	2,320	2,860	2,030	1,660	1,440	2,390	2,540
2	2,780	2,940	2,540	2,320	3,110	2,240	2,860	2,030	1,710	1,440	2,540	2,540
3	2,700	2,860	2,470	2,320	3,030	2,240	2,940	1,970	1,660	1,440	2,540	2,540
4	2,620	2,860	2,470	2,320	2,940	2,320	2,860	1,970	1,610	1,440	2,620	2,700
5	2,540	2,780	2,470	2,240	2,860	2,470	2,860	1,970	1,610	1,400	2,620	2,780
6	2,540	2,700	2,470	2,240	2,860	2,620	2,860	1,910	1,560	1,370	2,540	2,780
7	2,620	2,700	2,390	2,170	2,780	2,940	2,780	1,910	1,520	1,370	2,470	2,700
8	2,620	2,860	2,390	2,170	2,780	3,280	2,780	1,860	1,520	1,370	2,620	2,700
9	2,620	2,940	2,390	2,170	2,780	3,630	2,700	1,860	1,480	1,370	2,540	2,620
10	2,540	2,860	2,320	2,170	2,780	3,940	2,620	1,810	1,520	1,400	2,470	2,540
11	2,470	2,860	2,320	2,100	2,780	4,420	2,620	1,810	1,560	1,400	2,470	2,470
12	2,470	3,030	2,320	2,100	2,780	4,420	2,540	1,810	1,560	1,520	2,700	2,470
13	2,470	3,030	2,320	2,100	2,700	4,420	2,540	1,810	1,560	1,660	2,860	2,470
14	2,470	3,030	2,390	2,100	2,700	4,170	2,470	1,760	1,560	1,610	3,030	2,390
15	2,390	2,940	2,390	2,030	2,700	3,940	2,470	1,760	1,520	1,560	3,190	2,390
16	2,470	2,940	2,470	2,030	2,620	3,830	2,470	1,710	1,520	1,520	3,110	2,390
17	2,470	2,860	2,540	2,030	2,620	3,630	2,470	1,710	1,520	1,480	2,940	2,390
18	2,540	2,860	2,540	2,030	2,620	3,450	2,390	1,710	1,480	1,520	2,940	2,320
19	2,470	2,940	2,540	2,030	2,540	3,450	2,390	1,660	1,480	1,560	2,940	2,320
20	2,470	2,940	2,470	2,100	2,540	3,360	2,390	1,660	1,440	1,660	2,860	2,240
21	2,540	2,940	2,540	2,320	2,470	3,280	2,390	1,660	1,440	1,710	2,780	2,240
22	2,620	2,860	2,540	2,390	2,470	3,190	2,320	1,660	1,440	1,760	2,780	2,240
23	2,540	2,860	2,540	2,390	2,470	3,110	2,320	1,610	1,440	1,810	2,860	2,320
24	2,700	2,780	2,540	3,030	2,390	3,190	2,240	1,610	1,400	1,910	2,860	2,320
25	3,450	2,780	2,540	3,360	2,390	3,110	2,240	1,610	1,400	1,910	2,860	2,320
26	3,540	2,700	2,470	3,540	2,390	3,110	2,170	1,560	1,440	1,910	2,860	2,320
27	3,630	2,700	2,470	3,630	2,320	3,110	2,170	1,560	1,400	1,910	2,940	2,320
28	3,540	2,620	2,390	3,540	2,320	3,110	2,170	1,560	1,370	1,910	2,940	2,240
29	3,360	2,620	2,390	3,450	2,320	3,110	2,100	1,560	1,370	1,910	2,780	2,320
30	3,280	2,620	2,390	3,280	-	3,030	2,100	1,610	1,400	2,030	2,700	2,320
31	3,110	-	2,320	3,190	-	2,940	-	1,610	-	2,240	2,620	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	85,520	3,630	2,390	2,759		
November	85,440	3,030	2,620	2,848		
December	75,880	2,540	2,320	2,448		
Calendar year 1947	752,980	3,830	1,380	2,063		
January	77,210	3,630	2,030	2,491		
February	77,170	3,110	2,320	2,661		
March	101,380	4,420	2,240	3,270		
April	75,090	2,940	2,100	2,503		
May	54,330	2,030	1,560	1,753		
June	45,150	1,710	1,370	1,505		
July	50,540	2,240	1,370	1,630		
August	85,370	3,190	2,390	2,754		
September	73,250	2,780	2,240	2,442		
Water year 1947-48	886,330	4,420	1,370	2,422		

Oklawaha River at Riverside Landing, near Orange Springs, Fla.

Location.- Water-stage recorder, lat. 29°20', long. 81°48', in sec. 33, T. 11 S., R. 25 E., at Riverside Landing, 8½ miles east of Orange Springs. Datum of gage is at mean sea level, datum of 1929 (Corps of Engineers bench mark).

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 6,060 second-feet Mar. 12 (gage height, 8.83 feet); minimum, 1,570 second-feet June 29 (gage height, 5.54 feet).

1943-48: Maximum discharge, that of Mar. 12, 1948; minimum, 956 second-feet June 3, 4, 6-19, 1945; minimum gage height, 3.97 feet June 17, 18, 1945.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

5.5	1,530
5.8	1,810
7.8	4,400
8.8	6,060

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,990	3,990	3,340	a3,000	3,990	2,880	3,600	2,570	1,930	1,700	3,730	3,340
2	3,730	3,860	3,280	a2,970	3,990	2,880	3,600	2,570	1,930	1,760	3,860	3,340
3	3,600	3,860	3,280	a2,940	3,860	2,820	3,600	2,500	1,930	1,760	3,860	3,280
4	3,470	3,730	3,210	a2,910	3,860	2,880	3,470	2,440	1,930	1,700	3,730	3,280
5	3,340	3,600	3,210	a2,890	3,730	3,020	3,470	2,440	1,930	1,660	3,730	3,340
6	3,340	3,600	a3,200	a2,860	3,600	3,140	3,470	2,380	1,870	1,610	3,600	3,470
7	3,340	3,470	a3,160	a2,840	3,600	3,340	3,470	2,380	1,810	1,610	3,470	3,470
8	3,340	3,600	a3,120	2,820	3,470	3,600	3,340	2,310	1,760	1,610	3,470	3,470
9	3,340	3,730	a3,100	a2,810	3,470	3,860	3,340	2,310	1,760	1,660	3,470	3,470
10	3,340	3,730	a3,100	a2,790	3,470	4,550	3,280	2,250	1,760	1,810	3,470	3,340
11	3,340	3,730	a3,100	a2,770	3,470	5,720	3,210	2,250	1,810	1,930	3,340	3,340
12	3,340	3,860	a3,100	a2,750	3,470	6,060	3,140	2,250	1,810	2,120	3,470	3,340
13	3,340	3,990	a3,100	a2,730	3,470	5,890	3,140	2,190	1,810	2,380	3,600	3,280
14	3,340	3,990	a3,100	a2,700	3,470	5,550	3,080	2,190	1,810	2,500	3,730	3,210
15	3,210	3,860	a3,100	a2,680	3,340	5,210	3,020	2,120	1,810	2,380	3,860	3,140
16	3,210	3,860	a3,200	a2,660	3,340	4,870	3,020	2,120	1,810	2,190	3,860	3,140
17	3,280	3,730	a3,430	2,640	3,340	4,710	2,950	2,060	1,810	2,000	3,860	3,140
18	3,280	3,730	a3,430	2,700	3,280	4,400	2,950	2,060	1,760	1,930	3,860	3,080
19	3,280	3,860	a3,400	2,700	3,210	4,260	2,950	2,000	1,810	2,000	3,860	3,020
20	3,280	3,860	a3,360	2,700	3,210	4,120	2,950	2,000	1,760	2,190	3,860	3,020
21	3,210	3,860	a3,330	2,880	3,140	3,990	2,880	2,000	1,700	2,190	3,860	2,950
22	3,340	3,730	a3,300	3,080	3,140	3,860	2,880	1,930	1,700	2,310	3,860	3,020
23	3,470	3,730	a3,280	3,210	3,080	3,860	2,820	1,930	1,660	2,310	3,860	3,080
24	3,730	3,730	a3,240	3,730	3,080	3,860	2,820	1,930	1,610	2,440	3,860	3,020
25	4,260	3,600	a3,200	4,260	3,020	3,730	2,760	1,870	1,660	2,500	3,730	3,020
26	4,550	3,600	a3,180	4,400	3,020	3,730	2,700	1,870	1,700	2,500	3,600	3,020
27	4,550	3,470	a3,150	4,550	3,020	3,730	2,700	1,810	1,700	2,440	3,600	3,020
28	4,550	3,470	a3,120	4,550	2,950	3,730	2,640	1,810	1,610	2,440	3,600	3,020
29	4,400	3,470	a3,090	4,400	2,950	3,730	2,640	1,870	1,570	2,570	3,600	3,020
30	4,260	3,340	a3,050	4,260	-	3,600	2,570	1,870	1,610	3,140	3,470	3,140
31	4,120	-	a3,020	4,120	-	3,600	-	1,930	-	3,730	3,470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	112,170	4,550	3,210	3,618		
November	111,640	3,990	3,340	3,721		
December	99,280	3,430	3,020	3,203		
Calendar year 1947	935,340	5,550	1,530	2,563		
January	99,300	4,550	2,640	3,203		
February	98,040	3,990	2,950	3,381		
March	125,180	6,060	2,820	4,038		
April	92,460	3,600	2,570	3,082		
May	66,210	2,570	1,810	2,136		
June	53,130	1,930	1,570	1,771		
July	67,070	3,730	1,610	2,164		
August	114,200	3,860	3,340	3,684		
September	95,820	3,470	2,950	3,194		
Water year 1947-48	1,134,500	6,060	1,570	3,100		

Peak discharge (base, 3,200 sec.-ft.).- Oct. 26-28, 4,550 sec.-ft.; Jan. 27, 28, 4,550 sec.-ft.; Mar. 12 (10 a.m.) 6,060 sec.-ft.; Aug. 16 (12 m.) 3,990 sec.-ft.

a No gage-height record; discharge computed on basis of records for Oklawaha River near Orange Springs.

Palatlakaha Creek near Mascotte, Fla.

Location.- Water-stage recorder, lat. 28°37', long. 81°51', in sec. 36, T. 21 S., R. 24 E., at county highway bridge, 0.2 mile downstream from Lake Emma and 3¼ miles northeast of Mascotte. Datum of gage is 89.54 feet above mean sea level, datum of 1929.

Records available.- May 1945 to September 1948.

Extremes.- Maximum discharge during year, 362 second-feet Oct. 16-18; maximum gage height, 6.61 feet Oct. 16; minimum discharge, 13 second-feet July 2 (gage height, 3.62 feet).

1945-48: Maximum discharge, 458 second-feet Oct. 4, 5, 1945 (gage height, 7.06 feet); minimum observed, 0.2 second-foot June 18, 19, 1945; minimum gage height observed, 2.14 feet June 19, 1945.

Remarks.- Records good except those below 50 second-feet, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1-17		Oct. 18 to Sept. 30							
6.3	297	3.6	12	4.1	41	4.8	108	6.6	362
6.6	362	3.8	22	4.4	66	5.9	260		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	308	340	253	189	210	232	196	136	48	14	83	268
2	308	340	253	189	210	225	196	130	46	14	87	268
3	308	340	253	189	218	225	189	124	44	15	94	275
4	318	332	246	183	218	232	189	119	42	14	99	275
5	329	332	246	183	225	239	183	114	40	15	105	275
6	329	325	239	175	225	246	183	109	39	16	112	282
7	340	325	239	175	225	246	175	102	37	15	115	289
8	340	325	239	174	232	246	172	97	35	16	118	289
9	351	318	232	172	232	253	168	93	33	18	119	289
10	351	310	232	169	239	253	164	90	34	18	125	289
11	351	310	232	165	239	253	162	85	35	18	151	282
12	351	310	225	164	239	253	161	83	33	18	167	282
13	351	303	225	165	246	253	157	80	32	20	175	282
14	351	303	225	164	246	246	153	77	32	20	189	282
15	351	303	225	160	239	246	153	73	31	20	189	275
16	362	296	225	158	246	246	153	70	29	20	189	275
17	362	296	218	158	246	246	150	67	29	20	196	275
18	362	296	218	161	246	239	147	64	30	22	196	268
19	354	296	218	160	246	239	144	61	28	27	203	268
20	354	289	218	162	246	232	139	58	27	27	210	260
21	347	289	218	175	246	232	136	55	26	29	225	260
22	347	289	210	172	246	232	130	53	24	30	239	260
23	347	282	210	172	239	225	125	51	22	34	246	275
24	347	282	210	196	239	218	120	50	20	40	246	275
25	354	282	210	203	239	218	116	47	18	45	253	268
26	354	275	203	203	239	210	113	47	18	51	260	260
27	354	268	203	203	239	210	132	44	17	55	260	268
28	354	268	196	210	239	210	150	45	17	58	260	275
29	347	260	196	210	232	203	146	51	16	61	260	289
30	347	260	196	210	-	203	140	51	14	68	268	289
31	347	-	196	210	-	196	-	50	-	78	268	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,676	362	308	344		
November	9,044	340	260	301		
December	6,909	253	196	223		
Calendar year 1947	51,228	362	24	140		
January	5,579	210	158	180		
February	6,831	246	210	236		
March	7,207	253	196	232		
April	4,642	196	113	155		
May	2,376	136	44	76.6		
June	896	48	14	29.9		
July	916	78	14	29.5		
August	5,707	268	83	184		
September	8,267	289	260	276		
Water year 1947-48	69,050	362	14	189		

Peak discharge (base, 150 sec.-ft.).- Oct. 16-18, 362 sec.-ft.; Mar. 9-13, 253 sec.-ft.; Sept. 7-10, 289 sec.-ft.

Palatlakaha Creek near Okahumpka, Fla.

Location.- Measuring section, lat. 28°43', long. 81°53', in sec. 26, T. 20 S., R. 24 E., at bridge 2 miles southeast of Okahumpka and 4 miles above mouth.

Records available.- May 1945 to September 1948 (discharge measurements only).

Extremes.- 1945-48: Maximum discharge measured, 436 second-feet Sept. 17, 1945; minimum measured, 0.80 second-foot May 30, 1945.

Remarks.- Discharge measurements made about once monthly.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Nov. 5	348	Feb. 24	236	June 7	38.6	Sept. 27	275
Dec. 17	220	Mar. 29	198	July 12	22.0		
Jan. 20	190	Apr. 28	181	Aug. 19	212		

Silver Springs near Ocala, Fla.

Location.- Measuring point for discharge measurements at lat. 29°13', long. 82°02', in sec. 6, T. 15 S., R. 23 E., 700 feet downstream from Paradise Landing, 0.7 mile downstream from head of springs, and 6.0 miles northeast of Ocala. Water-stage recorder on Sharpes Ferry artesian well, lat. 29°11', long. 81°59', in sec. 15, T. 15 S., R. 23 E., about 400 feet east of Oklawaha River, 2 miles upstream from Silver River, 4.2 miles southeast of head springs and 9 miles east of Ocala. Datum of gage is 42.36 feet above mean sea level, datum of 1929, supplementary adjustment of 1937 (Corps of Engineers bench mark). Auxiliary water-stage recorder at head of springs in boat repair basin. Datum of gage is 38.96 feet above mean sea level, datum of 1929.

Records available.- January 1933 to September 1948.

Average discharge.- 15 years, 820 second-feet.

Extremes.- Maximum discharge during year, 1,110 second-feet Sept. 22; maximum gage height at head of springs, 2.48 feet Oct. 16; minimum discharge, 854 second-feet July 9, 15-17; minimum gage height at head of springs, 1.15 feet July 9, 17.

1933-48: Maximum discharge observed, 1,140 second-feet Oct. 7, 1933; maximum gage height observed at head of springs, 5.50 feet Sept. 6, 1933; minimum daily discharge, 627 second-feet Mar. 31, Apr. 1, 1933; minimum gage height observed at head of springs, 0.06 foot June 22, 1945.

Remarks.- Records good. Surface inflow between head of springs and measuring site is negligible. Discharge computed from relation between artesian pressure at Sharpes Ferry well and discharge at measuring point.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	974	1,040	1,030	1,010	982	990	1,030	998	934	870	910	1,070
2	990	1,040	1,020	998	982	990	1,030	990	926	870	910	1,080
3	982	1,040	1,020	990	990	990	1,010	990	926	870	910	1,080
4	990	1,040	1,030	990	990	990	1,010	990	926	870	918	1,080
5	998	1,040	1,030	982	998	982	1,020	990	918	870	918	1,080
6	1,010	1,040	1,030	982	998	982	1,020	990	918	870	926	1,080
7	1,010	1,040	1,030	982	998	998	1,020	990	918	870	934	1,090
8	1,010	1,040	1,030	982	998	990	1,020	982	918	882	934	1,090
9	1,010	1,030	1,020	982	998	998	1,020	974	918	854	934	1,090
10	1,010	1,040	1,020	982	990	998	1,020	974	918	882	942	1,090
11	1,010	1,050	1,020	974	990	998	1,020	982	910	862	950	1,090
12	1,010	1,040	1,020	974	998	998	1,020	974	910	882	958	1,090
13	1,010	1,040	1,020	982	1,010	990	1,020	966	910	882	986	1,090
14	1,010	1,040	1,010	974	998	998	1,020	988	910	882	974	1,090
15	1,020	1,040	1,020	958	982	1,010	1,020	966	902	854	982	1,090
16	1,010	1,040	1,010	966	990	1,010	1,020	966	902	854	990	1,080
17	1,010	1,040	1,010	982	998	1,010	1,020	966	902	854	998	1,080
18	1,010	1,040	1,010	974	998	1,010	1,010	968	902	862	1,010	1,080
19	a1,010	1,040	1,010	966	998	1,010	1,010	958	894	870	1,010	1,090
20	a1,010	1,040	1,010	966	998	1,010	1,010	958	894	870	1,020	1,090
21	a1,010	1,040	1,010	982	998	1,020	1,010	958	894	870	1,030	1,090
22	a1,020	1,040	1,010	974	998	1,030	1,010	958	886	870	1,040	1,100
23	a1,020	1,040	1,010	974	990	1,030	1,010	958	886	870	1,040	1,100
24	a1,020	1,040	1,010	974	982	1,030	1,010	950	886	870	1,040	1,090
25	h1,020	1,040	1,010	958	982	1,030	1,010	950	886	878	1,050	1,070
26	a1,020	1,040	998	958	990	1,030	1,010	950	886	878	1,060	1,070
27	a1,030	1,040	998	974	998	1,040	1,010	942	878	878	1,060	1,080
28	1,030	1,030	998	974	998	1,030	1,010	942	878	888	1,070	1,080
29	1,040	1,030	998	982	990	1,020	1,010	942	878	888	1,070	1,070
30	1,040	1,030	998	990	-	1,020	998	942	878	894	1,070	1,070
31	1,040	-	998	990	-	1,040	-	934	-	902	1,070	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	31,384	1,040	974	1,012		
November	31,170	1,050	1,030	1,039		
December	31,438	1,030	998	1,014		
Calendar year 1947	324,213	1,050	794	888		
January	30,326	1,010	958	978		
February	28,810	1,010	982	993		
March	31,272	1,040	982	1,009		
April	30,458	1,030	998	1,015		
May	29,962	998	934	967		
June	27,092	934	878	903		
July	26,962	902	854	870		
August	30,694	1,070	910	990		
September	32,520	1,100	1,070	1,084		
Water year 1947-48	362,088	1,100	854	989		

a No artesian pressure record; discharge interpolated.
h Staff-gage reading of artesian pressure.
Note.- No gage height record at head of springs Oct. 25 to Nov. 2, Feb. 24-27, Mar. 1, Sept. 21-24.

Orange Lake Outlet near Citra, Fla.

Location.- Water-stage recorder, lat. 29°26', long. 82°07', in sec. 21, T. 12 S., R. 22 E., at bridge on State Highway 200 0.8 mile south of Island Grove and 1.5 miles north of Citra. Prior to Mar. 28, 1947, staff gage at same site and datum. Datum of gage is 53.41 feet above mean sea level, datum of 1929.

Records available.- November 1941 (three miscellaneous discharge measurements), January 1947 to September 1948.

Extremes.- 1947: Maximum discharge during period January to September, 192 second-feet Sept. 29, 30; maximum gage height, 5.97 feet Sept. 30; minimum discharge, 46 second-feet Aug. 7 (gage height, 4.67 feet).

1947-48: Maximum discharge during water year, 677 second-feet Mar. 17-24; maximum gage height, 7.81 feet Mar. 17; minimum discharge, 68 second-feet July 11 (gage height, 5.24 feet).

Maximum discharge known, 976 second-feet (measured) Nov. 10, 1941; maximum stage known, that of Mar. 17, 1948.

Remarks.- Records good. Gage read once daily prior to Mar. 28, 1947.

Rating tables, Jan. 1, 1947, to Sept. 30, 1948 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 3 to May 12, 1947, Mar. 17 to Apr. 18, 1948)

Jan. 1 to Apr. 22, 1947		Apr. 23, 1947, to Apr. 2, 1948				Apr. 3 to Sept. 30, 1948			
4.9	78	4.7	47	6.5	267	5.2	62	6.7	363
5.8	187	4.9	58	6.8	335	5.7	143	7.4	613
		5.0	66	7.8	677	6.4	272		
		5.2	90						

Discharge, in second-feet, 1947-48

1947

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				150	102	102	175	155	97	56	53	74
2				149	102	109	181	151	96	56	52	73
3				149	102	112	181	150	91	55	50	70
4				147	102	107	181	143	87	54	50	67
5				146	98	107	181	139	82	52	49	65
6				144	95	107	181	136	82	51	47	64
7				139	95	109	181	134	81	50	48	62
8				139	102	113	175	131	78	50	51	63
9				139	101	112	175	125	75	51	52	63
10				135	100	112	169	123	70	52	51	62
11				131	97	112	169	117	72	52	52	64
12				130	95	112	175	114	70	51	53	70
13				129	95	112	169	112	68	50	52	69
14				127	97	a122	175	107	67	52	53	69
15				126	102	131	175	105	66	51	55	70
16				125	101	144	175	101	65	53	57	70
17				124	100	144	181	97	63	55	61	70
18				122	98	141	175	94	61	54	62	73
19				121	97	157	175	91	60	53	64	80
20				119	95	163	175	89	59	54	64	86
21				116	100	169	175	84	59	57	66	87
22				114	97	169	175	84	60	58	69	90
23				112	97	169	168	85	61	56	74	114
24				109	95	169	168	90	59	54	74	151
25				109	90	181	172	94	57	53	74	159
26				108	90	175	171	93	57	53	74	166
27				107	85	169	168	93	57	54	75	172
28				104	85	169	163	97	56	54	76	182
29				102	-	169	158	108	56	55	76	192
30				100	-	169	157	105	55	54	76	192
31				98	-	175	-	103	-	53	75	-

a No gage-height record; discharge interpolated.

Discharge, in second-feet, of Orange Lake Outlet near Citra, Fla., 1947-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Juue	July	Aug.	Sept.
1	192	303	330	239	350	285	606	298	152	88	111	214
2	198	313	322	239	344	276	606	290	150	88	112	214
3	198	322	313	232	347	285	595	282	148	90	121	216
4	198	322	301	232	347	290	595	275	143	88	129	214
5	198	324	296	232	344	299	577	266	138	85	133	216
6	205	322	292	225	344	296	559	259	134	85	138	218
7	205	324	285	225	341	308	559	255	131	82	138	223
8	205	362	276	218	341	319	541	245	128	77	140	230
9	205	368	276	218	344	338	541	238	124	74	143	232
10	205	368	276	212	347	410	505	232	123	72	148	236
11	205	375	276	212	341	499	505	228	123	71	171	240
12	212	400	276	205	341	588	488	225	121	77	180	238
13	212	404	276	205	335	624	470	218	121	79	189	236
14	212	404	276	212	341	659	466	212	121	76	198	234
15	212	400	276	205	335	659	463	207	118	76	203	238
16	218	400	276	198	330	659	488	201	116	74	205	230
17	232	400	276	198	330	677	470	198	114	74	207	227
18	239	400	276	198	327	677	463	191	112	82	207	223
19	239	407	267	198	324	677	452	189	111	82	210	219
20	246	404	267	205	322	677	445	185	109	82	210	214
21	246	397	267	218	319	677	430	180	106	80	209	209
22	252	394	267	225	313	677	416	175	106	83	212	212
23	252	391	260	225	308	677	402	171	103	87	214	209
24	267	384	260	267	308	677	388	166	98	96	214	201
25	285	384	260	285	303	659	377	161	95	98	212	198
26	287	378	260	294	299	659	363	156	93	95	214	194
27	292	368	252	311	292	641	349	150	88	93	214	191
28	296	359	246	322	290	659	343	147	87	96	216	187
29	299	350	246	327	287	641	329	145	85	101	218	189
30	303	341	246	327	-	624	314	154	82	112	218	198
31	303	-	239	341	-	606	-	152	-	112	214	-

Monthly discharge, in second-feet, 1947-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January 1947	3,870	150	98	125		
February	2,715	102	85	97.0		
March	4,311	181	102	139		
April	5,199	181	157	173		
May	3,450	155	84	111		
June	2,067	97	55	68.9		
July	1,653	58	50	53.3		
August	1,885	76	47	60.8		
September	2,889	192	62	96.3		
Water year	-	-	-	-		
October 1947	7,318	303	192	236		
November	11,068	407	303	369		
December	8,512	330	239	275		
Calendar year 1947	54,937	407	47	151		
January 1948	7,450	341	198	240		
February	9,494	350	287	327		
March	16,699	677	276	539		
April	14,105	606	314	470		
May	6,451	298	145	208		
June	3,480	152	82	116		
July	2,655	112	71	85.6		
August	5,648	218	111	182		
September	6,500	240	187	217		
Water year 1947-48	99,380	677	71	272		

Orange Creek at Orange Springs, Fla.

Location.- Staff gage, lat. 29°31', long. 81°57', in sec. 25, T. 11 S., R. 23 E., at bridge on State Highway 318, a quarter of a mile northwest of Orange Springs and 1¼ miles upstream from Little Orange Creek.

Records available.- Four miscellaneous discharge measurements in 1930, 1932, and 1938; November 1941 to September 1948 (discharge measurements only).

Extremes.- 1941-48: Maximum discharge measured, 1,490 second-feet Nov. 16, 1941; minimum measured, 4.53 second-feet May 28, 1945.

Remarks.- Measurements are made about once monthly at bridge on State Highway 318.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 7	379	Mar. 3	470	July 29	283
Nov. 6	523	31	1,030	Sept. 2	454
Dec. 4	576	Apr. 27	638	29	310
Jan. 8	376	May 24	266		
Feb. 2	688	July 1	134		

Lochloosa Creek near Hawthorn, Fla.

Location.- Staff gage, lat. 29°33'55", long. 82°08'25", in sec. 6, T. 11 S., R. 22 E., at abandoned bridge on sand road, 1¼ miles above Lochloosa Lake and 3¾ miles southwest of Hawthorn.

Records available.- February 1947 to September 1948 (discharge measurements only).

Extremes.- 1947-48: Maximum discharge measured, 418 second-feet Jan. 26, 1948; minimum measured, 1.22 second-feet May 14, 1947.

Remarks.- Discharge measurements made at abandoned bridge.

Discharge measurements, in second-feet, February 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1947		1947		1948		1948	
Feb. 19	13.7	Aug. 4	2.93	Jan. 26	418	May 31	3.26
Apr. 2	59.2	Sept.15	51.1	Mar. 9	251	July 12	1.73
May 14	1.22	Oct. 29	76.6	Apr. 19	62.5	Aug. 23	140
June 24	1.84	Dec. 15	18.6				

Lochloosa Lake Outlet near Lochloosa, Fla.

Location - Water-stage recorder, lat. 29°29'10", long. 82°06'10", in sec. 3, T. 12 S., R. 22 E., at culvert on State Highway 200, 1.3 miles south of Lochloosa and 2.4 miles north of Island Grove. Prior to Mar. 28, 1947, staff gage at same site and datum. Datum of gage is 55.41 feet above mean sea level, datum of 1929.

Records available.- January 1947 to September 1948.

Extremes.- 1947: Maximum discharge during period January to September, 118 second-feet Sept. 26 (gage height, 4.37 feet); minimum, 6.5 second-feet Aug. 7 (gage height, 2.86 feet).

1947-48: Maximum discharge during water year, 341 second-feet Mar. 12, 13 (gage height, 6.04 feet); minimum, 19 second-feet July 11 (gage height, 3.34 feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair. Gage read twice daily prior to Mar. 28, 1947.

Rating table, Jan. 1, 1947, to Sept. 30, 1948 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 12 to Oct. 21, 1947, June 2 to Aug. 21, 1948)

2.8	4.6	3.8	52	5.0	181
2.9	7.7	3.9	59	5.6	263
3.0	11	4.1	83	6.0	332
3.3	23	4.7	165		

Discharge, in second-feet, 1947-48

·1947

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a44	24	29	61	52	28	12	10	19
2				a44	23	32	64	51	26	14	9.4	18
3				a44	22	32	68	50	26	13	8.7	17
4				a42	22	32	68	48	24	13	8.0	17
5				a39	21	32	67	45	23	11	7.7	16
6				a38	21	32	66	44	22	9.7	7.1	15
7				38	22	32	66	44	21	9.0	8.0	14
8				a38	22	32	64	43	21	9.0	11	13
9				a37	21	30	63	41	20	12	12	13
10				a37	20	28	62	38	19	12	11	13
11				a36	19	26	60	36	19	12	16	15
12				a36	19	24	60	a35	18	11	19	21
13				a35	21	26	60	a34	17	11	17	24
14				a34	24	31	62	33	17	11	17	24
15				a33	23	38	64	a32	17	11	17	23
16				a32	22	44	68	a30	17	13	17	21
17				a30	22	44	71	a29	16	15	17	21
18				a31	22	44	69	28	15	14	18	25
19				a31	23	58	64	27	16	13	17	24
20				a30	23	61	62	26	15	12	17	24
21				a30	22	61	63	a26	14	13	21	23
22				a28	21	61	63	a25	14	14	25	24
23				a26	20	60	59	h25	14	14	28	51
24				a24	20	61	57	a26	13	13	25	91
25				24	19	61	58	a27	12	12	23	114
26				24	18	60	58	28	13	11	21	116
27				24	18	59	58	28	14	11	20	111
28				24	22	58	56	28	13	10	21	100
29				23	-	57	53	30	13	11	22	91
30				22	-	57	52	30	12	11	22	84
31				22	-	62	-	30	-	10	21	-

a No gage-height record; discharge either interpolated or computed on basis of gage-height record for Lochloosa Lake at Lochloosa.
h Computed from staff-gage reading.

Discharge, in second-feet, of Lochloosa Lake outlet near Lochloosa, Fla., 1947-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	164	171	130	181	168	271	165	66	27	46	104
2	73	165	168	134	181	165	279	162	60	26	48	104
3	71	168	168	130	181	165	271	158	56	27	51	105
4	70	171	168	127	181	171	256	155	56	26	53	110
5	70	171	165	124	181	171	256	151	52	25	53	107
6	71	171	165	120	181	171	248	146	51	24	55	107
7	69	171	162	119	178	173	248	142	50	24	56	110
6	70	178	162	116	178	175	240	134	48	23	66	118
9	83	178	161	114	178	181	240	127	46	22	66	119
10	83	178	158	111	181	240	226	123	46	21	67	120
11	87	178	158	108	178	305	219	120	46	20	78	120
12	90	187	155	104	178	332	219	118	45	21	86	118
13	90	187	153	104	178	332	212	115	43	23	98	115
14	90	187	155	108	178	323	206	112	42	23	118	114
15	90	187	155	103	178	323	206	108	41	22	105	114
16	107	187	161	97	175	323	212	103	40	22	101	112
17	112	187	158	96	175	323	212	100	40	22	97	108
18	116	187	156	97	175	323	206	94	39	24	94	104
19	118	193	152	97	175	323	200	91	38	29	100	103
20	119	187	149	103	175	323	193	86	38	26	101	101
21	124	187	152	131	175	323	187	83	36	26	101	97
22	137	181	153	135	173	323	187	79	35	26	103	97
23	137	181	151	134	173	323	181	76	34	26	103	96
24	151	178	149	173	171	323	178	73	32	30	103	94
25	161	178	146	178	171	314	175	69	30	35	104	93
26	160	178	145	181	171	305	175	66	29	33	108	87
27	161	175	142	178	171	305	173	62	28	35	111	83
28	161	173	138	178	168	305	173	60	26	35	107	83
29	164	173	135	178	168	296	171	60	25	39	105	86
30	164	171	134	178	-	279	168	61	26	45	104	103
31	164	-	131	181	-	271	-	66	-	47	103	-

Monthly discharge, in second-feet, 1947-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January 1947	1,000	44	22	32.3		
February	596	24	18	21.3		
March	1,364	62	24	44.0		
April	1,866	71	52	62.2		
May	1,069	52	25	34.5		
June	529	28	12	17.6		
July	367.7	15	9.0	11.9		
August	513.9	28	7.1	16.6		
September	1,182	116	13	39.4		
Water year	-	-	-	-		
October 1947	3,439	164	69	111		
November	5,357	193	164	179		
December	4,776	171	131	154		
Calendar year 1947	22,059.6	193	7.1	60.4		
January 1948	4,067	181	96	131		
February	5,107	181	168	176		
March	8,377	332	165	270		
April	6,388	279	168	213		
May	3,265	165	60	105		
June	1,244	66	25	41.5		
July	854	47	20	27.5		
August	2,691	118	46	86.8		
September	3,132	120	83	104		
Water year 1947-48	48,697	332	20	133		

South Fork Black Creek near Penney Farms, Fla.

Location.- Water-stage recorder, lat. 29°59', long. 81°51', in sec. 13, T. 6 S., R. 24 E., at bridge on State Highway 16, half a mile downstream from Greens Creek, 2½ miles west of Penney Farms, and 10 miles west of Green Cove Springs. Datum of gage is 9.82 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 160 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 7,130 second-feet Oct. 25 (gage height, 20.36 feet); minimum, 36 second-feet June 8 (gage height, 1.29 feet).

1939-48: Maximum discharge, 13,900 second-feet Oct. 19, 1944 (gage height, 26.33 feet, from floodmarks), from rating curve extended above 8,000 second-feet; minimum, 15 second-feet Nov. 8-10, 13, 14, 1940; minimum gage height, 0.83 foot June 10, 11 1945.

Remarks.- Records good except those for periods of no gage-height record, which are poor.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1-25				Oct. 26 to Sept. 30			
2.9	143	14.0	1,570	1.3	36	4.2	266
7.8	627	15.0	2,010	1.7	59	7.8	627
11.4	1,030	15.6	2,490	2.8	143		
13.0	1,290	18.3	5,100				

Note.- Same as preceding table above 7.8 feet.

Disohsrge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	197	215	131	123	774	119	198	70	45	224	a417	103
2	174	1,920	127	123	534	119	1,250	68	62	257		247
3	151	1,840	127	123	355	115	1,340	67	48	193		f242
4	143	921	123	119	286	346	606	65	42	111		f306
5	147	514	123	115	237	1,010	435	64	40	100		206
6	316	355	119	111	211	997	276	146	38	96		172
7	763	286	115	107	172	753	232	103	37	100		159
8	944	554	114	103	185	970	202	74	36	67		f412
9	837	826	127	103	202	816	180	66	37	153		f257
10	454	474	123	100	504	2,960	164	63	38	375	232	176
11	306	355	127	100	554	4,810	151	61	a40	185	a214	147
12	266	944	151	96	365	1,980	143	61	a41	185	a223	127
13	336	1,040	172	100	286	1,060	131	61	a42	286	a252	115
14	326	606	228	119	242	648	127	60	a49	176	232	111
15	296	405	224	107	206	444	155	57	a50	115	211	215
16	648	316	336	103	185	355	164	54	50	107	f306	198
17	837	266	326	103	168	316	143	54	86	90	f257	168
18	616	237	252	131	159	326	123	52	56	86	a387	151
19	385	336	206	127	147	286	115	52	48	119		119
20	286	286	185	219	139	247	111	51	76	151		96
21	232	242	228	753	135	219	103	a50	107	123		86
22	197	224	355	944	139	198	100	a50	49	103		80
23	178	211	316	524	202	189	96	a54	40	107		90
24	252	198	247	2,370	189	176	92	a55	40	147		127
25	5,100	180	211	2,400	164	159	90	a51	93	257	206	135
26	2,640	168	180	983	147	151	86	a48	219	185	180	107
27	1,030	164	164	544	135	155	82	a46	131	172	185	100
28	606	155	147	395	127	215	81	a45	72	189	155	123
29	405	147	139	355	127	198	76	a45	53	a204	131	111
30	306	139	135	296	-	164	72	a47	58	a217	111	155
31	252	-	127	454	-	159	-	a47	-	a242	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	19,626	5,100	143	633	3.96	4.56
November	14,524	1,920	139	484	3.02	3.38
December	5,686	355	115	183	1.14	1.32
Calendar year 1947	94,807	8,000	38	260	1.62	22.04
January	12,350	2,400	96	398	2.49	2.87
February	7,276	774	127	251	1.57	1.69
March	20,660	4,810	115	666	4.16	4.80
April	7,124	1,340	72	237	1.48	1.66
May	1,887	146	45	60.9	.381	.44
June	1,833	219	36	61.1	.382	.43
July	5,122	375	67	165	1.03	1.19
August	9,451	417	94	305	1.91	2.20
September	4,841	412	80	161	1.01	1.13
Water year 1947-48	110,380	5,100	36	302	1.89	25.67

Peak discharge (base, 1,300 sec.-ft.).- Oct. 25 (12:30 p.m.) 7,130 sec.-ft.; Nov. 2 (7 p.m.) 4,520 sec.-ft.; Jan. 24 (8 p.m.) 4,710 sec.-ft.; Mar. 11 (1:30 a.m.) 5,970 sec.-ft.; Apr. 2 (9 p.m.) 2,010 sec.-ft.

a No gage-height record; discharge computed on basis of records for North Fork Black Creek near Middleburg.

f Computed on basis of partly estimated gage-height record.

North Fork Black Creek near Middleburg, Fla.

Location.- Staff gage, lat. 30°06'50", long. 81°54'35", in sec. 33, T. 4 S., R. 24 E., a third of a mile upstream from Big Branch, 4 miles northwest of Middleburg, and 6¾ miles upstream from confluence with South Fork. Datum of gage is 0.62 foot above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 170 square miles.

Records available.- November 1931 to September 1948.

Average discharge.- 16 years (1932-48), 178 second-feet.

Extremes.- Maximum discharge during year, 7,290 second-feet Mar. 10 (gage height, 20.12 feet, from floodmark; may have been exceeded on Oct. 25); minimum, 12 second-feet May 25-28, June 7-13; minimum gage height, 0.72 foot May 26-28, June 8-11.

1931-48: Maximum discharge, 10,400 second-feet Oct. 19, 1944 (gage height, 23.76 feet, from floodmark), from rating curve extended above 5,000 second-feet; minimum observed, 3.6 second-feet June 8, 1935 (gage height, 0.26 foot).

Maximum stage known, 25.3 feet in June 1919, from information by old resident (discharge, 15,000 second-feet, from rating curve extended above 5,000 second-feet).

Remarks.- Records good except those for periods of no gage-height record, which are poor. Gage read twice daily.

Revisions (water years).- W 852: 1933(M). W 952: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 12-30)

0.7	11	1.0	25	4.3	333	14.5	1,850
.8	14	1.5	61	6.2	478	15.3	2,350
.9	19	2.5	152	13.4	1,510	18.9	6,050

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a289	297	142	123	853	123	1,080	37	21	78	710	61
2	a254	654	132	114	895	114	4,500	34	25	162	597	123
3	a218	981	123	110	513	110	4,290	33	23	162	867	142
4	182	881	110	100	356	409	1,640	31	18	123	1,240	172
5	256	409	105	92	277	796	1,030	30	18	87	1,300	162
6	409	349	96	87	223	1,150	501	31	13	61	1,900	132
7	1,450	277	100	78	192	1,010	364	30	12	43	1,580	105
8	1,900	578	92	78	172	881	287	28	12	33	1,010	92
9	1,670	1,220	87	74	234	1,090	213	26	12	34	611	82
10	1,100	1,170	105	69	568	5,740	172	24	12	69	424	266
11	611	625	132	69	810	5,430	142	23	12	110	333	416
12	390	2,390	192	69	554	3,670	123	23	12	105	287	256
13	325	2,640	256	69	390	1,900	105	22	12	162	341	213
14	277	1,430	396	100	307	1,230	96	20	18	172	297	132
15	468	867	489	92	245	725	132	20	18	105	202	223
16	2,260	526	639	87	192	439	478	18	14	74	192	377
17	3,470	390	867	92	162	356	597	16	14	53	341	349
18	1,670	325	654	142	152	371	316	16	50	46	995	256
19	1,100	439	403	182	132	396	182	15	40	87	1,360	182
20	597	668	316	256	123	409	123	15	40	82	668	123
21	390	501	371	439	114	349	100	13	74	142	501	82
22	316	396	682	554	114	277	82	13	53	92	501	74
23	256	349	838	489	182	223	69	17	33	57	513	87
24	739	307	597	924	202	182	65	13	24	232	349	142
25	a6,000	266	396	1,900	202	152	61	12	57	1,260	223	192
26	3,260	213	307	1,430	202	132	57	12	96	1,410	182	223
27	1,470	202	234	796	172	132	53	12	53	810	162	182
28	1,010	182	182	424	152	424	50	12	41	501	132	162
29	597	172	162	383	132	390	45	14	29	396	105	132
30	409	152	142	409	-	266	42	19	29	416	74	114
31	349	-	132	597	-	356	-	18	-	582	57	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	33,692	6,000	182	1,087	6.41	7.37
November	19,856	2,640	152	662	3.89	4.34
December	9,479	867	87	306	1.80	2.07
Calendar year 1947	132,697	7,810	12	364	2.14	29.02
January	10,428	1,900	69	336	1.98	2.28
February	8,822	895	114	304	1.79	1.93
March	29,232	5,740	110	943	5.55	6.39
April	16,995	4,500	42	566	3.33	3.72
May	647	37	12	20.9	.123	.14
June	885	96	12	29.5	.174	.19
July	7,746	1,410	33	250	1.47	1.69
August	18,054	1,900	57	582	3.42	3.95
September	5,254	416	61	175	1.03	1.15
Water year 1947-48	161,090	6,000	12	440	2.59	35.22

a No gage-height record; discharge interpolated, or computed on basis of records for South Fork Black Creek near Penney Farms.

Moultrie Creek near St. Augustine, Fla.

Location.- Water-stage recorder, and wooden control, lat. 29°49'40", long. 81°21'00", in sec. 11, T. 8 S., R. 29 E., at bridge on Kings Road, two-fifths of a mile upstream from Fort Peyton Branch and 5 miles southwest of St. Augustine.

Drainage area.- 22 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 763 second-feet Mar. 11 (gage height, 7.92 feet); minimum, 0.5 second-foot May 26 to June 12.

1939-48: Maximum discharge, 1,370 second-feet Oct. 12, 1941 (gage height, 9.31 feet); minimum, 0.2 second-foot May 18, 22, 26, 30, June 1, 2, 1945.

Remarks.- Records fair except those for period of no gage-height record or period of unstable conditions, which are poor.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Unstable conditions Apr. 27 to June 2)

Oct. 1 to Apr. 26

2.2	3.2	3.0	25	5.8	118
2.3	4.6	3.7	40	6.0	162
2.4	6.4	4.6	61	6.4	273
2.5	8.7	5.3	75	7.7	694
2.7	15	5.5	84		
2.8	19	5.7	103		

June 3 to Sept. 30

2.5	0.5	3.1	20	5.8	113
2.6	1.2	3.6	34	6.0	152
2.7	2.6	4.1	46	6.2	204
2.8	5.0	5.0	65	6.9	430
2.9	8.6	5.4	79		
3.0	15	5.7	99		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	25	16	8.5		9.7	17	1.7	0.5	0.7	70	22
2	48	65	15	8.5		9.0	30	1.5	.5	.7	54	22
3	42	75	14	8.2		8.5	41	1.4	.5	1.4	49	24
4	36	66	13	7.8	53	11	37	1.3	.5	1.0	49	22
5	32	55	13	7.6		24	32	1.2	.5	.9	47	22
6	78	44	12	7.1		35	28	1.1	.5	.8	49	22
7	215	38	11	6.4		44	24	1.0	.5	.8	49	21
8	188	53	11	5.7		58	20	1.0	.5	.7	52	18
9	126	75	10	5.7		55	17	.9	.5	.7	52	16
10	90	66	9.7	5.3		363	14	.9	.5	1.0	46	12
11	74	59	9.7	5.0	42	678	12	.8	.5	1.3	41	13
12	75	114	9.7	4.8		530	10	.8	.5	1.4	52	10
13	82	94	10	4.8		359	8.5	.8	.7	1.4	62	11
14	71	76	12	4.6		249	7.3	.7	1.4	1.3	58	10
15	65	67	12	4.0		180	6.9	.7	.8	1.1	62	8.6
16	63	59	13		29	130	7.1	.7	.7	.9	58	7.4
17	61	50	13		27	95	6.2	.7	3.4	.8	47	7.4
18	57	45	12		24	78	6.9	.6	7.0	.8	47	5.9
19	50	56	12		21	68	6.9	.6	4.2	.8	53	4.4
20	43	53	11	42	19	61	6.0	.6	2.1	.8	61	3.7
21	37	47	14		17	53	5.3	.6	1.8	.9	56	3.0
22	33	43	17		15	45	5.0	.6	1.4	.9	49	5.6
23	30	39	16		14	38	4.6	.6	1.0	2.8	43	20
24	31	36	14		14	34	4.2	.6	.9	4.2	39	22
25	41	32	14		13	29	3.8	.6	.8	2.2	64	148
26	47	28	13		13	25	3.2	.5	.8	1.6	63	410
27	50	26	12	172	12	23	2.7	.5	.7	1.3	57	326
28	45	23	11		11	24	2.3	.5	.7	1.1	48	255
29	38	20	10		10	20	2.0	.5	.7	1.4	38	226
30	32	18	9.7		-	18	1.8	.5	.7	16	30	179
31	28	-	9.0		-	17	-	.5	-	94	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,964	215	28	63.4	2.88	3.32
November	1,547	114	18	51.6	2.35	2.62
December	378.8	17	9.0	12.2	.554	.64
Calendar year 1947	13,358.1	330	1.0	36.6	1.66	22.59
January	1,806.0	-	-	58.3	2.65	3.05
February	946	-	10	32.6	1.48	1.60
March	3,371.2	678	8.5	109	4.95	5.70
April	372.7	41	1.8	12.4	.564	.63
May	25.0	1.7	.5	.81	.037	.04
June	35.8	3.4	.5	1.19	.054	.06
July	145.7	94	.7	4.70	.214	.25
August	1,570	70	25	50.6	2.30	2.65
September	1,877.0	410	3.0	62.6	2.85	3.17
Water year 1947-48	14,039.2	678	.5	38.4	1.75	23.73

Peak discharge (base, 350 sec.-ft.).- Mar. 11 (8 a.m.) 763 sec.-ft.; Sept. 26 (8 to 11 a.m.) 430 sec.-ft.

Note.- No gage-height record Jan. 16 to Feb. 15, and unstable conditions Apr. 27 to June 2; discharge computed on basis of weather records and records for South Fork Black Creek near Penney Farms.

Lake Okeechobee, Fla.

Location.- Seven staff gages at various locations on rim of lake. Center of lake, lat. 26°57', long. 80°50', in southern Florida. Datum of gages is at mean sea level (levels by Corps of Engineers).

Records available.- October 1931 to September 1948 in reports of Geological Survey. 1915 to 1931 in reports or files of Everglades Drainage District.

Extremes.- Maximum weighted gage height observed during year, 18.77 feet Nov. 2; minimum weighted gage height observed, 13.04 feet June 29.
1931-48: Maximum gage height observed, 20.1 feet, present datum, Sept. 4, 1933; minimum observed, 10.3 feet, present datum, May 17, 1932.

Remarks.- Stage of lake regulated by gates at several lake outlets. Total usable capacity of lake, 1,320,000 acre-feet. Gages read once daily.

Cooperation.- Records furnished by Corps of Engineers.

Gage height, in feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.97	18.71	18.36	17.40	16.88	15.88	14.38	13.63	13.39	13.07	13.21	13.76
2	17.96	18.77	18.30	17.37	16.85	15.75	14.47	13.60	13.39	13.05	13.28	13.81
3	18.03	18.74	18.23	17.37	16.83	15.74	14.58	13.62	13.37	13.07	13.34	13.88
4	18.10	18.71	18.20	17.32	16.76	15.71	14.49	13.61	13.32	13.09	13.34	13.88
5	18.11	18.71	18.15	17.34	16.74	15.72	14.48	13.54	13.31	13.08	13.36	13.88
6	18.28	18.67	18.12	17.24	16.74	15.65	14.44	13.59	13.31	13.12	13.37	13.89
7	18.22	18.65	18.09	17.21	16.71	15.60	14.40	13.51	13.31	13.09	13.43	13.89
8	18.21	18.60	18.05	17.16	16.67	15.60	14.36	13.56	13.30	13.12	13.42	13.97
9	18.27	18.69	18.04	17.14	16.65	15.54	14.32	13.55	13.26	13.08	13.41	13.97
10	18.30	18.55	17.99	17.11	16.65	15.54	14.31	13.52	13.28	13.12	13.43	13.96
11	18.33	18.47	18.00	17.06	16.61	15.52	14.27	13.54	13.27	13.09	13.44	13.99
12	18.58	18.46	17.97	17.03	16.57	15.47	14.19	13.52	13.25	13.09	13.45	14.01
13	18.64	18.58	17.94	16.97	16.53	15.49	14.13	13.53	13.21	13.08	13.48	14.08
14	18.60	18.56	17.93	17.22	16.45	15.40	14.11	13.52	13.25	13.06	13.49	14.06
15	18.60	18.50	17.88	17.09	18.51	15.37	14.06	13.53	13.28	13.08	13.48	14.10
16	18.63	18.48	18.00	17.04	16.46	15.25	14.17	13.52	13.26	13.09	13.47	14.14
17	18.64	18.48	17.91	17.01	16.40	15.23	14.15	13.48	13.29	13.09	13.51	14.27
18	18.64	18.44	17.86	16.92	16.41	15.22	14.12	13.44	13.26	13.05	13.57	14.32
19	18.66	18.43	17.85	16.94	16.34	15.21	14.07	13.48	13.26	13.09	13.54	14.33
20	18.66	18.50	17.84	16.87	16.30	15.09	13.98	13.63	13.26	13.13	13.60	14.36
21	18.64	18.45	17.76	16.89	16.26	15.06	13.94	13.50	13.24	13.16	13.58	14.49
22	18.62	18.43	17.80	16.91	16.19	14.99	13.88	13.52	13.19	13.12	13.64	15.16
23	18.69	18.42	17.74	16.88	16.15	14.96	13.85	13.49	13.19	13.07	13.63	15.26
24	18.71	18.39	17.74	16.91	16.08	14.94	13.79	13.48	13.16	13.11	13.63	15.32
25	18.69	18.35	17.72	16.98	16.11	14.89	13.73	13.46	13.12	13.13	13.64	15.46
26	18.70	18.31	17.64	16.96	16.04	14.83	13.71	13.44	13.11	13.13	13.69	15.56
27	18.73	18.31	17.63	16.94	15.99	14.79	13.59	13.42	13.09	13.14	13.66	15.66
28	18.72	18.43	17.54	16.91	15.95	14.80	13.68	13.40	13.06	13.10	13.72	15.89
29	18.73	18.42	17.51	16.91	15.92	14.70	13.76	13.39	13.04	13.13	13.73	16.05
30	18.72	18.41	17.47	16.89	-	14.63	13.65	13.39	13.05	13.15	13.73	16.25
31	18.72	-	17.45	16.89	-	14.60	-	13.42	-	13.16	13.75	-

Note.- Figures in above table are weighted means of readings from 7 pages. All values are mean sea level datum.

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 25, 1 mile south of Palmdale. Datum of gage is 27.19 feet above mean sea level, datum of 1929.

Drainage area.- 305 square miles.

Records available.- April 1931 to September 1948.

Average discharge.- 17 years, 255 second-feet.

Extremes.- Maximum discharge observed during year, 14,500 second-feet Sept. 24 (gage height, 10.52 feet); no flow June 9, 10, 13, July 20-23.
1931-48: Maximum discharge observed, 16,400 second-feet Sept. 19, 1947 (gage height, 11.06 feet); no flow during periods in nearly every year.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Gage read once daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 30								July 31 to Sept. 30			
1.54	0	2.4	11	4.6	110	6.0	659	4.7	153	6.7	1,130
1.6	.1	2.6	17	4.8	137	6.3	928	5.1	246	6.9	1,480
1.8	1.9	2.8	25	5.0	177	6.5	1,170	5.6	391	7.2	2,200
1.9	2.7	2.9	28	5.3	258	6.7	1,500	6.1	574	7.8	4,070
2.2	5.4	4.0	73	5.5	333			6.3	695	8.4	6,260
2.3	7.5	4.4	94	5.7	445			6.5	879	10.3	13,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,320	512	312	155	a478	88	5.2	4.5	2.7	0.7	344	493
2	1,100	a495	333	146	445	83	5.4	a5.4	2.5	2.1	359	458
3	984	478	359	137	385	78	5.4	6.2	2.1	1.7	458	493
4	878	478	359	a130	385	73	a5.4	19	1.7	1.0	493	458
5	a831	415	333	122	359	68	5.3	25	1.2	.9	493	a576
6	784	385	a314	110	333	64	5.4	28	.8	.7	458	695
7	740	359	a294	101	292	a64	5.6	26	.6	.8	458	600
8	659	333	275	101	a284	64	6.2	23	.1	.8	a441	531
9	700	a304	a259	94	275	64	5.8	a16	0	.8	424	493
10	659	275	243	91	258	58	5.2	8.2	0	1.9	408	574
11	621	275	228	a87	258	56	a5.0	5.8	.1	a1.4	424	476
12	a660	258	228	83	243	52	4.7	2.9	.1	.8	424	a467
13	700	243	214	83	228	48	4.0	3.8	0	1.4	391	458
14	659	228	a208	137	214	a44	3.7	4.0	.3	1.5	344	476
15	659	228	201	146	a214	40	3.7	3.1	1.5	1.2	313	476
16	621	a270	201	146	214	36	5.0	1.9	1.9	.8	299	512
17	621	312	201	146	214	34	7.8	2.0	3.1	.3	344	829
18	659	445	214	a146	201	32	a9.4	2.1	4.9	a.2	359	1,290
19	a568	415	201	146	189	30	11	1.7	7.5	.1	359	a1,290
20	478	385	214	177	177	25	11	1.5	16	0	424	1,290
21	445	a372	a221	201	166	a24	12	1.5	16	0	441	1,130
22	415	359	228	177	a156	22	12	1.2	13	0	424	4,410
23	415	a346	258	189	146	21	11	1.0	8.9	0	441	9,760
24	385	333	a243	333	137	20	8.9	.8	5.2	.3	424	13,700
25	445	312	228	a606	122	16	5.0	.1	4.1	.5	424	10,600
26	1,170	292	228	878	116	15	4.5	.1	3.1	.5	408	6,660
27	1,500	312	214	928	101	12	4.5	1.0	2.2	.4	1,060	4,750
28	928	333	166	784	98	a10	6.7	1.5	1.7	.5	879	4,750
29	740	333	177	659	94	8.9	7.5	.8	1.2	.3	695	5,470
30	621	a322	166	621	-	7.1	5.8	1.2	1.0	12	574	4,750
31	548	-	a160	512	-	6.2	-	2.9	-	153	531	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	22,513	1,500	385	726	2.38	2.75
November	10,407	512	228	347	1.14	1.27
December	7,480	359	160	241	.790	.91
Calendar year 1947	257,502.7	14,500	.5	706	2.31	31.44
January	8,372	928	91	270	.885	1.02
February	6,782	478	94	234	.767	.83
March	1,263.2	88	6.2	40.7	.133	.15
April	198.1	12	3.7	6.60	.022	.02
May	202.2	28	.1	6.52	.021	.02
June	103.5	16	0	3.45	.011	.01
July	186.6	153	0	6.02	.020	.02
August	14,318	1,060	299	462	1.51	1.75
September	78,915	13,700	458	2,630	8.62	9.62
Water year 1947-48	150,740.6	13,700	0	412	1.35	18.37

a No gage-height record; discharge interpolated.

Indian Prairie Canal near Okeechobee. Fla.

Location.- Water-stage recorder, lat. 27°04', long. 80°59', in sec. 24, T. 39 S., R. 33 E., at bridge on State Highway 78, 2 miles upstream from shore of Lake Okeechobee corresponding to lake elevation of 12.5 feet above mean sea level, and 15 miles southwest of town of Okeechobee. Datum of gage is at mean sea level, unadjusted (levels by Corps of Engineers).

Records available.- June 1939 to September 1948. April 1931 to February 1933 at site 3 miles upstream.

Extremes.- Maximum discharge during year, 1,670 second-feet Sept. 29; maximum gage height, 19.10 feet Oct. 12; no flow Mar. 16 to July 3.

1931-33, 1939-48: Maximum discharge, that of Sept. 29, 1948; maximum gage height, 21.00 feet Sept. 15, 16, 1932, site and datum then in use; no flow during several periods in some years.

Remarks.- Records fair except those for period of unstable conditions, which are poor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090									0	242	311
2	1,080	610								0	237	412
3	1,080									0	289	371
4	1,070	592		130						19	253	314
5	1,070									67	230	263
6	1,060				290					116	275	321
7	1,060									141	295	380
8			310	92		50				147	240	424
9										188	186	448
10		500								247	158	442
11										237	151	418
12					235					223	162	396
13	950									230	168	418
14				70						218	164	430
15										206	151	460
16						0				202	213	743
17						0				202	283	875
18			243			0				211	352	955
19						0				223	359	920
20		-			170	0				240	384	875
21						0				318	342	902
22						0				292	292	1,460
23						0				260	280	1,590
24		400				0				318	424	1,420
25	740		190	220		0				308	566	1,380
26						0				321	513	1,330
27						0				392	592	1,420
28						0				345	769	1,500
29						0				342	610	1,590
30					-	0				324	460	1,500
31		-			-	0				283	338	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	27,790	1,090	-	896	55,120
November	14,122	-	-	471	28,010
December	7,983	-	-	258	15,830
Calendar year 1947	157,326.2	1,500	0	431	312,100
January	4,262	-	-	137	8,450
February	6,315	-	-	218	12,530
March	750	-	0	24.2	1,490
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	6,620	392	0	214	13,130
August	9,978	769	151	322	19,790
September	24,358	1,590	263	812	48,310
Water year 1947-48	102,178	1,590	0	279	202,700

Note.- Unstable conditions Oct. 1 to July 3; discharge computed on basis of 6 discharge measurements, gage heights, engineer's notes, and weather records. No gage-height record Dec. 26 to Jan. 7.

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 Lake Kissimmee and Vero Bridge on State Highway 60. Auxiliary staff gage at highway bridge. Datum of gage is 1.52 feet below mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 1,850 square miles.

Records available.- October 1933 to September 1948.

Average discharge.- 15 years, 1,172 second-feet.

Extremes.- Maximum discharge during year, 6,870 second-feet Sept. 30; maximum gage height, 57.70 feet Oct. 13, from recorded range in stage; minimum discharge, 676 second-feet Aug. 1 (gage height, 50.58 feet).

1933-48: Maximum discharge observed, 7,150 second-feet June 24, 1934; maximum gage height, that of Oct. 13, 1947; no flow Sept. 3, 4, 1935, caused by hurricane blowing upstream; minimum gage height observed, 46.10 feet Sept. 4, 1935.

Remarks.- Records fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-29)

Oct. 1 to Aug. 1				Aug. 2 to Sept. 30			
50.9	730	54.8	2,670	51.0	751	54.6	2,150
51.4	875	55.6	3,870	52.6	1,110	54.7	2,310
52.6	1,370	57.2	6,640	53.4	1,380	56.3	7,020
54.2	2,220			54.1	1,720		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,010	6,450	4,540	2,790	2,860	2,350	1,870	1,670	1,190	822	730	1,030
2	6,010	6,450	4,540	2,860	2,790	2,280	1,920	1,620	1,190	822	751	1,030
3	6,010	6,270	4,370	2,790	2,790	2,280	1,920	1,620	1,190	822	751	1,030
4	6,010	6,270	4,200	2,790	2,730	2,280	1,870	1,620	1,150	806	792	1,030
5	6,220	6,270	4,120	2,790	2,730	2,280	1,870	1,620	1,110	791	792	1,030
6	6,220	6,090	4,120	2,670	2,730	2,160	1,870	1,570	1,110	806	792	1,050
7	6,220	6,090	4,030	2,670	2,730	2,160	1,870	1,570	1,070	791	792	1,050
8	6,220	5,910	3,950	2,570	2,730	2,220	1,820	1,570	1,070	791	813	1,050
9	6,220	5,910	3,870	2,570	2,670	2,220	1,820	1,570	1,070	791	813	1,080
10	6,220	5,730	3,870	2,490	2,730	2,220	1,820	1,520	1,070	791	792	1,080
11	6,430	5,560	3,790	2,490	2,670	2,220	1,770	1,570	1,030	776	792	1,080
12	6,640	5,560	3,790	2,420	2,670	2,220	1,720	1,520	1,030	764	792	1,080
13	6,850	5,560	3,790	2,420	2,570	2,280	1,720	1,520	991	776	792	1,110
14	6,850	5,390	3,710	2,670	2,670	2,220	1,720	1,470	991	776	813	1,110
15	6,640	5,390	3,550	2,570	2,670	2,100	1,770	1,470	991	776	813	1,110
16	6,640	5,220	3,630	2,490	2,570	2,100	1,770	1,420	991	764	813	1,110
17	6,640	5,220	3,630	2,420	2,570	2,100	1,770	1,420	991	764	834	1,110
18	6,640	5,220	3,630	2,420	2,570	2,160	1,770	1,370	991	751	856	1,110
19	6,640	5,050	3,550	2,420	2,490	2,100	1,770	1,370	991	764	856	1,140
20	6,430	5,050	3,470	2,350	2,490	2,100	1,720	1,370	952	751	878	1,140
21	6,430	5,050	3,470	2,350	2,490	2,100	1,720	1,320	932	751	900	1,170
22	6,430	4,880	3,550	2,420	2,490	2,040	1,670	1,320	913	740	922	2,010
23	6,430	4,880	3,390	2,350	2,490	2,040	1,670	1,270	913	740	944	2,100
24	6,430	4,710	3,310	2,490	2,420	2,040	1,620	1,270	894	730	967	2,550
25	6,640	4,710	3,310	2,670	2,420	2,040	1,620	1,270	875	740	990	3,120
26	6,640	4,710	3,310	2,730	2,350	1,980	1,570	1,270	857	740	990	3,720
27	6,640	4,710	3,230	2,670	2,350	1,980	1,670	1,230	839	740	1,010	4,320
28	6,640	4,880	3,160	2,730	2,350	2,040	1,720	1,190	839	730	1,010	5,520
29	6,640	4,880	3,000	2,730	2,350	2,040	1,720	1,190	806	730	1,030	6,420
30	6,640	4,710	3,000	2,730	-	1,980	1,720	1,190	806	740	1,030	6,870
31	6,640	-	2,930	2,790	-	1,870	-	1,190	-	740	1,030	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	199,960	6,850	6,010	6,450	3.49	4.02
November	162,780	6,450	4,710	5,426	2.93	3.27
December	113,810	4,540	2,930	3,671	1.98	2.29
Calendar year 1947	938,545	6,850	581	2,571	1.39	18.88
January	80,320	2,860	2,350	2,591	1.40	1.61
February	75,140	2,860	2,350	2,591	1.40	1.51
March	66,200	2,350	1,870	2,135	1.15	1.33
April	52,850	1,920	1,570	1,762	.952	1.06
May	44,160	1,670	1,190	1,425	.770	.89
June	29,843	1,190	806	995	.538	.60
July	23,816	822	730	768	.415	.48
August	26,880	1,030	730	867	.469	.54
September	59,360	6,870	1,030	1,979	1.07	1.19
Water year 1947-48	935,119	6,870	730	2,555	1.38	18.79

Note.- Discharge *for* period Oct. 1 to Nov. 15 computed on basis *of recorded range* in stage and gage-height record for station on Lake Kissimmee and Kissimmee River at Fort Kissimmee.

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 70, 10 miles west of Okeechobee. Datum of gage is 1.33 feet below mean sea level, datum of 1929.

Drainage area.- 3,260 square miles.

Records available.- October 1930 to September 1948.

Average discharge.- 18 years, 1,913 second-feet.

Extremes.- Maximum discharge during year, 15,800 second-feet Sept. 27-30; maximum gage height, 28.94 feet Sept. 30; minimum discharge, 1,160 second-feet June 30 to July 2; minimum gage height, 21.08 feet July 1.

1930-48: Maximum discharge, that of Sept. 27-30, 1948; maximum gage height, 29.33 feet Sept. 9, 1933, 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.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 5 to Jan. 7)

Oct. 1 to Dec. 21

25.9	4,420
26.6	5,920
27.2	8,120
27.9	11,000

Dec. 22 to Sept. 30

21.1	1,160	25.7	4,510
23.8	2,050	26.6	6,800
24.5	2,520	28.5	14,200
25.1	3,330	28.9	15,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,000	7,720	5,200	4,280	4,510	3,170	2,220	1,880	1,540	1,160	1,440	2,160
2	10,500	7,320	4,990	4,280	4,510	3,170	2,220	1,880	1,540	1,160	1,440	2,220
3	10,500	7,320	4,990	4,280	4,280	3,170	2,220	1,850	1,540	1,190	1,470	2,220
4	10,100	7,320	4,990	4,070	4,280	3,020	2,220	1,850	1,510	1,220	1,510	2,280
5	9,740	6,930	4,990	4,070	4,280	3,020	2,220	1,820	1,510	1,260	1,510	2,350
6	10,100	6,930	4,990	4,070	4,280	3,020	2,220	1,820	1,540	1,290	1,540	2,350
7	10,100	6,930	4,990	4,070	4,070	3,020	2,220	1,790	1,510	1,350	1,540	2,430
8	9,740	6,560	4,990	3,870	4,070	3,020	2,160	1,790	1,510	1,380	1,570	2,750
9	9,740	6,560	4,990	3,870	4,070	2,880	2,160	1,760	1,510	1,410	1,570	2,880
10	9,740	6,560	4,790	3,870	4,070	2,880	2,160	1,760	1,470	1,440	1,600	2,880
11	9,740	6,560	4,790	3,870	4,070	2,880	2,160	1,760	1,510	1,510	1,600	3,020
12	9,740	6,560	4,790	3,680	4,070	2,880	2,100	1,730	1,470	1,570	1,630	3,170
13	9,740	6,560	4,790	3,680	3,870	2,750	2,100	1,730	1,470	1,630	1,630	3,330
14	9,740	6,560	4,600	3,870	3,870	2,750	2,100	1,690	1,470	1,660	1,630	3,500
15	9,740	6,220	4,600	3,870	3,870	2,750	2,050	1,690	1,470	1,690	1,630	3,500
16	9,330	6,220	4,600	3,680	3,680	2,630	2,100	1,660	1,440	1,690	1,660	3,870
17	8,930	5,920	4,600	3,680	3,680	2,630	2,100	1,660	1,440	1,660	1,690	3,870
18	8,930	5,920	4,600	3,680	3,680	2,630	2,100	1,630	1,440	1,660	1,730	3,870
19	8,930	5,920	4,600	3,680	3,680	2,630	2,100	1,660	1,410	1,630	1,730	3,680
20	8,530	5,920	4,600	3,680	3,680	2,520	2,050	1,660	1,380	1,600	1,730	3,680
21	8,530	5,660	4,420	3,870	3,500	2,520	2,050	1,630	1,350	1,570	1,730	3,870
22	8,120	5,660	4,510	4,280	3,500	2,430	2,050	1,630	1,320	1,540	1,730	4,990
23	8,120	5,660	4,510	4,280	3,500	2,430	2,000	1,630	1,290	1,510	1,730	6,800
24	8,120	5,420	4,510	4,510	3,500	2,430	2,000	1,630	1,290	1,470	1,730	8,980
25	8,120	5,420	4,510	4,750	3,500	2,430	2,000	1,600	1,260	1,440	1,760	13,300
26	8,120	5,420	4,510	4,750	3,330	2,350	1,960	1,600	1,220	1,380	1,790	14,600
27	7,720	5,420	4,510	4,750	3,330	2,350	1,960	1,600	1,220	1,380	1,850	15,400
28	7,720	5,420	4,280	4,750	3,330	2,350	1,960	1,570	1,190	1,380	1,880	15,800
29	8,120	5,420	4,280	4,510	3,170	2,280	1,920	1,570	1,190	1,350	1,960	15,400
30	8,120	5,200	4,280	4,510	-	2,280	1,920	1,570	1,160	1,410	2,050	15,800
31	7,720	-	4,280	4,510	-	2,280	-	1,540	-	1,440	2,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	283,140	11,000	7,720	9,134	2.80	3.23
November	187,210	7,720	5,200	6,240	1.91	2.14
December	145,080	5,200	4,280	4,680	1.44	1.66
Calendar year 1947	1,512,500	13,000	1,020	4,144	1.27	17.24
January	127,570	4,750	3,680	4,115	1.26	1.45
February	111,230	4,510	3,170	3,836	1.18	1.27
March	83,550	3,170	2,280	2,695	.827	.95
April	62,800	2,220	1,920	2,093	.642	.72
May	52,640	1,880	1,540	1,698	.521	.60
June	42,170	1,540	1,160	1,406	.431	.48
July	45,030	1,690	1,160	1,453	.446	.51
August	52,160	2,100	1,440	1,683	.516	.60
September	174,950	15,800	2,160	5,632	1.79	2.00
Water year 1947-48	1,367,530	15,800	1,160	3,736	1.15	15.61

Mary Jane-Hart Canal near Narcoossee, Fla.

Location.- Staff gage, lat. 28°23', long. 81°11', in sec. 23, T. 24 S., R. 31 E., at road bridge, 4.4 miles by road from State Highway 15 and 8.4 miles northeast of Narcoossee.
Records available.- May 1942 to September 1948 (discharge measurements only).
Extremes.- 1942-48: Maximum discharge measured, 448 second-feet Oct. 30, 1947; no flow May 24, 1945.
Remarks.- Measurements are made about once monthly.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 2	385	Jan. 5	175	Apr. 22	60.5	Aug. 9	238
30	448	Feb. 14	253	May 24	28.8	Sept.17	231
Dec. 11	226	Mar. 19	158	July 1	10.0		

Hart-East Tohopekaliga Canal near Narcoossee, Fla.

Location.- Staff gage, lat. 28°20. long. 81°13', in sec. 4, T. 25 S., R. 31 E., at bridge on State Highway 15 and 3 miles north of Narcoossee.
Records available.- May 1942 to September 1948 (discharge measurements only).
Extremes.- 1942-48: Maximum discharge measured, 934 second-feet Sept. 19, 1945; maximum reverse flow measured, 0.25 second-foot Feb. 26, 1946 (affected by wind).
Remarks.- Measurements are made about once monthly at bridge on State Highway 15.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 2	687	Jan. 5	229	Apr. 22	75.5	Aug. 9	277
30	629	Feb. 14	332	May 24	11.2	Sept.17	302
Dec. 11	294	Mar. 19	199	July 1	2.46		

East Tohopekaliga-Tohopekaliga Canal near St. Cloud, Fla.

Location.- Staff gage, lat. 28°16', long. 81°18', in sec. 34, T. 25 S., R. 30 E., at highway bridge 300 feet below outlet of East Tohopekaliga Lake and 1¾ miles northwest of St. Cloud.
Records available.- May 1942 to September 1948 (discharge measurements only).
Extremes.- 1942-48: Maximum discharge measured, 1,140 second-feet Sept. 19, 1945; minimum measured, 0.56 second-foot June 22, 1943.
Remarks.- Measurements are made about once monthly.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 3	840	Feb. 10	532	July 1	57.3
30	872	Mar. 16	392	Aug. 11	122
Dec. 11	606	Apr. 19	280	Sept.18	275
Jan. 6	476	May 25	131		

Tohopekaliga-Cypress Canal near St. Cloud, Fla.

Location.- Staff gage, lat. 28°08', long. 81°20', in sec. 18, T. 27 S., R. 30 E., at outlet of Lake Tohopekaliga, 8¾ miles southwest of St. Cloud.
Records available.- May 1942 to September 1948 (discharge measurements only)
Extremes.- 1942-48: Maximum discharge measured, 2,290 second-feet Sept. 22, 1945; minimum measured, 5.27 second-feet June 23, 1943.
Remarks.- Measurements are made about once monthly a quarter of a mile below Lake Tohopekaliga.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 3	1,970	Feb. 17	1,050	July 2	153
29	1,580	Mar. 18	756	Aug. 10	140
Dec. 10	1,070	Apr. 21	494	Sept.18	453
Jan. 9	773	May 28	329		

Hatchineha-Kissimmee Canal near Lake Wales, Fla.

Location.- Staff gage, lat. 27°58', long. 81°22', in sec. 12, T. 29 S., R. 29 E., at Camp Mack, 2 miles downstream from Hatchineha Lake and 14 miles east of Lake Wales.
Records available.- May 1942 to September 1948 (discharge measurements only).
Extremes.- 1942-48: Maximum discharge measured, 2,400 second-feet Sept. 21, 1945; minimum measured, 89.8 second-feet June 8, 1944.
Remarks.- Measurements are made near Camp Mack.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 29	2,030	Mar. 25	990	July 1	280
Jan. 6	1,340	Apr. 22	963	Aug. 13	664
Feb. 10	1,780	May 26	518	Sept.20	968

Reedy Creek near Loughman, Fla.

Location.- Water-stage recorder, lat. 28°16', long. 81°32', in sec. 32, T. 25 S., R. 28 E., at bridge on U. S. Highways 17 and 92, 2½ miles northeast of Loughman and 5 miles downstream from Davenport Creek. Datum of gage is 64.49 feet above mean sea level datum of 1929.

Drainage area.- 190 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 484 second-feet Sept. 24 (gage height, 3.89 feet); minimum, 4.9 second-feet June 25 (gage height, 1.06 feet).

1939-48: Maximum discharge, 706 second-feet Oct. 22, 23, 1944, from rating curve extended above 380 second-feet; maximum gage height, 4.02 feet Oct. 22, 23, 1944, Sept. 20, 21, 1947; minimum discharge, 2.6 second-feet June 2, 3, 1945; minimum gage height, 0.78 foot June 3, 1945.

Remarks.- Records fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 7

1.0	4.4	2.2	21	2.8	91
1.2	6.0	2.3	27	3.2	197
1.5	8.8	2.5	44	3.4	259
1.9	13	2.6	54	3.6	330
2.1	17	2.7	69		

June 8 to Sept. 30

1.1	5.2	2.1	26	3.0	164
1.4	7.8	2.3	39	3.3	251
1.6	10	2.4	48	3.7	396
1.8	14	2.5	60	3.9	489
1.9	17	2.6	76		
2.0	21	2.8	116		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	May	June	July	Aug.	Sept.
1	300	194	a153	69	240	63	64	19	7.4	24	197	226
2	286	189	a147	69	227	62	62	18	6.8	28	220	211
3	262	180	a141	66	212	60	58	17	6.0	36	242	200
4	246	175	a135	64	200	63	53	16	5.4	47	264	214
5	233	169	a130	62	189	69	51	16	5.1	65	271	206
6	218	164	a124	60	180	71	48	15	5.0	74	274	197
7	a211	159	a118	57	169	76	46	14	5.0	66	274	189
8	a204	161	a112	56	161	84	43	14	5.4	60	264	194
9	a198	161	a107	54	151	96	41	14	5.3	60	251	191
10	191	153	h101	53	148	99	39	15	5.7	70	248	191
11	189	148	a96	52	143	101	38	15	8.5	78	258	194
12	189	156	91	51	138	104	35	14	8.5	86	258	194
13	189	153	89	58	135	107	33	12	9.0	91	277	189
14	189	151	89	73	133	109	30	12	9.6	101	288	183
15	189	146	87	80	125	107	30	11	8.9	99	312	175
16	186	143	94	84	122	107	31	10	8.0	99	312	167
17	186	183	91	96	114	101	30	9.4	7.2	93	308	162
18	180	206	91	122	112	94	28	8.6	7.8	89	319	152
19	175	197	91	130	107	89	25	8.2	7.7	91	326	146
20	166	186	94	151	101	84	23	8.2	7.0	99	323	142
21	169	183	96	183	96	82	22	7.5	6.5	132	338	152
22	203	180	96	191	89	73	20	6.9	6.4	130	414	308
23	206	175	96	197	84	71	18	7.1	5.8	130	418	455
24	200	172	96	276	82	64	17	8.9	5.3	146	405	479
25	218	169	91	300	78	62	16	8.3	5.6	146	380	455
26	221	164	89	319	73	57	15	7.4	14	146	352	405
27	224	169	84	323	69	57	17	6.5	19	144	326	372
28	227	166	80	312	68	66	20	6.0	20	149	302	422
29	224	164	78	290	64	64	20	5.8	22	156	277	440
30	218	a158	76	269	-	66	20	6.2	22	164	258	455
31	206	-	73	256	-	66	-	6.4	-	183	242	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,503	300	166	210	1.11	1.27
November	5,074	206	143	169	.889	.99
December	3,136	153	73	101	.532	.61
Calendar year 1947	45,515.6	518	9.2	125	.658	8.90
January	4,423	323	51	143	.753	.87
February	3,810	240	64	131	.689	.75
March	2,474	109	57	79.8	.420	.48
April	993	64	15	33.1	.174	.19
May	343.4	19	5.8	11.1	.058	.07
June	265.9	22	5.0	8.86	.047	.05
July	3,082	183	24	99.4	.523	.60
August	9,198	418	197	297	1.56	1.80
September	7,666	479	142	256	1.35	1.50
Water year 1947-48	46,968.3	479	5.0	128	.674	9.18

Peak discharge (base, 240 sec.-ft.).- Jan. 27 (3 a.m.) 326 sec.-ft.; Aug. 22 (3 p.m.) 427 sec.-ft.; Sept. 24 (10 a.m.) 484 sec.-ft.

a No gage-height record; discharge interpolated.
h Computed from staff-gage reading.

Cypress Creek at Vineland, Fla.

Location.- Water-stage recorder, lat. 28°24', long. 81°31', in sec. 21, T. 24 S., R. 28 E., at bridge on State Highway 535, 1 mile west of Vineland. Datum of gage is 96.14 feet above mean sea level, datum of 1929 (levels by Orlando Utilities Commission).

Records available.- August 1945 to September 1948.

Extremes.- Maximum discharge during year, 69 second-feet Oct. 25 (gage height, 3.25 feet); no flow May 22 to June 20, June 22 to July 9; minimum gage height, 0.67 foot June 17.

1945-48: Maximum discharge observed, 181 second-feet Sept. 16, 1945 (gage height, 3.83 feet); minimum, that of May 22 to June 20, June 22 to July 9, 1948; minimum gage height, that of June 17, 1948.

Remarks.- Records good above 15 second-feet and fair below.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	37	24	10	34	14	10	2.4	0	0	a5.1	21
2	45	34	23	11	32	13	9.3	2.0	0	0	5.2	19
3	42	33	21	10	31	13	8.5	1.9	0	0	5.0	18
4	41	31	20	9.3	29	14	8.0	1.7	0	0	4.3	17
5	39	29	19	9.0	28	15	7.2	1.6	0	0	3.4	16
6	38	28	18	8.5	26	16	7.0	1.5	0	0	4.2	16
7	36	27	16	8.3	26	19	6.5	1.3	0	0	5.7	16
8	34	29	16	8.3	24	24	6.0	1.1	0	0	4.4	16
9	33	26	15	7.7	24	25	5.5	1.1	0	0	4.5	18
10	32	24	15	7.7	26	24	5.0	1.0	0	.3	6.5	17
11	33	23	14	7.2	24	25	4.5	.9	0	.3	17	16
12	34	24	14	7.0	23	26	4.2	.8	0	.9	14	15
13	35	22	14	9.5	22	25	3.8	.7	0	.8	16	15
14	34	20	14	14	21	23	3.7	.5	0	.9	21	a15
15	32	20	14	13	20	22	3.7	.5	0	.9	16	a14
16	31	19	15	12	22	20	4.2	.4	0	.9	24	a14
17	31	20	15	13	28	19	3.4	.4	0	.9	22	a14
18	30	24	14	23	25	18	3.1	.3	0	.9	28	a13
19	29	27	14	19	23	17	3.0	.2	0	1.1	31	13
20	28	25	14	22	21	16	2.6	.1	0	1.1	26	12
21	31	28	14	28	20	15	2.4	.1	.1	.9	28	15
22	41	28	14	25	19	14	2.4	0	0	.9	35	42
23	38	28	14	24	17	14	2.1	0	0	1.8	31	59
24	45	28	14	58	17	14	2.0	0	0	4.4	34	47
25	62	27	14	56	17	12	1.8	0	0	4.5	31	37
26	47	26	13	46	16	12	1.7	0	0	3.6	28	34
27	40	27	13	41	15	11	3.7	0	0	3.0	27	43
28	38	27	12	38	14	13	5.0	0	0	2.3	25	58
29	38	27	12	36	14	12	3.6	0	0	3.2	24	56
30	45	25	11	35	-	10	2.8	0	0	4.2	23	50
31	40	-	11	35	-	10	-	0	-	5.0	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,169	62	28	37.7		
November	793	37	19	26.4		
December	471	24	11	15.2		
Calendar year 1947	8,054.9	94	1.8	22.1		
January	651.5	58	7.0	21.0		
February	658	34	14	22.7		
March	525	26	10	16.9		
April	136.7	10	1.7	4.56		
May	20.5	2.4	0	.66		
June	.1	.1	0	0		
July	42.8	5.0	0	1.38		
August	570.3	35	3.4	18.4		
September	756	58	12	25.2		
Water year 1947-48	5,793.9	62	0	15.8		

a No gage-height record; discharge interpolated.

Weohyakapka-Rosalie Canal near Lake Wales, Fla.

Location.- Water-stage recorder, lat. 27°52', long. 81°23', in sec. 14, T. 30 S., R. 29 E., at bridge on State Highway 60, 11½ miles east of Lake Wales.

Records available.- May 1942 to June 1948 (discharge measurements only, discontinued).

Extremes.- 1942-48: Maximum discharge measured, 574 second-feet Sept. 26, 1947; minimum measured, 17.2 second-feet May 24, 1945.

Remarks.- Measurements are made at bridge.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge
Oct. 30	210	Mar. 17	72.6
Dec. 9	68.6	Apr. 21	59.5
Jan. 7	63.2	May 25	48.7
Feb. 11	123	June 30	53.8

Arbuckle Creek near De Soto City, Fla.

Location.- Water-stage recorder, lat. 27°27', long. 81°18', in sec. 11, T. 35 S., R. 30 E., at bridge on State Highway 66, half a mile upstream from Lake Istokpoga, 2 miles west of village of Lake Istokpoga, and 7 miles east of De Soto City. Datum of gage is 35.53 feet above mean sea level, datum of 1929.

Drainage area.- 390 square miles.

Records available.- June 1939 to September 1948.

Extremes.- Maximum discharge during year, 4,060 second-feet Sept. 23 (gage height, 8.71 feet), from rating curve extended above 2,300 second-feet; minimum, 70 second-feet July 1 (gage height, 2.09 feet).

1939-48: Maximum discharge, that of Sept. 23, 1948; minimum, 6.3 second-feet June 21, 1945 (gage height, 0.84 foot).

Remarks.- Records fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 3 to Apr. 14)

Oct. 1 to Mar. 15				Mar. 16 to Sept. 30			
4.2	162	6.2	600	2.3	85	6.8	1,330
5.1	215	6.8	1,000	3.0	142	7.2	1,560
5.4	258	7.2	1,360	3.6	209	7.6	1,950
5.6	312	7.5	1,710	3.8	240	7.9	2,410
5.9	435	7.6	1,860	4.0	290	8.7	4,060

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Mov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,800	713	344	341	546	200	170	174	128	91	1,130	1,170
2	1,670	707	341	326	524	194	163	172	122	91	1,130	1,170
3	1,620	688	344	312	502	194	165	168	122	95	1,100	1,170
4	1,570	669	348	306	485	189	169	166	122	98	1,100	1,170
5	1,520	350	348	291	475	184	173	165	119	110	1,060	1,170
6	1,470	632	341	282	445	184	172	163	121	122	1,020	1,170
7	1,450	613	337	275	417	184	173	159	117	126	1,020	1,130
8	1,380	600	337	268	394	184	173	153	113	128	988	1,170
9	1,330	564	330	263	385	184	171	154	110	132	961	1,170
10	1,340	552	326	258	373	178	171	151	108	134	932	1,240
11	1,330	546	323	249	352	173	178	148	110	132	896	1,240
12	1,320	540	316	249	344	173	176	155	114	128	896	1,280
13	1,330	529	312	258	334	162	176	148	116	124	896	1,240
14	1,310	518	306	249	312	162	174	141	117	128	896	1,240
15	1,270	512	326	249	280	162	209	137	114	128	896	1,240
16	1,200	496	389	240	277	166	240	137	117	127	896	1,210
17	1,140	470	398	249	270	163	237	136	113	127	896	1,210
18	1,080	465	398	249	265	165	233	138	110	132	932	1,210
19	1,040	460	403	240	258	169	232	138	110	142	988	1,210
20	992	445	407	249	249	168	225	141	110	153	1,020	1,170
21	932	426	407	275	240	169	220	144	112	166	1,020	1,170
22	883	417	407	294	233	170	216	139	110	200	1,020	1,900
23	842	407	407	309	226	168	206	136	106	201	988	3,960
24	816	398	403	368	220	159	199	134	103	206	1,020	3,850
25	848	381	398	460	220	158	190	132	100	255	1,060	3,540
26	848	360	385	507	215	161	182	130	98	345	1,100	3,220
27	836	352	377	534	207	164	177	135	96	385	1,100	3,120
28	816	348	368	558	207	158	176	132	95	433	1,130	3,540
29	790	360	356	558	200	151	173	134	95	544	1,130	3,540
30	764	356	348	558	-	156	173	135	92	914	1,170	3,430
31	726	-	344	558	-	168	-	130	-	1,100	1,130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	36,263	1,800	726	1,170	3.00	3.46
November	15,174	713	348	508	1.30	1.45
December	11,174	407	306	360	.923	1.07
Calendar year 1947	237,666	2,900	80	651	1.67	22.67
January	10,382	558	240	335	.859	.99
February	9,455	546	200	326	.836	.90
March	5,320	200	151	172	.441	.51
April	5,692	240	163	190	.487	.54
May	4,525	174	130	146	.374	.43
June	3,320	128	92	111	.285	.32
July	7,197	1,100	91	232	.595	.69
August	31,511	1,170	896	1,016	2.61	3.00
September	55,250	3,960	1,130	1,842	4.72	5.27
Water year 1947-48	195,263	3,960	91	534	1.37	18.63

Peak discharge (base, 820 sec.-ft.).- Aug. 1, 2, 1,130 sec.-ft.; Sept. 23 (1 p.m.) 4,060 sec.-ft.

Istokpoga Canal near Cornwell, Fla.

Location.- Staff gage, lat. 27°24', long. 81°09', in sec. 30, T. 35 S., R. 32 E., at highway bridge a quarter of a mile downstream from Seaboard Railway bridge, 1½ miles upstream from Kissimmee River, and 3 miles northwest of Cornwell. Datum of gage is 29.71 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 660 square miles.

Records available.- March 1934 to September 1948.

Average discharge.- 14 years, 420 second-feet.

Extremes.- Maximum discharge during year, 2,040 second-feet Sept. 22, from graph based on gage readings; maximum gage height observed, 10.33 feet Sept. 26; minimum discharge observed, 239 second-feet June 30 to July 3; minimum gage height observed, 5.28 feet July 2.

1934-48: Maximum discharge, that of Sept. 22, 1948; maximum gage height observed, that of Sept. 26, 1948; minimum discharge observed, 4.2 second-feet June 17, 1945; minimum gage height observed, 2.33 feet June 17, 18, 1945.

Maximum stage known, that of Sept. 26, 1948.

Remarks.- Records fair. Gage read once daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,300	889	818	764	792	636	461	386	357	239	558	986
2	1,340	897	782	768	792	643	486	361	376	239	558	1,030
3	1,340	874	786	768	800	602	486	361	394	239	558	1,030
4	1,380	898	791	772	800	608	461	361	376	252	558	1,080
5	1,390	890	796	768	768	608	461	361	357	340	558	1,080
6	1,410	890	763	746	768	608	461	361	340	323	642	1,080
7	1,320	857	758	746	772	572	461	337	323	323	642	1,080
8	1,230	921	754	749	772	620	461	337	308	323	642	1,130
9	1,200	872	763	740	776	578	461	337	308	558	600	1,130
10	1,240	864	772	743	772	578	461	337	292	433	642	1,130
11	1,300	830	777	710	788	578	436	337	308	414	642	1,130
12	1,210	859	749	722	747	563	436	337	308	376	642	1,130
13	1,110	845	758	725	747	563	436	337	308	376	685	1,170
14	1,120	852	766	740	750	563	411	313	323	357	642	1,270
15	1,100	823	771	740	716	563	411	313	308	357	685	1,410
16	1,040	823	819	710	718	563	461	313	308	340	685	1,420
17	1,080	837	819	722	724	563	436	313	308	340	685	1,500
18	1,050	801	814	725	724	563	436	313	292	340	728	1,490
19	1,090	807	819	731	728	563	436	337	292	323	771	1,490
20	1,030	821	780	734	728	563	436	340	278	323	771	1,410
21	1,020	790	780	784	686	537	436	340	278	323	771	1,500
22	980	802	780	768	697	537	411	340	264	308	771	1,960
23	989	808	793	772	694	537	411	340	292	308	771	1,670
24	963	802	793	809	658	511	411	340	264	292	814	1,550
25	1,100	784	764	787	661	511	411	340	264	292	900	1,550
26	1,020	790	768	774	666	511	411	340	252	340	943	1,090
27	999	802	773	766	670	486	386	340	252	340	943	1,040
28	954	808	777	774	636	486	411	340	252	340	943	930
29	893	818	781	783	636	486	411	340	252	376	943	952
30	919	808	785	787	-	486	386	357	239	454	943	930
31	872	-	790	787	-	461	-	357	-	558	943	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	34,989	1,410	872	1,129	1.71	1.97
November	25,162	921	784	839	1.27	1.42
December	24,239	819	749	782	1.18	1.37
Calendar year 1947	233,308	1,610	180	639	.968	13.15
January	23,414	809	710	755	1.14	1.32
February	21,186	800	636	731	1.11	1.19
March	17,247	643	461	556	.842	.97
April	13,080	486	386	436	.661	.74
May	10,566	386	313	341	.517	.60
June	9,073	394	239	302	.458	.51
July	10,746	558	239	347	.526	.61
August	22,579	943	558	728	1.10	1.27
September	37,348	1,960	930	1,245	1.89	2.10
Water year 1947-48	249,629	1,960	239	682	1.03	14.07

Note.- Discharge for periods Oct. 1 to Mar. 11, Sept. 15-30 computed by using gage-height record of Kissimmee River near Cornwell, 9.5 miles downstream from Istokpoga Canal, as a factor.

Reedy Lake Outlet near Frostproof, Fla.

Location.- Water-stage recorder and concrete control, lat. 27°43', long. 81°29', in sec. 1, T. 32 S., R. 28 E., at bridge on county road 3½ miles southeast of Frostproof. Datum of gage is 76.05 feet above mean sea level, datum of 1929.

Records available.- October 1946 to September 1948.

Extremes.- 1946-47: Maximum discharge during water year, 141 second-feet Sept. 29, 30; maximum gage height, 4.00 feet Sept. 29; minimum discharge, 9.5 second-feet Feb. 6, 7 (gage height, 2.09 feet).

1947-48: Maximum discharge during water year, 162 second-feet Sept. 30 (gage height, 4.29 feet); minimum, 23 second-feet July 1 (gage height, 1.81 feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Discharge, in second-feet, 1946-48

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	26	18	16	16	28	34	28	24	69	90	78
2				16	15	42	34	27	23	68	87	84
3				16	14	39	35	26	22	67	84	84
4				17	14	38	34	24	21	65	84	87
5				18	14	38	34	23	21	63	81	93
6				18	10	38	33	22	21	60	81	93
7				18	11	38	32	21	20	60	81	93
8				18	14	38	30	20	18	61	84	93
9				18	14	34	29	23	18	60	87	93
10				17	14	33	28	25	18	60	87	93
11				18	12	33	26	23	22	60	87	93
12				18	12	32	28	22	23	58	87	90
13				18	22	30	47	21	23	59	87	90
14				18	30	35	47	21	58	63	87	87
15				17	29	38	50	20	72	64	84	87
16	32	21	16	17	28	43	50	19	73	64	84	84
17				16	28	42	49	18	72	67	84	87
18				16	28	40	45	18	72	78	81	102
19				15	28	47	42	17	72	81	81	112
20				16	28	54	39	16	72	81	84	115
21				18	31	52	38	14	72	81	81	115
22				16	30	50	37	16	72	81	81	121
23				14	28	43	36	18	71	78	81	130
24				13	29	42	34	18	69	81	81	134
25				14	28	43	34	18	67	84	78	134
26				16	26	41	33	20	67	87	81	134
27				16	26	37	31	20	67	90	81	138
28				16	26	36	29	21	67	90	81	138
29				16	-	34	28	21	69	93	81	141
30				16	-	34	28	23	70	93	81	141
31		-		16	-	34	-	25	-	90	78	-

Note.- No gage-height record Oct. 1 to Jan. 1; discharge computed on basis of 3 discharge measurements, weather records and records for Arbuckle Creek and Josephine Creek near De Soto City.

Discharge, in second-feet, of Reedy Lake Outlet near Frostproof, Fla., 1946-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	138	106	a77	49	61	a42	44	55	38	27	59	91
2	138	106	a75	49	59	a42	47	53	41	34	60	93
3	134	102	a74	49	57	a43	48	52	38	34	59	93
4	134	102	a73	47	56	a44	45	50	37	36	60	93
5	130	99	a71	47	55	a45	43	49	36	35	61	91
6	130	99	70	43	54	a46	42	48	35	34	60	91
7	127	99	69	42	54	a46	41	48	34	32	59	91
8	127	99	69	42	52	47	41	44	34	30	57	89
9	124	96	69	41	52	47	41	44	34	28	55	89
10	124	93	a68	41	54	47	44	44	34	28	55	89
11	124	90	a67	39	52	47	47	44	33	27	61	89
12	121	93	a66	37	52	47	45	43	32	27	65	91
13	121	90	h65	42	52	47	43	41	30	35	68	91
14	a119	90	a64	51	53	42	43	41	29	34	68	89
15	a117	87	a64	42	50	40	56	40	34	30	71	89
16	a116	87	a63	39	49	40	60	38	35	27	73	87
17	a114	87	a63	39	49	57	59	37	34	29	75	87
18	112	87	a62	43	49	68	56	36	34	34	75	87
19	109	a86	a62	42	47	66	55	35	34	41	77	85
20	109	a84	h61	43	45	64	53	33	32	38	79	85
21	106	a82	a60	50	45	62	51	29	29	38	81	89
22	106	81	a58	50	43	61	49	29	28	35	83	116
23	102	81	a57	50	43	60	48	28	27	34	89	124
24	106	81	a56	61	42	59	45	27	26	34	89	127
25	112	81	a55	64	41	57	44	28	26	39	89	127
26	109	a80	a53	64	41	56	42	35	27	45	91	134
27	109	a80	h52	63	41	54	51	34	26	43	91	144
28	a108	a79	a52	64	40	54	62	32	26	41	93	155
29	a108	78	52	63	a41	51	59	34	26	44	91	158
30	a107	78	50	62	-	47	57	38	25	50	91	158
31	a107	-	50	63	-	44	-	38	-	58	91	-

a No gage-height record; discharge interpolated.
h Computed from staff-gage reading.

Monthly discharge, in second-feet, 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff	
						Inches	Acre-feet
October 1946	1,097	-	-	35.4			
November	705	-	-	23.5			
December	526	-	-	17.0			
Calendar year	-	-	-	-			
January 1947	512	18	13	16.5			
February	605	31	10	21.6			
March	1,206	54	28	38.9			
April	1,074	50	26	35.8			
May	648	28	14	20.9			
June	1,456	73	18	48.5			
July	2,256	93	58	72.8			
August	2,577	90	78	83.1			
September	3,164	141	78	105			
Water year 1946-47	15,826	141	10	43.4			
October 1947	3,648	138	102	118			
November	2,683	106	78	89.4			
December	1,947	77	50	62.8			
Calendar year 1947	21,776	141	10	59.7			
January 1948	1,521	64	37	49.1			
February	1,429	61	40	49.3			
March	1,572	68	40	50.7			
April	1,461	62	41	48.7			
May	1,227	55	27	39.6			
June	954	41	25	31.8			
July	1,101	58	27	35.5			
August	2,276	93	55	73.4			
September	3,122	158	85	104			
Water year 1947-48	22,941	158	25	62.7			

Josephine Creek near De Soto City, Fla.

Location.- Water-stage recorder, lat. 27°22', long. 81°24', in sec. 3, T. 36 S., R. 29 E., at bridge on State Highway 25, 4 miles south of De Soto City. Datum of gage is 53.88 feet above mean sea level, datum of 1929 (Florida State Road Department bench mark).

Records available.- October 1946 to September 1948.

Extremes.- 1946-47: Maximum discharge during water year, 900 second-feet Sept. 19 (gage height, 9.55 feet); minimum, 12 second-feet Feb. 12 (gage height, 3.44 feet).
1947-48: Maximum discharge during water year, 1,780 second-feet Sept. 23 (gage height, 11.56 feet); minimum, 24 second-feet July 1; minimum gage height, 4.09 feet July 3.

Remarks.- Records good above 300 second-feet and fair below except those for periods of no gage-height record, which are poor.

Rating tables, Jan. 28, 1947, to Sept. 30, 1948 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 1-7, 1948)

Jan. 28 to Feb. 12, 1947, Mar. 19, 1947, to June 16, 1948 July 1 to Sept. 30, 1948

3.4	11	5.4	99	9.2	768
3.9	26	6.5	200	9.7	940
4.8	57	6.8	242	10.7	1,370
5.1	75	8.0	473	11.4	1,680

Feb. 13 to Mar. 18, 1947, June 17-30, 1948

3.7	19	4.2	25
5.2	61	4.3	28
5.5	76	4.7	44
6.0	117		

Discharge, in second-feet, 1946-48

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	65	38	24	19	40	110	95	116	342	402	305
2	170		37	24	19	117		104	113	314	372	296
3	165		36	24	18	108		104	106	296	352	278
4			35	23	18	91		98	98	296	333	278
5			34	23	17	83		93	69	278	324	278
6			33	23	15	83		88		260	333	305
7			33	23	15	76		83		251	342	342
8			32	22	15	76		79		260	362	362
9			31	22	14	70	85	84		260	372	362
10			31	22	13	68		87		260	352	352
11			30	22	13	65		80	78	251	333	352
12			29	22	12	63		75		287	305	362
13			29	21	20	61	83	71		324	305	352
14			28	21	34	68		67	215	392	314	342
15		63	28	21	31	70		64		362	305	333
16	91	60	30	21	31	70		61	314	342	296	324
17		58	30	20	32	70	88	58	333	305	305	333
18		56	29	20	32	70	86	55	372	278	296	577
19		54	29	20	32	117		53	402	260	296	860
20		52	28	20	35			51	422	269	287	768
21		50	28	20	44			48	392	269	287	688
22		48	27	19	41	120		47	352	260	314	663
23		47	27	19	40			47	352	251	342	714
24		46	27	19	40			46	333	260	342	714
25		44	26	19	39			45	314	305	342	688
26		43	26	18	38			63	314	362	333	683
27		42	26	18	36			56	296	372	324	626
28		41	25	18	35			55	287	432	314	601
29	66	40	25	18	-			57	296	530	314	589
30	65	39	25	18	-			59	352	484	324	565
31		-	25	19	-		-	78	-	442	305	-

Note.- No gage-height record Oct. 1 to Jan. 27, Mar. 19 to May 1, June 5-15, except staff-gage reading Apr. 17; discharge computed on basis of discharge measurements made on Oct. 2, 29, Dec. 3, 20, Apr. 17, recorded range in stage, weather records, and records for Arbuckle Creek near De Soto City.

Discharge, in second-feet, of Josephine Creek near De Soto City, Fla., 1946-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	553	372	234	166	190	117	58	67	51	25	462	305
2	530	362	219	166	185	115	60	64	48	25	484	392
3	506	352	212	162	180	113	64	62	45	27	484	422
4	495	333	206	158	180	112	62	60	44	31	473	432
5	484	314	200	158	176	107	60	57	42	35	452	402
6	462	305	200	148	176	101	59	55	41	44	442	372
7	452	305	200	148	171	105	58	55	40	43	432	372
6	442	342	195	144	166	115	57	52	40	44	422	382
9	432	333	195	144	166	112	56	52	38	49	392	462
10	432	296	195	140	176	110	59	54	37	50	372	452
11	442	278	195	140	176	107	68	52	36	50	362	422
12	452	314	190	135	171	105	65	52	36	50	342	392
13	452	352	190	148	166	102	63	50	36	51	342	382
14	442	362	190	171	166	94	62	48	39	55	352	362
15	432	342	185	162	162	89	105	47	40	61	333	352
16	422	324	234	148	158	88	135	45	41	58	333	372
17	422	314	234	144	158	86	130	44	41	58	342	412
18	422	296	226	140	153	84	126	43	38	130	362	442
19	402	278	212	140	153	85	117	76	43	140	372	432
20	402	278	200	144	148	84	111	126	42	135	352	422
21	392	269	200	171	144	81	103	91	40	144	342	422
22	382	251	200	171	140	78	97	74	38	162	324	1,100
23	372	242	195	166	135	76	92	65	36	180	314	1,680
24	362	242	195	206	130	74	88	58	34	195	305	1,370
25	402	234	190	226	130	72	83	55	33	269	305	1,140
26	412	226	185	219	126	69	78	53	31	251	314	980
27	432	226	180	212	126	67	80	51	30	226	333	940
28	422	226	176	206	122	67	81	50	29	234	342	1,060
29	412	269	171	200	122	65	77	51	28	260	333	1,100
30	402	251	171	200	-	62	72	56	26	324	314	1,060
31	392	-	166	195	-	60	-	53	-	392	305	-

Monthly discharge, in second-feet, 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October 1946	3,874	180	-	125		
November	1,693	-	39	56.4		
December	917	38	25	29.6		
Calendar year	-	-	-	-		
January 1947	643	24	18	20.7		
February	748	44	12	26.7		
March	2,900	-	40	93.5		
April	2,758	-	-	91.9		
May	2,149	104	45	69.3		
June	6,642	422	-	221		
July	9,854	530	251	318		
August	10,157	402	287	328		
September	14,272	860	278	476		
Water year 1946-47	56,607	860	12	155		
October 1947	13,460	553	362	434		
November	8,888	372	226	296		
December	6,141	234	166	198		
Calendar year 1947	78,612	860	12	215		
January 1948	5,178	226	135	167		
February	4,552	190	122	157		
March	2,802	117	60	90.4		
April	2,426	135	56	80.9		
May	1,818	126	43	58.6		
June	1,143	51	26	38.1		
July	3,798	392	25	123		
August	11,438	484	305	369		
September	18,835	1,680	305	628		
Water year 1947-48	80,479	1,680	25	220		

St. Lucie Canal at Lake Okeechobee, Fla.

Location.- Water-stage recorder, lat. 26°59', long. 80°36', in sec. 14, T. 40 S., R. 37 E., at Florida East Coast Railway bridge at Lake Okeechobee. Auxiliary water-stage recorder, lat. 27°01', long. 80°27', in sec. 8, T. 40 S., R. 39 E., at bridge on State Highway 710, 1½ miles southeast of Indiantown and 23.2 miles upstream from lock near Stuart. Distance between gages, 10.1 miles. Datum of each gage is 1.56 feet below mean sea level, datum of 1929.
Records available.- April 1931 to September 1948.
Average discharge.- 16 years (1932-48), 1,450 second-feet.
Extremes.- Maximum daily discharge during year, 7,070 second-feet Nov. 2, 3; no flow on many days May to September.
1931-48: Maximum daily discharge, that of Nov. 2, 3, 1947; no flow on several days in some years.
Remarks.- Records fair above 1,000 second-feet and poor below. Discharge computed by using stage at auxillary gage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,920	6,999	6,570	5,890	5,690	5,160	4,340	576	432	544	0	0
2	5,990	7,070	6,680	5,890	5,660	5,130	4,390	576	553	338	427	261
3	5,990	7,070	6,570	5,830	5,560	5,130	4,200	630	500	240	494	261
4	6,110	6,990	6,570	5,890	5,630	5,080	4,140	630	250	0	352	452
5	6,250	6,990	6,570	5,780	5,690	4.900	4,170	630	348	240	250	522
6	6,140	6,990	6,570	5,760	5,630	4,900	4,230	727	427	0	352	261
7	6,210	6,920	6,490	5,720	5,630	5,040	4,200	727	494	0	504	452
8	6,280	6,990	6,490	5,720	5,630	4,930	4,200	803	247	0	0	368
9	6,140	6,840	6,490	5,670	5,630	4,870	4,170	713	0	0	252	264
10	6,080	6,840	6,490	5,640	5,520	4,870	4,140	975	247	343	252	372
11	6,050	6,880	6,490	5,550	5,480	4,840	4,060	576	490	0	355	0
12	5,860	6,880	6,490	5,500	5,510	4,790	4,090	622	494	0	0	372
13	6,090	6,840	6,440	5,610	5,510	4,650	4,030	719	605	420	0	457
14	6,490	6,840	6,400	5,790	5,480	4,700	4,030	569	432	0	0	457
15	6,540	6,840	6,470	5,550	5,360	4,610	4,060	508	494	243	358	648
16	6,580	6,810	6,400	5,550	5,460	4,610	4,060	569	427	415	0	266
17	6,620	6,730	6,310	5,550	5,460	4,680	4,010	622	0	240	0	0
18	6,660	6,770	6,280	5,550	5,420	4,610	3,950	719	247	0	0	0
19	6,690	6,770	6,190	5,550	5,420	4,560	3,880	673	427	0	503	0
20	6,730	6,770	6,350	5,470	5,420	4,560	3,880	837	348	243	359	0
21	6,770	6,770	6,280	5,520	5,370	4,540	3,920	0	424	243	254	0
22	6,770	6,770	6,240	5,470	5,340	4,500	3,880	719	420	0	362	3,000
23	6,810	6,770	6,190	5,470	5,300	4,560	3,880	564	486	243	0	5,660
24	6,810	6,810	6,190	5,590	5,220	4,540	3,850	668	486	0	0	a4,950
25	6,810	6,770	6,220	5,550	5,190	4,420	3,820	668	243	0	0	h4,030
26	6,840	6,700	6,220	5,560	5,250	4,370	3,790	617	486	0	359	a3,970
27	6,960	6,640	6,170	5,660	6,250	4,400	3,820	432	486	243	439	a4,130
28	6,920	6,610	6,170	5,660	5,220	4,500	3,780	500	486	243	514	a4,440
29	6,880	6,640	6,080	5,690	6,220	4,310	2,570	504	415	0	362	a4,610
30	6,920	6,640	5,890	5,720	-	4,280	576	355	415	243	259	4,730
31	6,960	-	5,890	5,780	-	4,280	-	500	-	345	259	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	200,870	6,960	5,860	6,480		
November	204,940	7,070	6,610	6,831		
December	196,850	6,680	5,890	6,350		
Calendar year 1947	1,343,648	7,070	0	3,681		
January	175,130	5,890	5,470	5,649		
February	158,150	5,690	5,190	5,453		
March	145,320	5,160	4,280	4,688		
April	116,116	4,390	576	3,871		
May	18,928	975	0	611		
June	11,809	605	0	394		
July	4,826	544	0	156		
August	7,269	514	0	234		
September	44,932	5,660	0	1,498		
Water year 1947-48	1,285,140	7,070	0	3,511		

a No gage-height record at auxiliary gage; discharge computed on basis of 1 discharge measurement and gage-height record for upper gage.
h Computed from staff gage-reading.

Loxahatchee Slough near Jupiter, Fla.

Location.- Reference point, lat. 26°56', long. 80°11', in sec. 6, T. 41 S., R. 42 E., at bridge on State Highway 710, 5.2 miles west of Jupiter.
Records available.- August 1946 to September 1948 (discharge measurements only).
Extremes.- 1946-48: Maximum discharge measured, 1,060 second-feet Oct. 9, 1947; minimum measured, 4.91 second-feet Apr. 9, 1948.
Remarks.- Discharge meaurements made at seven bridges on State Highway 710. The combined flow at these bridges is total flow of Slough.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 9	1,060	Feb. 26	20.6	July 15	18.8
20	1,000	Apr. 9	4.91	Aug. 13	36.2
Dec. 8	419	28	15.3	Sept. 15	285
Jan. 27	184	May 26	12.8		

West Palm Beach Canal at Canal Point, Fla.

Location.- Staff gage above lock and dam, lat. 26°52', long. 80°38', in sec. 34, T. 41 S., R. 37 E., in Canal Point, 350 feet downstream from State Highway 15 (renumbered) and 550 feet downstream from outlet from Lake Okeechobee. Auxiliary water-stage recorder below lock and dam. Datum of each gage is at mean sea level, datum of 1929.

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 817 second-feet Mar. 18; maximum gage height observed, 18.54 feet Oct. 23; maximum daily reverse flow, 1,360 second-feet Sept. 28; minimum gage height observed, 10.00 feet June 17.

1939-48: Maximum daily discharge, that of Mar. 18, 1948; maximum gage height observed, that of Oct. 23, 1947; maximum daily reverse flow, 1,760 second-feet June 15, 1942; minimum gage height observed, that of June 17, 1948.

Remarks.- Records fair. Staff gage read three times daily. Flow regulated at station by manipulation of stop logs in lock and dam. Flow occasionally reversed after periods of considerable rainfall owing to downstream natural drainage and to pumping from agricultural lands in Everglades. Discharge computed using three daily observations of velocity.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	522	580	421	386	507	-99	31
2					0	544	583	546	363	476	-230	42
3					0	582	570	433	367	445	-155	0
4					0	515	508	424	360	435	-14	0
5					0	352	512	378	343	423	81	26
6					0	0	549	431	341	420	-232	10
7					0	0	553	438	342	444	-112	16
8					0	164	559	379	177	410	-48	32
9					0	591	559	416	295	374	-78	0
10					e200	608	513	358	468	172	e5	26
11						556	450	418	463	375	e10	27
12						593	465	373	440	396	e10	32
13						567	461	410	427	384	e0	0
14						376	480	408	407	286	e5	0
15					} e600	427	484	403	430	98	e10	-705
16						808	399	410	323	322	e10	-666
17						816	449	395	115	363	e10	-590
18						817	417	390	461	450	e10	-735
19					633	655	365	415	480	348	10	-606
20					557	632	382	369	462	424	10	-570
21					602	632	380	390	402	352	0	-587
22					591	607	471	415	416	290	0	0
23					508	665	378	382	414	376	0	-998
24					582	754	355	364	423	332	15	-1,130
25					603	658	399	403	475	366	0	-1,240
26					440	651	339	376	434	258	0	-1,240
27					497	646	345	365	409	340	-50	-1,300
28					616	656	354	323	475	311	-91	-1,360
29					526	647	369	346	483	409	81	-1,290
30					-	559	347	345	454	335	229	-1,170
31					-	545	-	374	-	375	199	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1947	-27,044	524	-1,280	-74.1	-53,630
January	0	0	0	0	0
February	11,155	-	0	385	22,130
March	17,145	817	0	553	34,010
April	13,575	583	339	452	26,930
May	12,298	546	323	397	24,390
June	11,835	483	115	394	23,470
July	11,296	507	98	364	22,400
August	-414	229	-232	-13.4	-821
September	-13,945	42	-1,360	-465	-27,660
Water year 1947-48	62,945	817	-1,360	172	124,800

e No velocity record; discharge estimated.

Note.- Negative figures indicate reverse flow. Gates at lake outlet closed Oct. 1 to Feb. 9, Mar. 6, 7.

West Palm Beach Canal at West Palm Beach, Fla.

Location.- Water-stage recorder above lock and dam, lat. 26°39', long. 80°03', in sec. 16, T. 44 S., R. 43 E., at bridge on U. S. Highway 1 on Poinsettia Avenue in West Palm Beach. Datum of gage is 0.25 foot above mean sea level (Florida State Road Department bench mark).

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 5,280 second-feet Oct. 13; maximum gage height, 10.64 feet Oct. 13; minimum daily discharge, 461 second-feet Feb. 26; minimum gage height, 3.65 feet Sept. 12.

1939-48: Maximum daily discharge, 5,320 second-feet Apr. 18, 1942; maximum gage height, that of Oct. 13, 1947; minimum daily discharge, 124 second-feet May 1, 1945; minimum gage height, 2.72 feet May 7, 1941.

Maximum stage known, 12.95 feet, present datum, Oct. 23, 24, 1924 (discharge, 8,570 second-feet), from records by Everglades Drainage District.

Remarks.- Records fair. Flow regulated by manipulation of stop logs in dam and gates in lock chamber for irrigation and drainage purposes by Everglades Drainage District.

Cooperation.- Stop-log record furnished by Everglades Drainage District.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,420	3,220	2,620	1,640	1,450	612	552	820	596	536	760	1,350
2	4,180	3,110	2,410	1,640	1,410	596	552	802	628	536	1,080	1,460
3	3,900	3,040	2,290	1,600	1,380	612	596	770	628	552	1,140	1,780
4	3,660	3,000	2,250	1,600	1,300	628	660	748	580	564	1,100	1,840
5	3,520	2,970	2,200	1,520	1,260	644	660	728	552	612	1,080	1,730
6	3,460	2,870	2,200	1,450	1,230	708	644	702	536	628	1,220	1,620
7	3,390	2,790	2,130	1,380	1,140	692	644	682	552	676	1,300	1,510
8	3,260	2,730	2,080	1,300	1,100	852	644	668	564	769	1,260	1,460
9	3,160	2,690	1,970	1,260	1,030	952	612	660	536	724	1,220	1,380
10	3,180	2,690	1,950	1,230	976	978	596	682	536	692	1,180	1,320
11	3,290	2,660	1,920	1,190	952	924	580	708	536	692	1,100	1,260
12	4,740	2,620	1,920	1,230	952	908	580	808	536	676	1,100	1,240
13	5,280	2,620	1,920	1,300	952	848	564	840	552	676	1,220	1,350
14	5,260	2,540	1,860	2,010	952	840	552	802	564	676	1,300	1,610
15	5,080	2,540	1,860	1,950	952	840	536	802	580	692	1,260	2,150
16	4,920	2,510	1,860	1,840	952	820	612	770	564	676	1,260	2,480
17	4,670	2,480	1,950	1,800	952	820	660	740	536	676	1,300	2,590
18	4,480	2,480	2,030	1,770	952	832	660	720	520	676	1,340	2,660
19	4,220	2,450	1,800	1,640	928	820	644	748	536	692	1,340	2,520
20	4,000	2,370	1,870	1,600	900	820	644	740	552	708	1,340	2,350
21	3,750	2,250	1,900	1,640	900	820	660	708	564	708	1,300	2,560
22	3,550	2,250	1,900	1,640	900	814	660	682	552	708	1,300	3,610
23	3,420	2,250	1,870	1,560	900	802	644	660	552	692	1,550	4,430
24	3,290	2,110	1,840	1,600	900	802	612	660	536	692	1,640	4,360
25	3,660	2,080	1,840	1,740	900	802	596	640	536	708	1,640	4,160
26	3,660	2,000	1,800	1,710	461	794	564	622	536	708	1,710	4,130
27	3,550	1,950	1,770	1,640	476	774	596	594	536	708	1,840	4,380
28	3,460	2,450	1,740	1,600	536	782	888	501	536	692	2,030	4,300
29	3,420	3,040	1,710	1,520	580	794	908	488	536	708	1,780	4,160
30	3,390	2,900	1,670	1,490	-	762	848	520	536	708	1,500	3,820
31	3,320		1,670	1,410	-	618	-	564	-	724	1,380	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	120,560	5,280	3,180	3,889	239,100
November	77,660	3,220	1,950	2,589	154,000
December	60,800	2,620	1,670	1,961	120,600
Calendar year 1947	702,366	5,280	308	1,924	1,393,000
January	48,500	2,010	1,190	1,565	96,200
February	28,273	1,450	461	975	56,080
March	24,310	978	596	784	48,220
April	19,168	908	536	639	38,020
May	21,579	840	488	696	42,800
June	16,604	628	520	553	32,930
July	20,885	769	536	674	41,420
August	41,570	2,030	760	1,341	82,450
September	75,570	4,430	1,240	2,519	149,900
Water year 1947-48	555,479	5,280	461	1,518	1,102,000

Hillsboro Canal at Belle Glade, Fla.

Location.- Water-stage recorder, lat. 26°41', long. 80°40', in sec. 31, T. 43 S., R. 37 E., at bridge on State Highway 15 in Belle Glade, 3 miles southeast of Lake Okeechobee. Datum of gage is at mean sea level, datum of 1929.

Records available.- January 1940 to September 1948.

Extremes.- Maximum daily discharge during year, 361 second-feet June 1, 3; maximum daily reverse flow, 250 second-feet Oct. 27.

1940-48: Maximum discharge measured, 481 second-feet Feb. 14, 1940; maximum reverse flow measured, 289 second-feet Sept. 9, 1940.

Remarks.- Records poor. Flow regulated by hurricane gates at Lake Okeechobee. Flow occasionally reversed after periods of considerable rainfall by pumping from agricultural lands in the Everglades. Discharge computed using three daily observations of velocity.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	e-100	-214	-146	e50	-41	234	256	246	361	297	6.1	281
2	f-95	-212	-154	101	-36	235	267	274	333	242	-133	238
3	f-180	-211	-130	49	-17	272	267	242	361	253	-52	163
4	-125	-225	-179	34	-24	245	-72	241	333	267	-138	80
5	-91	-228	-132	7.3	5.0	222	198	269	294	254	-82	172
6	-81	-242	-186	32	21	38	262	253	288	238	68	74
7	-101	-230	-166	3.5	0	258	262	268	279	205	212	127
8	-95	-155	-134	0	1.9	267	258	258	334	231	245	168
9	a-80	-203	-98	51	18	266	260	283	314	e180	276	204
10	-10	-216	-45	6.7	63	259	276	318	340		252	208
11	e0	-201	0	-13	197	258	287	275	352		232	259
12	11	-206	a100	19	201	240	281	280	305		328	256
13	-22	-179	a80	-16	176	243	231	283	321		199	249
14	-39	-202	a-130	310	193	256	214	335	325		251	195
15	-50	-190	a40	45	200	264	281	e340	341		357	74
16	-100	-214	a220	7.3	195	234	-40		278	128	308	-11
17	-166	-224	a100	-3.6	196	253	-18		257	170	257	-3.8
18	-149	-198	a70	-53	201	271	133		179	222	269	-30
19	-109	-149	h65	-124	179	307	55	342	e190	205	300	-74
20	-120	-182	a50	-69	196	308	123	318	e200	162	262	-15
21	-119	-176	a70	14	210	313	106	326	a220	170	210	-155
22	-109	-166	a170	-52	246	270	165	324	a220	161	230	e-140
23	-71	-216	90	-21	219	283	176	e300	a260	175	232	-129
24	-81	-169	72	7.0	191	296	193		a220	199	204	-183
25	-135	-103	8.3	-14	195	268	210		a280	218	222	-153
26	-226	-122	104	-24	214	245	218		a240	138	196	-188
27	-250	-90	95	0	242	260	234	250	a250	110	159	-141
28	-222	-39	24	-54	256	272	284	326	251	150	-143	0
29	-232	-48	93	-50	261	317	340	327	266	142	-102	111
30	-220	-109	7.9	-58	-	295	272	332	310	139	-49	146
31	-199	-	0	6.4	-	304	-	342	-	119	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-3,566	11	-250	-115	-7,070
November	-5,319	-39	-242	-177	-10,550
December	-40.8	220	-186	-1.32	-81
Calendar year 1947	7,658.0	222	-250	21.0	15,200
January	191.6	310	-124	6.18	380
February	3,955.1	261	-41	136	7,840
March	8,053	317	38	260	15,970
April	5,979	340	-72	199	11,860
May	9,272	-	-	299	18,390
June	8,502	361	179	283	16,860
July	5,855	297	110	189	11,610
August	5,609.1	357	-143	149	9,140
September	1,782.2	281	-188	59.4	3,530
Water year 1947-48	39,273.2	361	-250	107	77,880

a No gage-height record; discharge computed on basis of velocity record and gage-height record for Hillsboro Canal at Shawano Plantation.
e No velocity record; discharge estimated, or interpolated.
f Computed on basis of partly estimated gage height record.
h Computed from staff-gage reading.
Note.- Negative figures indicate reverse flow.

Hillsboro Canal near Deerfield Beach, Fla.

Location.- Water-stage recorder above lock and dam, lat. 26°20', long. 80°07', in sec. 35, T. 47 S., R. 42 E., 2 miles west of Deerfield Beach and 4.4 miles east of State Highway 7. Auxiliary water-stage recorder below lock and dam. Datum of each gage is at mean sea level, datum of 1929 (Corps of Engineers bench mark).

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 3,490 second-feet Oct. 12; maximum gage height, 11.80 feet Oct. 12; minimum daily discharge, 75 second-feet Mar. 31; minimum gage height, 3.78 feet Aug. 31.

1939-48: Maximum daily discharge, that of Oct. 12, 1947; maximum gage height, 12.10 feet Oct. 17, 1944, from floodmarks; no flow Dec. 16, 1939, Apr. 11, June 18, 1940; minimum gage height, 3.50 feet Apr. 21, 1941.

Remarks.- Records fair. Flow partly regulated at station by Everglades Drainage District for irrigation and drainage. Pumps above station divert water for irrigation during growing season.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,650	1,680	1,500	1,020	1,040	120	100	365	225	155	605	625
2	2,500	1,630	1,400	1,060	990	115	115	314	315	155	810	715
3	2,280	1,570	1,400	1,020	920	115	255	315	325	165	990	830
4	2,390	1,540	1,340	990	838	110	485	300	290	185	970	870
5	2,530	1,520	1,340	895	805	155	450	280	250	200	920	830
6	2,450	1,460	1,340	846	740	422	420	217	225	235	969	780
7	2,280	1,460	1,340	850	670	315	440	235	225	270	850	780
8	2,280	1,490	1,260	830	546	433	310	260	245	405	740	780
9	2,310	1,520	1,220	805	465	689	285	265	235	480	740	895
10	2,250	1,470	1,190	740	505	545	177	363	131	485	790	1,020
11	2,280	1,420	1,140	805	505	490	125	465	115	480	740	945
12	3,490	1,290	1,140	990	505	415	120	425	208	470	790	945
13	3,160	1,450	1,120	1,110	480	240	110	365	375	455	740	1,020
14	2,890	1,450	1,090	1,060	438	200	110	345	621	440	715	1,040
15	2,650	1,450	1,060	896	455	190	125	335	625	425	670	1,200
16	2,450	1,450	1,220	780	402	170	526	325	533	400	650	1,340
17	2,280	1,400	1,290	850	315	160	477	315	495	385	650	1,420
18	2,140	1,400	1,400	850	305	150	330	295	535	390	670	1,400
19	2,040	1,400	1,340	805	280	130	245	290	376	385	690	1,400
20	1,950	1,400	1,400	805	262	125	125	290	355	400	690	1,330
21	1,840	1,400	1,340	850	300	125	110	275	355	445	740	a2,230
22	1,790	1,400	1,290	850	300	120	95	265	315	450	790	a2,610
23	1,730	1,400	1,260	850	270	100	227	265	265	405	791	a2,430
24	1,710	1,400	1,240	1,050	265	161	282	255	195	420	715	a2,300
25	1,900	1,400	1,190	1,220	295	145	285	235	195	420	690	a2,150
26	1,930	1,340	1,160	1,190	280	105	245	195	195	440	715	1,950
27	1,900	1,340	1,120	1,270	255	80	295	195	195	475	1,030	2,010
28	1,840	1,620	1,090	1,190	198	120	486	195	185	495	1,140	1,950
29	1,790	1,740	1,060	1,140	132	150	475	205	169	525	990	1,870
30	1,730	1,680	1,020	1,090	-	113	420	225	160	505	870	1,820
31	1,680	-	990	1,060	-	75	-	193	-	525	602	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	69,090	3,490	1,680	2,229	137,000
November	44,170	1,740	1,290	1,472	87,610
December	38,290	1,500	990	1,235	75,950
Calendar year 1947	367,315	3,490	38	1,006	728,500
January	29,767	1,270	740	960	59,040
February	13,761	1,040	132	475	27,290
March	6,583	689	75	212	13,060
April	8,250	526	95	275	16,360
May	8,867	465	193	286	17,590
June	8,833	625	115	294	17,520
July	12,070	525	155	389	23,940
August	24,342	1,140	602	785	48,280
September	41,485	2,610	625	1,383	82,280
Water year 1947-48	305,508	3,490	75	835	605,900

a No gage-height record at lower gage; discharge computed on basis of 1 discharge measurement and gage-height record for Hillsboro Canal at Range Line Road, near Deerfield Beach.

North New River Canal at South Bay, Fla.

Location.- Staff gage below lock and dam, lat. 26°40', long. 80°43', in sec. 14, T. 44 S., R. 36 E., in South Bay, 410 feet downstream from bridge on U. S. Highway 27 (renumbered) and 2.5 miles south of Lake Okeechobee. Datum of gage is at mean sea level, datum of 1929.

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 533 second-feet Oct. 5; no flow Dec. 13, 14. 1939-48: Maximum daily discharge, 1,040 second-feet Sept. 30, 1947; maximum reverse flow observed, 445 second-feet June 10, 17, 1942.

Remarks.- Records fair except those for periods of no velocity record, which are poor. Gage read twice daily. Lock and dam at station not operated during year. Flow regulated by hurricane gates at Lake Okeechobee and by operation of drainage pumps. Discharge computed using twice-daily observations of velocity.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	518	295	217	29	99	332	362	400	321	282	284	e80
2	409	268	203	28	88	358	422	373	332	269	299	e85
3	364	331	197	28	53	322	457	364	332	296	325	e95
4	446	329	184	32	40	325	211	372	264	280	358	e90
5	533	275	178	48	33	324	319	412	236	336	340	e80
6	360	358	171	35	30	200	387	406	260	300	321	81
7	308	357	164	34	28	298	429	405	224	314	353	88
8	283	394	152	25	51	330	426	408	248	211	363	91
9	303	321	139	33	49	323	406	429	243	283	349	89
10	370	307	138	41	106	307	407	432	240	279	318	83
11	389	300	103	39	198	279	390	442	237	300	329	73
12	497	307	57	31	208	289	392	450	227	263	322	94
13	475	433	0	42	184	321	384	450	209	296	326	121
14	497	406	0	87	188	342	381	451	221	278	363	204
15	403	324	17	138	196	318	402	453	238	282	287	220
16	423	347	17	141	172	314	381	440	240	266	311	227
17	354	360	38	183	182	331	320	439	216	260	355	322
18	386	321	27	184	172	322	367	437	196	258	366	305
19	453	301	33	143	184	367	342	506	213	262	325	233
20	432	270	32	137	194	384	343	471	231	247	380	220
21	376	269	21	165	218	379	301	417	212	265	367	217
22	344	249	32	169	240	383	308	345	178	279	360	e270
23	304	206	32	164	243	400	316	370	182	265	339	270
24	385	188	37	148	279	403	325	415	231	276	348	301
25	356	163	47	167	316	429	337	357	290	275	319	206
26	446	120	41	172	329	396	320	269	280	284	344	288
27	463	143	41	153	329	429	386	254	318	262	349	211
28	389	229	30	126	311	419	430	283	278	285	226	130
29	369	213	30	121	331	431	430	236	266	319	242	388
30	419	218	30	115	-	420	421	231	284	306	199	408
31	368	-	29	101	-	411	-	322	-	284	191	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	12,422	533	283	401	24,640
November	8,602	433	120	287	17,060
December	2,437	217	0	78.6	4,830
Calendar year 1947	57,751.2	1,040	0	158	114,600
January	3,059	184	25	98.6	6,070
February	5,051	331	28	174	10,020
March	10,846	431	200	350	21,510
April	11,102	457	211	370	22,020
May	12,039	506	231	388	23,880
June	7,447	332	178	248	14,770
July	8,662	336	211	279	17,180
August	9,958	380	191	321	19,750
September	5,570	408	73	186	11,050
Water year 1947-48	97,195	533	0	266	192,800

e No velocity record; discharge computed on basis of 1 discharge measurement and gage-height record.

North New River Canal at 26-mile bend, near Fort Lauderdale Fla.

Location.- Water-stage recorder above lock and dam, lat. 26°15', long. 80°28', T. 48 S., R. 39 E., on State Highway 25 at 26-mile bend, 22 miles northwest of Fort Lauderdale.

Records available.- 1941-42 (two measurements in 1941 and one in 1942), December 1942 to September 1948 (discharge measurements).

Extremes.- 1941-48: Maximum discharge measured, 1,550 second-feet Sept. 24, 1947; minimum measured, 9.4 second-feet Dec. 15, 1944.

Remarks.- Measurements are made above or below dam. Several small diversions above station.

Discharge measruements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Oct. 6	1,280	Jan. 7	952	Apr. 26	462	Aug. 9	585
16	1,080	26	1,140	May 11	544	23	623
31	1,140	Feb. 9	696	June 1	411	Sept. 7	604
Nov. 10	1,010	24	530	15	359	24	1,180
19	1,100	Mar. 12	491	28	247	27	754
Dec. 1	979	29	485	July 12	527	29	741
18	1,210	Apr. 12	439	26	358		

North New River Canal near Fort Lauderdale, Fla.

Location.- Water-stage recorder above lock and dam, lat. 26°06', long. 80°14', in sec. 14, T. 50 S., R. 41 E., on State Highway 84, 6 miles southwest of Fort Lauderdale. Datum of gage is at mean sea level, datum of 1929 (Corps of Engineers bench mark). Auxiliary water-stage recorder 500 feet below base gage at same datum.

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 3,280 second-feet Nov. 19; maximum gage height, 10.83 feet Oct. 17; minimum daily discharge, 216 second-feet July 1, 2; minimum daily gage height, about 2.15 feet Feb. 11.

1939-48: Maximum daily discharge, that of Nov. 19, 1947; maximum gage height, that of Oct. 17, 1947; minimum daily discharge, 2.4 second-feet May 21, 22, 1947; minimum gage height, 0.78 foot Dec. 3, 1942.

Maximum discharge known, 5,400 second-feet Oct. 15, 1929 (gage height, 7.66 feet, present datum), from records by Everglades Drainage District.

Remarks.- Records fair. Flow regulated at and above station by dams for irrigation, drainage, and fire control. Several small diversions above station for irrigation.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,450	2,180	2,910	1,950	1,460	608	360	781	449	216	506	977
2	2,370	2,200	2,820	2,090	1,440	608	344	735	360	216	536	1,020
3	2,240	2,210	2,740	2,060	1,450	584	368	701	336	224	645	1,030
4	2,300	2,240	2,710	2,000	1,430	560	a470	663	344	248	672	1,050
5	2,500	a2,260	2,660	1,960	1,390	560	a470	634	336	304	656	1,050
6	2,500	a2,300	2,540	1,930	1,370	584	472	584	312	360	720	1,070
7	a2,500	a2,360	2,390	1,900	f1,360	560	472	578	288	400	720	1,040
8	2,550	a2,390	2,270	1,860	f1,350	584	456	561	280	456	736	1,050
9	2,400	2,380	2,240	1,820	f1,340	608	456	546	296	528	736	1,050
10	2,380	2,440	2,160	1,800	f1,330	608	424	541	304	649	736	1,060
11	2,340	2,490	2,030	1,790	f1,320	560	440	a561	280	623	720	1,080
12	2,050	2,540	1,900	1,770	f1,340	544	424	a555	288	587	720	1,110
13	1,960	2,580	1,880	1,710	1,140	528	392	a550	328	556	696	1,160
14	1,940	2,620	1,890	1,750	856	512	384	a545	360	551	696	1,210
15	1,940	a2,730	1,910	1,680	856	496	376	a540	376	536	672	1,320
16	1,930	a2,860	1,950	1,650	856	472	512	a535	376	536	672	1,330
17	1,920	2,980	2,130	1,620	856	456	544	a530	376	536	672	1,460
18	1,920	3,130	2,050	1,580	832	363	560	528	368	520	672	1,710
19	1,930	3,280	1,950	1,550	816	360	560	533	344	484	672	1,680
20	1,950	3,250	2,140	1,540	800	360	560	546	352	469	696	1,750
21	1,960	3,190	2,160	1,560	776	360	544	533	336	464	720	1,850
22	1,980	3,130	2,150	1,580	776	368	544	517	312	464	720	2,220
23	2,000	3,070	2,130	1,570	776	376	512	494	288	484	736	2,220
24	2,020	2,980	2,100	1,570	752	368	472	476	272	469	800	2,190
25	2,040	2,920	2,120	1,580	652	368	456	463	256	484	776	2,190
26	2,060	2,890	2,100	1,560	640	368	440	449	240	506	832	1,890
27	2,070	2,860	2,080	1,550	640	368	496	419	232	489	655	2,160
28	2,080	2,940	2,060	1,560	624	376	779	406	224	464	1,120	2,270
29	2,100	3,030	2,050	1,550	624	376	857	390	224	451	1,060	2,360
30	2,130	2,990	1,990	1,540	-	368	831	379	224	464	1,010	2,560
31	2,160	-	1,960	1,510	-	360	-	450	-	469	985	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	66,670	2,550	1,920	2,151	132,200
November	81,420	3,280	2,180	2,714	161,500
December	68,170	2,910	1,880	2,199	135,200
Calendar year 1947	463,099.3	3,280	2.4	1,269	918,400
January	53,140	2,090	1,510	1,714	105,400
February	29,852	1,460	624	1,029	59,210
March	14,571	608	360	470	28,900
April	14,975	857	344	499	29,700
May	16,723	781	379	539	33,170
June	9,361	449	224	312	18,570
July	14,207	649	216	458	28,180
August	22,965	1,120	506	741	45,550
September	46,117	2,560	977	1,537	91,470
Water year 1947-48	438,171	3,280	216	1,197	869,000

a No gage-height record; discharge computed on basis of recorded range in stage, records for lower gage, and weather records.

f Computed on basis of partly estimated gage-height record.

Miami Canal at water plant, Hialeah, Fla.

Location.- Water-stage recorder, lat. 25°50', long. 80°17', in sec. 18, T. 53 S., R. 41 E., at Miami water plant in Hialeah, on State Highway 25, half a mile upstream from 54th Street Bridge; datum of gage is 0.13 foot above mean sea level, datum of 1929. Auxiliary water-stage recorder above boat lift and dam, about 150 feet below 36th Street Bridge and 2 miles downstream from gaging station in Hialeah; datum of auxiliary gage is at mean sea level, datum of 1929.

Records available.- January 1940 to September 1948.

Extremes.- Maximum daily discharge during year, 4,170 second-feet Oct. 15; maximum gage height, 7.34 feet Oct. 15; maximum reverse flow measured, 282 second-feet July 16; minimum gage height, 0.05 foot July 2.

1940-48: Maximum daily discharge, that of Oct. 15, 1947; maximum gage height, that of Oct. 15, 1947; maximum reverse flow measured, 390 second-feet June 23, 1943; minimum gage height, -0.67 foot July 2, 1943, Mar. 22, 1945.

Remarks.- Records good above 500 second-feet and fair below. Flow affected by tide; discharge computed by using gage heights and tide ranges at auxiliary gage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,800	3,520	2,590	2,100	1,770	1,320	547	407	554	274	436	604
2	2,820	3,500	2,550	2,100	1,740	1,290	527	385	567	258	500	646
3	2,850	3,400	2,530	2,090	1,730	1,260	534	370	567	258	506	778
4	3,010	3,370	2,520	2,080	1,720	1,260	579	385	534	281	479	739
5	3,110	3,350	2,490	2,040	1,720	1,190	560	392	500	348	457	734
6	3,140	3,270	2,470	2,040	1,730	1,160	534	385	493	378	436	712
7	3,200	3,230	2,430	2,020	1,690	1,190	506	414	579	421	428	702
8	3,190	3,200	2,440	1,980	1,660	1,230	493	399	586	428	450	707
9	3,190	3,070	2,430	1,970	1,650	1,190	479	407	534	493	506	734
10	3,350	2,980	2,400	2,000	1,640	1,180	464	486	592	457	573	762
11	3,200	2,970	2,410	1,960	1,630	1,160	457	500	646	443	534	762
12	3,980	2,970	2,380	2,000	1,610	1,160	457	506	586	407	493	756
13	4,160	2,910	2,360	2,000	1,600	1,100	421	500	573	392	443	762
14	4,160	2,880	2,320	2,090	1,580	1,060	407	464	611	392	428	756
15	4,170	2,860	2,310	2,050	1,560	1,040	385	428	592	370	421	819
16	4,160	2,820	2,330	2,020	1,600	1,000	520	399	560	356	414	848
17	4,110	2,800	2,310	2,000	1,560	966	520	385	534	348	421	872
18	4,080	2,810	2,290	1,990	1,540	922	486	392	527	356	436	934
19	4,040	2,790	2,280	1,980	1,520	885	479	414	506	378	443	979
20	4,000	2,730	2,320	1,940	1,490	842	472	428	493	399	520	985
21	4,000	2,750	2,290	1,910	1,480	807	486	414	464	436	527	972
22	3,870	2,720	2,260	1,910	1,460	784	479	407	450	399	506	1,540
23	3,800	2,690	2,240	1,920	1,450	745	479	385	414	392	493	1,800
24	3,780	2,650	2,210	1,900	1,420	728	450	356	385	414	464	1,810
25	3,720	2,600	2,210	1,890	1,420	717	443	363	348	457	436	1,790
26	3,670	2,610	2,220	1,870	1,400	702	428	326	326	450	513	1,820
27	3,570	2,670	2,180	1,850	1,390	686	506	311	311	385	540	1,840
28	3,610	2,630	2,140	1,840	1,380	663	534	288	288	378	702	1,820
29	3,620	2,650	2,140	1,820	1,360	629	457	318	281	378	663	1,820
30	3,580	2,620	2,120	1,800	-	592	428	493	258	356	617	1,840
31	3,530	-	2,120	1,780	-	579	-	617	-	363	592	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	111,470	4,170	2,800	3,596	221,100
November	88,020	3,520	2,600	2,934	174,600
December	72,290	2,590	2,120	2,332	143,400
Calendar year 1947	515,282	4,170	-	1,412	1,022,000
January	60,940	2,100	1,780	1,966	120,900
February	45,500	1,770	1,360	1,569	90,250
March	30,037	1,320	579	969	59,580
April	14,517	579	385	484	28,790
May	12,724	617	288	410	25,240
June	14,659	646	258	489	29,080
July	11,845	493	258	382	23,490
August	15,377	702	414	496	30,500
September	32,643	1,840	604	1,088	64,750
Water year 1947-48	510,022	4,170	258	1,397	1,012,000

Tamiami Canal outlets west of Miami, Fla.

Location.- Staff gage, lat. 25°46', long. 80°50', in T. 54 S., R. 35 E., at 40-mile bend on U. S. Highway 94, 38 miles west of Miami. Datum of gage is 0.87 foot below mean sea level, datum of 1929.

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 17,000 second-feet Oct. 12, from rating curve extended above 9,800 second-feet; minimum daily, 2.5 second-feet Aug. 26, June 4. 1939-48: Maximum daily discharge, that of Oct. 12, 1947; no flow Apr. 25 to May 16, 1945.

Remarks.- Records fair. Gage read once daily. Daily discharge computed on basis of 24 discharge measurements, gage heights, and weather records. Figures of daily discharge consist of runoff from Everglades as represented by flow through all outlets from Tamiami Canal from a point 55 miles west of Miami to a point 15 miles west of Miami, where an earth barrier aids in diverting flow through the 64 outlets to the area immediately south of canal.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,800	6,340	3,660	2,300	880	160	12	2.8	2.8	6.5	99	225
2	4,900	6,180	3,570	2,250	860	145	11	2.9	2.7	5.4	105	230
3	5,010	6,020	3,480	2,200	†838	130	11	3.0	2.6	4.2	105	235
4	5,110	5,860	3,390	2,150	810	115	10	3.0	†2.5	3.0	110	240
5	5,210	†5,700	3,300	2,100	785	97	10	3.1	3.4	11	115	245
6	a5,320	†5,600	3,190	2,040	755	87	9.8	3.2	4.3	19	120	250
7	a5,420	5,500	3,080	1,980	730	77	9.6	3.2	5.2	27	125	255
8	a5,530	5,400	†2,980	1,920	700	66	9.4	3.3	6.1	35	130	260
9	†5,630	5,300	†2,890	1,860	675	†56	9.2	3.4	7.0	44	130	265
10	†5,630	5,200	2,800	1,800	645	52	9.0	3.4	7.9	52	135	270
11	†a5,600	5,120	2,760	1,740	615	48	8.8	3.5	8.8	60	140	275
12	a17,000	5,040	2,710	1,680	585	43	8.6	3.6	9.7	68	†144	280
13	a16,000	4,960	2,670	1,630	560	39	8.4	3.6	11	†76	145	†288
14	14,800	4,880	2,620	1,580	530	34	8.2	3.7	12	77	150	295
15	13,800	4,800	2,580	1,530	500	30	†8.0	3.8	13	78	155	510
16	13,000	a4,750	2,570	†1,480	470	28	7.5	3.8	14	78	160	725
17	12,300	†4,700	2,560	1,420	445	26	7.0	3.9	14	79	160	940
18	11,600	4,640	2,540	1,370	420	24	6.5	†4.0	15	80	165	1,160
19	11,000	4,570	2,530	1,320	†394	22	6.0	3.9	16	80	170	1,380
20	†10,300	4,500	2,520	1,270	365	20	5.5	3.8	16	81	170	1,600
21	†9,790	4,430	2,540	1,230	340	19	5.0	3.7	17	82	175	a1,820
22	†9,390	4,360	2,560	1,190	310	18	4.5	3.6	†18	82	180	a2,040
23	9,000	4,290	†2,580	1,150	285	17	4.0	3.5	17	83	180	†2,260
24	8,600	4,220	2,560	1,110	260	16	3.5	3.5	16	84	185	2,380
25	8,200	4,150	2,530	1,080	245	15	3.0	3.4	14	84	190	2,500
26	7,920	4,070	2,500	1,050	225	15	†2.5	3.3	13	85	†193	2,620
27	7,630	3,990	2,470	1,020	210	14	2.6	3.2	12	86	200	2,740
28	7,350	3,910	2,440	990	190	a14	2.6	3.1	10	86	205	2,860
29	7,060	3,830	2,410	960	175	†13	2.7	3.0	8.8	†87	210	2,980
30	6,780	3,750	2,380	930	-	a13	2.8	3.0	7.6	91	215	3,090
31	6,500	-	2,360	900	-	a12	-	2.9	-	95	220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	266,180	17,000	4,800	8,586	528,000
November	146,060	6,340	3,750	4,869	289,700
December	85,730	3,660	2,360	2,765	170,000
Calendar year 1947	724,496	17,000	12	1,985	1,437,000
January	47,230	2,300	900	1,524	93,680
February	14,802	880	175	510	29,360
March	1,465	160	12	47.3	2,910
April	208.7	12	2.5	6.96	414
May	105.1	4.0	2.8	3.39	208
June	307.4	18	2.5	10.2	610
July	1,909.1	95	3.0	61.6	3,790
August	4,886	220	99	158	9,690
September	35,218	3,090	225	1,174	69,850
Water year 1947-48	604,101.3	17,000	2.5	1,651	1,198,000

† Discharge measurement made on this day.
a No gage-height record.

Imperial River near Bonita Springs, Fla.

Location.- Water-stage recorder and wooden control, lat. 26°20', long. 81°45', in sec. 36, T. 47 S., R. 25 E., 1½ miles east of Bonita Springs. Datum of gage is at mean sea level, datum of 1929.

Records available.- May 1940 to September 1948.

Extremes.- Maximum discharge during year, 1,240 second-feet Sept. 27 (gage height, 9.58 feet); minimum, 0.8 second-foot June 1.
1940-48: Maximum discharge observed, 2,890 second-feet Sept. 12, 1940 (gage height, 12.45 feet); no flow June 28 to July 3, 1940.

Remarks.- Records fair except those for periods of no gage-height record, which are poor.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 12

1.38	0.9	1.8	16	6.5	439
1.4	1.0	1.9	23	7.5	604
1.5	2.4	2.0	31	8.2	778
1.6	5.9	2.3	57	9.2	1,110
1.7	10	5.5	318		

June 13 to Sept. 30

2.0	31	3.2	107
2.2	49	5.5	318
2.8	81		

Note.- Same as preceding table below 2.0 and above 5.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1,100	h209	145	37	55	3.6	3.7	1.1	0.9	3.1	164	138
2	a900	a200	137	40	51	3.2	1.7	1.2	.9	12	156	160
3	a750	a190	129	38	48	2.9	1.5	1.2	.9	8.4	160	151
4	h647	a180	113	35	44	2.6	1.4	1.2	.9	20	138	124
5	a560	169	103	31	42	2.4	1.4	1.1	1.0	51	120	100
6	a500	161	92	29	39	2.1	1.4	1.1	1.1	65	100	87
7	a450	157	81	26	36	2.8	1.4	1.1	1.2	107	87	75
8	a410	149	75	25	34	4.1	1.4	1.0	1.1	128	72	70
9	h374	129	68	23	32	2.4	1.4	1.4	.9	146	64	65
10	386	121	63	22	35	2.4	1.2	1.4	.9	138	72	59
11	374	121	58	20	30	2.3	1.4	1.4	.9	146	107	56
12	a370	125	55	19	28	2.1	1.5	1.4	.9	146	96	64
13	a370	113	52	28	26	2.0	1.5	1.4	1.1	96	81	90
14	a370	103	48	44	23	2.0	1.5	1.4	1.1	68	68	93
15	a365	98	45	37	20	2.0	1.8	1.2	1.0	54	57	100
16	a360	90	109	33	19	2.0	1.5	1.2	1.0	50	53	142
17	a355	80	78	31	17	2.1	1.2	1.1	1.0	50	72	151
18	h350	72	74	31	16	2.0	1.2	1.0	1.0	54	75	169
19	a340	66	75	29	14	2.0	1.2	1.1	1.1	60	62	156
20	a330	59	76	29	12	1.8	1.2	1.2	1.1	56	50	151
21	a320	52	79	36	10	1.8	1.1	1.2	1.5	52	72	a170
22	a310	50	74	39	9.9	1.8	1.4	1.2	1.7	54	128	a1,090
23	a300	48	67	36	8.9	1.8	1.5	1.4	1.8	58	232	a1,040
24	a285	46	63	55	8.0	1.8	1.4	1.2	2.0	65	232	972
25	h273	55	59	59	7.1	1.7	1.4	1.2	2.0	192	250	906
26	a265	51	53	58	5.9	1.7	1.5	1.2	2.0	192	241	778
27	a255	60	50	59	5.5	1.7	1.5	1.1	2.1	178	218	906
28	a245	133	47	63	5.1	1.8	1.4	1.0	2.0	178	187	1,110
29	a235	157	44	62	4.3	1.7	1.2	1.0	2.0	200	160	939
30	a225	149	42	56	-	1.7	1.2	1.0	2.0	200	142	873
31	a215	-	39	60	-	1.5	-	1.0	-	196	151	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	12,589	1,100	215	406	24,970
November	3,393	209	46	113	6,730
December	2,293	145	39	74.0	4,550
Calendar year 1947	81,757.1	2,400	1.5	224	162,200
January	1,190	63	19	38.4	2,360
February	685.7	55	4.3	23.6	1,360
March	67.8	4.1	1.5	2.19	134
April	44.1	3.7	1.1	1.47	87
May	36.7	1.4	1.0	1.18	73
June	39.1	2.1	.9	1.30	78
July	3,023.5	200	3.1	97.5	6,000
August	3,867	250	50	125	7,670
September	10,985	1,110	56	366	21,790
Water year 1947-48	38,213.9	1,110	.9	104	75,800

Peak discharge (base, 310 sec.-ft.).- Sept. 22 (time unknown) 1,180 sec.-ft.; Sept. 27 (10 p.m.) 1,240 sec.-ft.

a No gage-height record; discharge computed on basis of 2 discharge measurements, recorded range in stage, and weather records.

h Computed from staff-gage reading.

Caloosahatchee Canal at Moore Haven, Fla.

Location.- Water-stage recorder, lat. 26°50', long. 81°05', in sec. 12, T. 42 S., R. 32 E., at Moore Haven, 0.5 mile downstream from hurricane gate and lock 1 at Lake Okeechobee Outlet and 15 miles upstream from lock 2. Auxiliary water-stage recorder a quarter of a mile upstream from Lake Hicpochee and 3.0 miles downstream from lock 1. Datum of each gage is 1.42 feet below mean sea level, datum of 1929.

Records available.- July 1938 to September 1948.

Extremes.- Maximum daily discharge during year, 5,320 second-feet Dec. 31.
1938-48: Maximum discharge measured, 5,930 second-feet Nov. 6, 1947; maximum daily, 5,660 second-feet Dec. 8, 1945; lock closed and flow consists of leakage and lockage (estimated as 10 second-feet) during several periods in each year.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Records given herein represent discharge through canal from Lake Okeechobee and do not include leakage or lockage. Discharge computed by using stage at auxiliary gage as a factor.

Cooperation.- Weekly average discharge for hurricane gate and lock 1 furnished by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,020	4,610	4,500	4,850	4,690	4,950	3,610			-		-
2	3,630	4,720	4,680	4,740	4,740	4,580	3,450			-		-
3	3,710	4,830	4,870	4,700	4,720	4,510	3,740			-		-
4	3,480	4,940	4,980	4,830	4,430	4,280	3,890			-		-
5	3,670	5,050	5,070	4,740	4,730	5,050	3,560			-		-
6	3,670	5,160	4,800	4,890	4,660	4,860	3,380			-		-
7	3,780	5,270	4,800	4,940	4,730	4,610	3,380			-		-
8	3,640	4,710	4,790	4,940	4,320	4,340	3,330			-		-
9	3,850	5,060	5,000	4,600	4,510	4,690	3,260			-		-
10	3,940	4,970	4,850	4,970	4,790	4,340	3,440			-		-
11	2,690	4,950	4,820	5,140	4,940	4,620	3,400			-		-
12	2,800	4,770	4,840	4,560	4,900	4,390	3,260			-		-
13	3,970	4,490	4,980	5,080	4,820	4,740	3,450			-		-
14	3,550	4,600	5,070	4,830	4,820	4,800	3,260			-		-
15	3,710	4,670	4,880	4,900	4,670	4,600	3,260			-		-
16	3,830	4,740	4,690	4,900	5,010	4,200	3,190			-		-
17	3,960	4,690	4,500	4,920	4,700	4,500	3,360			-		-
18	3,710	4,690	4,800	4,940	4,860	4,430	3,570			-		-
19	4,000	4,840	4,870	4,600	4,390	3,940	3,300			-		-
20	4,000	4,640	5,100	4,780	4,520	4,550	3,340			636		1,450
21	3,920	4,690	4,880	4,450	4,950	4,420	3,010			-		2,460
22	4,010	4,690	4,840	4,460	4,630	4,170	3,000			1,440		-
23	3,970	4,740	4,920	4,460	5,020	4,110	3,270			1,060		-
24	3,740	4,520	4,940	4,490	4,940	4,280	3,220			-		-
25	3,850	4,910	4,740	4,720	4,920	4,180	3,140			-		-
26	3,980	4,910	4,780	4,340	4,730	4,130	2,480			-		-
27	4,070	5,130	4,800	4,430	4,700	4,030	586			-		-
28	4,180	3,940	4,860	4,460	4,620	3,890	390			-		-
29	4,290	4,360	4,950	4,820	4,300	3,990	195			-		-
30	4,400	4,820	5,250	4,600	-	3,780	-			-		-
31	4,500	-	5,320	4,600	-	3,590	-			-		-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	116,500	4,500	2,020	3,758	231,100
November	143,330	5,270	3,940	4,778	284,300
December	150,990	5,320	4,500	4,871	299,500
Calendar year 1947	862,025	5,320	-	-	1,710,000
January	146,680	5,140	4,340	4,732	290,900
February	136,760	5,020	4,300	4,716	271,300
March	135,550	5,050	3,590	4,373	268,900
April	87,721	3,890	-	-	174,000
May	-	-	-	-	-
June	-	-	-	-	-
July	3,136	1,440	-	-	6,220
August	-	-	-	-	-
September	3,910	2,460	-	-	7,760
Water year 1947-48	924,577	5,320	-	-	1,834,000

Note.- No gage-height record at one or both gages Oct. 25 to Nov. 6, Dec. 15, 16, Apr. 28 to May 4; discharge interpolated for Oct. 25 to Nov. 6, Dec. 15, 16; discharge estimated for Apr. 28, 29 on basis of weekly average flow information furnished by Corps of Engineers; and characteristics of recorder graph for upper gage for Apr. 30 to May 4 and record of hurricane gate openings indicate no flow except leakage and lockage. On days for which no discharge is shown, flow consists of leakage and lockage through lock 1 (about 10 second-feet).

Peace Creek Marsh outlet near Alturas, Fla.

Location.- Water-stage recorder, lat. 27°55', long. 81°43', in sec. 34, T. 29 S., R. 26 E., at highway bridge half a mile north of State Highway 60, 3.5 miles north of Alturas, and $8\frac{1}{4}$ miles east of Bartow. Datum of gage is 97.67 feet above mean sea level, datum of 1929 (State Road Department bench mark).

Records available.- January 1947 to September 1948.

Extremes.- 1947: Maximum discharge during period January to September, 1,360 second-feet Sept. 19 (gage height, 10.88 feet); minimum, 11 second-feet Feb. 6, 7 (gage height, 2.89 feet).

1947-48: Maximum discharge during year, 1,640 second-feet Sept. 23 (gage height, 11.51 feet); minimum, 12 second-feet June 30 (gage height, 2.94 feet).

Maximum stage known, 13.3 feet in 1928, from information by local resident (discharge, 2,540 second-feet, from rating curve extended above 1,600 second-feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Discharge, in second-feet, 1947-48

1947

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a14	12	49	71	54	101	327	474	169
2					12	210	73	52	101	320	371	415
3	•				12	174	75	48	88	327	281	306
4					12	114	67	43	135	313	239	306
5					12	92	62	40	180	287	257	371
6					11	79	55	36	140	251	227	320
7					12	70	50	34	113	233	204	400
8					13	69	47	32	92	227	245	386
9					12	66	44	33	78	227	257	334
10					12	61	40	36	71	216	233	281
11					12	56	38	33	87	251	204	245
12					12	53	71	31	98	275	216	222
13				a13	30	47	444	29	105	386	222	198
14					88	75	430	27	488	400	233	180
15					67	122	444	26	945	334	216	180
16					56	334	342	24	918	294	239	163
17					50	306	245	22	837	263	233	192
18					44	192	210	20	729	227	216	918
19					41	275	198	20	653	210	275	1,320
20					44	459	174	19	567	227	269	1,240
21					57	349	152	18	518	257	251	1,110
22					49	257	131	17	474	263	239	1,020
23					44	210	111	18	459	239	222	1,170
24				a12	40	180	99	18	430	251	198	1,200
25					38	157	90	18	400	275	180	1,110
26					38	135	82	36	349	269	157	972
27					36	115	73	50	334	281	140	864
28					33	100	65	48	342	349	140	783
29					-	89	59	57	320	300	163	677
30				12	-	82	58	53	313	313	146	608
31				12	-	76	-	76	-	488	123	-

a No gage-height record; discharge computed on basis of records for Peace Creek at Bartow and drainage canal west of Dundee.

Discharge, in second-feet, of Peace Creek Marsh outlet near Alturas, Fla., 1947-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	549	251	188	109	371	107	74	101	19	16	334	306
2	503	239	174	109	334	103	78	89	20	18	364	281
3	459	222	165	106	313	99	82	80	23	22	430	269
4	415	210	156	103	287	96	74	71	24	24	488	281
5	400	193	147	98	269	102	68	64	25	26	400	263
6	386	178	142	92	257	101	63	58	26	34	306	257
7	371	170	138	88	245	134	59	53	34	41	263	287
8	334	165	134	84	233	257	56	48	38	37	233	269
9	306	160	124	82	227	275	54	44	39	43	204	251
10	306	147	124	79	239	222	50	45	38	63	227	287
11	488	138	118	76	227	188	47	43	36	75	444	320
12	459	156	115	73	216	174	44	40	32	61	488	415
13	400	160	116	98	204	170	42	37	31	53	533	415
14	342	156	117	198	198	156	39	34	31	72	587	386
15	300	147	117	165	193	142	106	31	30	56	587	356
16	275	142	138	a150	183	134	204	29	28	42	549	327
17	263	138	138	134	178	124	160	26	27	36	677	334
18	257	142	134	156	174	119	138	25	25	35	729	400
19	239	147	129	152	165	113	120	24	24	31	677	415
20	222	152	124	156	156	106	108	23	23	36	608	378
21	210	147	138	400	152	100	98	21	21	99	518	342
22	198	147	183	444	142	93	88	20	20	80	503	894
23	188	142	170	356	138	88	80	18	18	74	488	1,590
24	193	138	156	567	134	83	71	18	17	160	488	1,540
25	444	138	147	783	129	78	65	17	16	124	474	1,360
26	459	142	142	677	124	71	58	16	15	117	459	1,240
27	386	227	134	587	119	67	84	15	14	91	444	1,200
28	342	227	124	430	115	95	204	14	16	79	415	1,240
29	313	233	119	459	111	99	147	20	14	92	386	1,240
30	294	204	117	430	-	88	117	24	13	233	356	1,170
31	269	-	114	386	-	80	-	21	-	386	327	-

a No gage-height record; discharge interpolated.

Monthly discharge, in second-feet, 1947-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January 1947	407	-	12	13.1		
February	899	88	11	32.1		
March	4,653	459	47	150		
April	4,100	444	38	137		
May	1,068	76	17	34.5		
June	10,465	945	71	349		
July	8,880	488	210	286		
August	7,070	474	123	228		
September	17,660	1,320	163	589		
Water year	-	-	-	-		
October 1947	10,570	549	188	341		
November	5,158	251	138	172		
December	4,282	188	114	138		
Calendar year 1947	75,212	1,320	11	206		
January 1948	7,827	783	73	252		
February	5,833	371	111	201		
March	3,864	275	67	125		
April	2,678	204	39	89.3		
May	1,169	101	14	37.7		
June	737	39	13	24.6		
July	2,356	386	16	76.0		
August	13,986	729	204	451		
September	18,313	1,590	251	610		
Water year 1947-48	76,773	1,590	13	210		

Peace Creek at Bartow, Fla.

Location.- Water-stage recorder, lat. 27°54', long. 81°49', in sec. 4, T. 30 S., R. 25 E., at bridge on State Highway 60, 900 feet downstream from McKinney Branch and half a mile east of Bartow. Datum of gage is 89.63 feet above mean sea level, datum of 1929.

Drainage area.- 335 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 2,920 second-feet Sept. 29 (gage height, 6.13 feet); minimum, 17 second-feet June 30 (gage height, 0.97 foot).

1939-48: Maximum discharge, 4,140 second-feet Sept. 24, 1947 (gage height, 6.45 feet), from rating curve extended above 2,900 second-feet: minimum, 1.4 second-feet June 2, 1945 (gage height, 0.05 foot).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.0	18	2.0	58	3.2	245	4.4	894
1.2	22	2.4	88	3.5	336	5.9	2,190
1.4	28	2.6	111	3.7	416	6.0	2,430
1.7	41	2.8	148	4.0	587	6.1	2,810

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,750	a595	512	300	1,200	354	224	166	45	19	636	1,020
2	1,620	a562	483	297	1,150	362	227	140	42	29	643	954
3	1,540	a528	456	300	1,070	336	242	123	45	33	710	877
4	1,410	h494	426	297	1,020	326	232	110	51	36	724	828
5	1,360	451	399	288	963	333	212	101	74	42	732	779
6	1,320	436	382	276	911	323	197	91	53	48	687	748
7	1,240	407	366	267	869	336	189	81	50	57	608	710
8	1,150	390	354	253	819	441	184	74	54	65	536	680
9	1,070	369	351	248	779	542	175	78	54	62	483	643
10	1,030	354	340	242	772	574	159	78	53	72	477	601
11	1,110	333	333	235	764	561	146	74	51	86	615	608
12	1,110	340	329	219	732	517	134	70	48	92	756	636
13	1,070	362	333	242	694	506	132	64	40	90	911	672
14	989	358	336	369	657	472	123	59	38	91	1,110	680
15	903	347	329	407	636	426	144	53	42	98	1,200	672
16	811	343	343	394	601	403	248	49	42	82	1,200	643
17	748	336	362	362	574	390	313	46	40	70	1,320	643
18	h732	329	358	362	549	377	294	46	38	64	1,360	643
19	a688	333	354	377	523	362	248	46	34	56	1,410	650
20	h643	340	340	394	500	347	206	43	31	61	1,360	657
21	h615	347	347	549	483	329	187	34	28	86	1,410	672
22	h574	343	407	764	461	316	163	27	30	108	2,380	1,280
23	h549	343	436	869	446	300	152	28	31	126	1,790	2,010
24	h517	340	415	1,320	436	282	140	29	29	245	1,540	2,100
25	h536	343	399	1,580	412	276	126	28	26	288	1,450	2,060
26	a642	362	377	1,540	394	262	111	26	25	265	1,360	2,010
27	h748	421	358	1,490	382	245	106	25	22	237	1,320	2,060
28	h732	489	340	1,450	366	248	166	24	22	202	1,280	2,810
29	h710	529	326	1,360	354	267	235	31	22	204	1,240	2,770
30	h702	536	316	1,320	-	262	204	57	18	276	1,150	2,430
31	h629	-	310	1,280	-	240	-	54	-	456	1,070	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	29,248	1,750	517	943	2.81	3.25
November	12,060	595	329	402	1.20	1.34
December	11,518	512	310	372	1.11	1.28
Calendar year 1947	195,828	4,100	31	537	1.60	21.73
January	19,651	1,580	219	634	1.89	2.18
February	19,517	1,200	354	673	2.01	2.17
March	11,315	574	240	365	1.09	1.26
April	5,619	313	106	187	.558	.62
May	1,955	166	24	63.1	.188	.22
June	1,178	74	18	39.3	.117	.13
July	3,746	456	19	121	.361	.42
August	33,468	2,380	483	1,080	3.22	3.72
September	34,546	2,810	601	1,152	3.44	3.84
Water year 1947-48	183,821	2,810	18	502	1.50	20.43

Peak discharge (base, 600 sec.-ft.).- Oct. 27 (12 m.) 748 sec.-ft.; Jan. 25 (8 a.m.) 1,580 sec.-ft.; Aug. 5 (9 a.m.) 732 sec.-ft.; Aug. 22 (2 a.m.) 3,190 sec.-ft.; Sept. 29 (1 a.m.) 2,920 sec.-ft.

a No gage-height record; discharge interpolated.

h Computed from wire-weight gage readings.

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.- 830 square miles.

Records available.- September 1933 to September 1948.

Average discharge.- 15 years, 741 second-feet.

Extremes.- Maximum discharge during year, 11,600 second-feet Sept. 24 (gage height, 16.55 feet); minimum, 113 second-feet May 28 (gage height, 0.54 foot).
1933-48: Maximum discharge, 26,300 second-feet Sept. 6, 1933 (gage height, 20.05 feet); minimum, 50 second-feet May 5, 1943; minimum gage height, -0.28 foot May 2, 1945.

Remarks.- Records good except those for period of no gage-height record, which are fair.

Revisions.- W 892: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 27				Jan. 28 to Sept. 30					
2.3	425	7.8	2,240	0.5	107	4.5	1,040	13.0	6,120
4.5	955	10.3	4,040	0.7	140	6.9	1,840	14.8	8,430
5.8	1,410			2.3	454	8.1	2,430	16.4	11,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,740	1,010	955	574	1,930	595	391	342	170	126	1,420	1,660
2	3,230	955	904	586	1,760	569	382	324	163	127	1,420	1,620
3	2,860	929	855	574	1,620	569	422	284	150	150	1,420	1,560
4	2,500	904	805	562	1,520	569	411	265	172	168	1,360	1,460
5	2,240	879	756	539	1,420	556	411	255	191	205	1,390	1,390
6	2,060	830	731	516	1,360	544	391	236	211	a255	1,630	1,320
7	1,930	805	682	493	1,290	595	362	226	211	a312	1,660	1,230
8	1,800	805	658	493	1,230	788	352	213	193	a345	1,590	1,130
9	1,720	805	634	482	1,160	981	336	197	189	a358	1,230	1,070
10	1,600	780	610	470	1,160	981	324	219	172	342	1,070	1,160
11	1,680	756	598	447	1,160	952	324	223	180	304	924	1,130
12	1,760	731	610	436	1,130	924	294	219	191	284	836	1,130
13	1,680	731	658	470	1,100	868	284	211	205	314	1,130	1,420
14	1,560	706	706	780	1,070	788	275	180	226	304	1,520	1,360
15	1,480	682	706	780	1,010	711	304	174	191	314	1,880	1,190
16	1,410	682	756	731	952	685	556	172	172	275	2,100	1,190
17	1,330	682	780	731	924	634	659	174	161	247	2,650	1,590
18	1,330	658	756	805	896	608	556	178	167	304	3,080	1,420
19	1,480	658	682	855	841	569	518	172	172	391	2,790	1,260
20	1,520	731	658	830	814	531	492	159	159	342	2,720	1,100
21	1,330	731	634	929	788	518	443	157	153	294	2,360	1,100
22	1,150	682	731	1,600	762	505	372	151	146	255	2,210	3,450
23	1,040	682	756	1,880	736	479	324	146	142	372	2,430	7,450
24	1,040	682	731	2,150	711	466	314	170	131	422	3,010	11,200
25	1,110	658	731	3,010	685	443	294	148	131	608	3,670	10,000
26	1,150	658	706	3,740	685	432	284	144	122	896	3,380	8,430
27	1,080	780	658	4,040	634	411	294	135	126	868	3,010	7,060
28	1,040	904	634	3,670	621	401	284	116	127	981	2,500	6,930
29	1,080	1,040	610	3,010	608	432	275	136	119	1,130	2,150	8,150
30	1,080	1,010	598	2,430	-	411	324	168	126	1,190	1,970	8,880
31	1,040	-	574	2,150	-	411	-	182	-	1,320	1,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	51,050	3,740	1,040	1,647	1.98	2.29
November	23,546	1,040	658	785	.946	1.06
December	21,863	955	574	705	.849	.98
Calendar year 1947	539,054	19,700	131	1,477	1.78	24.15
January	40,763	4,040	436	1,315	1.58	1.83
February	30,577	1,930	608	1,054	1.27	1.37
March	18,926	981	401	611	.736	.85
April	11,249	659	275	375	.452	.50
May	6,076	342	116	196	.236	.27
June	4,969	226	119	166	.200	.22
July	13,803	1,320	126	445	.536	.62
August	62,520	3,670	896	2,017	2.43	2.80
September	99,040	11,200	1,070	3,301	3.98	4.44
Water year 1947-48	384,382	11,200	116	1,050	1.26	17.23

Peak discharge (base, 3,100 sec.-ft.).- Jan. 27 (9 a.m.) 4,040 sec.-ft.; Aug. 25 (11 a.m.) 3,740 sec.-ft.; Sept. 24 (2 p.m.) 11,600 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations at Bartow and at Arcadia.

Peace Creek at Arcadia, Fla.

Location.- Water-stage recorder, lat. 81°52', long. 27°13', in sec. 26, T. 37 S., R. 24 E., at bridge on State Highway 70, half a mile west of Arcadia and about 5 miles upstream from Joshua Creek. Datum of gage is 8.25 feet above mean sea level, datum of 1929.

Drainage area.- 1,380 square miles.

Records available.- April 1931 to September 1948.

Average discharge.- 17 years, 1,220 second-feet.

Extremes.- Maximum discharge during year, 16,200 second-feet Sept. 28 (gage height, 15.06 feet); minimum, 112 second-feet June 27 (gage height, 0.57 foot).

1931-48: Maximum discharge, 36,200 second-feet Sept. 9, 1933 (gage height, 17.67 feet); minimum, 41 second-feet June 4, 5, 7, 1945 (gage height, -0.81 foot).

Maximum stage known, 18.3 feet in 1912, from information by county engineer (discharge, 43,000 second-feet, from rating curve extended above 30,000 second-feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions.- W 892: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.5	93	10.0	6,430
2.2	567	11.6	8,510
4.3	1,500	13.0	10,900
5.4	2,120	14.6	14,500
6.8	3,240	15.0	15,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,300	1,930	1,410	776	3,520	710	462	393	197	120	2,880	2,880
2	9,420	1,600	1,360	776	2,970	688	448	407	188	139	2,970	2,480
3	8,220	1,650	1,310	776	2,560	666	448	380	175	169	3,240	2,260
4	6,980	1,550	1,170	754	2,260	645	476	339	161	224	3,420	2,120
5	5,800	1,460	1,080	732	1,990	645	476	314	180	462	3,330	2,060
6	4,570	1,360	1,040	688	1,870	624	462	298	199	520	3,150	1,990
7	3,800	1,270	996	645	1,700	624	448	279	224	505	3,060	1,990
8	3,240	1,220	952	624	1,600	710	407	262	224	421	3,060	1,930
9	2,880	1,170	886	624	1,550	930	393	243	207	710	2,800	1,810
10	2,800	1,130	842	604	1,550	1,100	366	235	197	1,020	2,060	1,700
11	3,060	1,080	798	586	1,500	1,130	366	246	183	1,200	1,990	1,760
12	3,060	1,700	798	551	1,500	1,080	352	251	197	1,080	1,760	1,700
13	2,970	1,700	798	567	1,460	1,040	333	246	218	1,310	1,810	1,760
14	2,800	1,310	864	732	1,360	952	314	235	232	1,360	2,190	1,990
15	2,480	1,150	930	a940	1,310	886	366	207	257	1,240	2,480	1,990
16	2,260	1,080	996	a1,070	1,240	798	645	197	218	1,040	2,880	1,930
17	2,060	1,040	1,040	a1,050	1,200	754	820	197	202	688	3,240	2,060
18	1,990	1,020	1,080	974	1,150	710	798	197	191	776	3,610	2,560
19	1,990	996	1,020	1,040	1,080	666	666	202	180	952	4,080	2,720
20	1,990	1,020	952	1,080	1,040	624	604	197	186	1,020	4,670	2,560
21	2,060	1,080	908	1,150	996	586	567	180	169	820	5,390	2,260
22	1,870	1,150	952	1,360	952	567	505	175	155	754	5,280	4,770
23	1,650	1,130	1,040	1,700	930	551	448	178	142	908	4,770	8,510
24	1,550	1,040	1,020	2,400	886	520	393	172	134	1,080	4,370	9,740
25	1,760	996	a997	3,330	842	505	380	188	131	1,200	4,880	12,200
26	2,260	952	a975	3,800	820	490	366	178	123	1,500	5,800	14,500
27	2,330	974	952	4,170	798	476	604	167	115	1,650	5,800	15,800
28	2,190	1,150	908	4,570	754	462	586	213	115	1,760	5,490	15,800
29	2,120	1,360	864	4,670	732	448	476	167	120	1,870	4,980	15,100
30	2,120	1,460	842	4,470	-	476	407	164	128	1,990	4,170	14,500
31	2,060	-	798	3,980	-	462	-	188	-	2,330	3,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	104,640	10,300	1,550	3,375	2.45	2.82
November	37,728	1,930	952	1,258	.912	1.02
December	30,578	1,410	798	986	.714	.82
Calendar year 1947	996,554	23,600	156	2,730	1.98	26.87
January	51,189	4,670	551	1,651	1.20	1.38
February	42,120	3,520	732	1,452	1.05	1.14
March	21,525	1,130	448	694	.503	.58
April	14,382	820	314	479	.347	.39
May	7,295	407	164	235	.170	.20
June	55,348	257	115	178	.129	.14
July	30,818	2,330	120	994	.720	.83
August	113,030	5,800	1,760	3,646	2.64	3.05
September	155,430	15,800	1,700	5,181	3.75	4.19
Water year 1947-48	614,083	15,800	115	1,678	1.22	16.56

Peak discharge (base, 5,300 sec.-ft.).- Aug. 26 (11 p.m.) 5,900 sec.-ft.; Sept. 28 (1 p.m.) 16,200 sec.-ft.

a No gage-height record; discharge either interpolated or computed on basis of records for station at Zolfo Springs.

Drainage canal west of Dundee, Fla.

Location.- Water-stage recorder, lat. 28°01', long. 81°38', in sec. 29, T. 28 S., R. 27 E., at bridge on State Highway 542, 1.2 miles west of Dundee and 1.4 miles below Lake Hamilton Outlet. Datum of gage is 114.08 feet above mean sea level, datum of 1929.

Records available.- December 1946 to September 1948.

Extremes.- 1946-47: Maximum discharge during period December to September, 188 second-feet Sept. 18 (gage height, 6.86 feet); minimum, 2.7 second-feet Feb. 5 (gage height, 2.28 feet).

1947-48: Maximum discharge during water year, 231 second-feet Sept. 22 (gage height, 7.37 feet); minimum, 2.1 second-feet June 25 (gage height, 2.22 feet).

Remarks.- Records good except those for periods of no gage-height record, which are poor. Flow partly regulated by Lake Hamilton.

Discharge, in second-feet, 1946-48

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			a4.8	4.6	3.4	5.7	a7.4	12	29	98	71	33
2			a5.0	4.6	3.3	17	a7.6	11	32	96	65	59
3			a5.2	4.5	3.2	15	a7.8	10	32	96	59	56
4			a4.8	4.5	3.2	12	a7.2	8.8	97	92	59	76
5			a4.6	4.4	3.0	9.	a6.6	7.8	76	83	63	82
6			a4.5	4.5	3.0	7.8	a6.0	6.9	63	74	52	76
7			a4.4	4.4	3.1	6.9	a5.6	6.0	50	66	48	74
8			a4.3	4.3	3.1	7.0	a5.3	5.7	42	61	46	76
9			a4.2	4.4	3.1	6.9	a5.0	5.2	33	58	44	67
10			4.1	4.3	3.0	6.3	a4.7	4.9	29	56	45	61
11			4.1	4.3	3.0	5.9	4.5	4.4	32	67	44	56
12			3.9	4.3	3.0	5.5	10	4.2	40	71	41	50
13			3.9	4.4	6.2	a5.2	44	4.1	54	99	38	47
14			3.9	4.4	19	a8.2	40	3.9	157	86	38	44
15			3.7	4.2	16	a13	44	3.7	157	78	48	45
16			3.7	4.2	13	a28	35	3.7	140	71	45	44
17			3.6	4.2	9.0	a25	31	3.8	127	67	44	46
18			3.7	4.2	7.4	a18	32	3.6	112	61	44	148
19			3.7	4.2	6.9	a27	35	3.6	103	56	50	181
20			3.7	4.2	6.3	a44	31	3.5	99	63	63	175
21			3.7	4.2	6.9	a33	28	3.6	112	65	63	170
22			3.7	4.1	6.2	a25	25	4.1	135	61	59	161
23			3.6	4.1	5.7	a21	23	4.8	127	56	54	175
24			3.6	4.1	5.5	a18	23	5.3	117	52	48	175
25			4.1	4.1	4.8	a16	21	5.7	108	50	44	170
26			4.9	4.1	4.5	a14	19	6.2	108	48	42	161
27			4.8	3.9	4.3	a12	17	6.5	115	48	37	157
28			4.7	3.9	4.5	a10	15	8.0	108	46	34	153
29			4.6	3.7	-	a9.2	14	12	98	46	33	148
30			4.6	3.6	-	a8.4	13	14	108	61	31	144
31			4.6	3.5	-	a7.8	-	20	-	74	29	-

a No gage-height record; discharge computed on basis of records for Peace Creek at Bartow and Peace Creek Marsh outlet near Alturas.

Discharge, in second-feet, of drainage canal west of Dundee, Fla., 1946-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	74	94	52	122	62	h42	20	4.2	3.2	71	112
2	136	72	89	52	117	62	h41	18	4.0	3.2	93	108
3	127	69	83	50	115	59	a40	16	3.9	a3.7	a98	103
4	122	66	80	49	110	59	h40	15	3.9	h4.4	a105	103
5	120	62	75	46	108	64	h36	12	3.9	a5.2	a77	99
6	117	59	73	44	108	62	h34	10	3.8	a7.0	h67	99
7	115	56	69	42	106	65	h32	9.4	3.6	a9.0	65	105
8	110	58	67	41	103	79	h30	8.2	3.6	6.5	61	105
9	110	55	64	40	103	82	h29	7.3	3.5	11	a57	101
10	108	50	61	38	108	79	h26	7.1	3.4	25	a67	99
11	110	47	59	38	106	77	a25	6.8	3.5	30	a92	101
12	108	56	58	35	103	75	h24	6.1	3.4	23	a113	99
13	108	54	57	44	98	75	h22	5.5	3.4	19	h122	97
14	103	55	59	70	98	a71	h19	4.8	3.2	21	124	90
15	100	52	56	64	94	a68	24	4.3	3.1	19	122	86
16	98	51	61	56	92	a65	32	4.0	3.1	15	114	84
17	96	55	61	53	89	a62	29	3.6	3.1	13	122	122
18	94	66	59	61	86	a60	25	3.5	3.1	14	131	140
19	92	75	57	61	84	a57	22	3.5	3.0	16	120	127
20	89	77	55	63	82	a54	18	3.4	3.0	36	114	116
21	86	77	62	100	79	a52	16	3.0	3.0	59	116	110
22	83	76	77	106	77	a50	14	2.8	2.8	40	166	181
23	80	74	76	100	77	a48	12	2.8	2.7	27	161	227
24	83	72	72	146	75	a46	10	2.8	2.7	27	153	222
25	100	74	69	160	75	a44	9.2	2.7	2.3	27	148	222
26	100	77	66	151	70	a42	8.2	2.7	2.3	25	144	217
27	96	96	61	146	68	h40	19	2.7	2.8	24	140	217
28	94	100	58	141	68	a52	37	3.5	3.1	22	135	222
29	89	100	56	136	65	a60	30	4.6	3.0	25	127	227
30	83	98	55	127	-	a51	24	4.8	3.1	43	122	222
31	77	-	53	124	-	h44	-	4.3	-	71	118	-

a No gage-height record; discharge computed on basis of records for Peace Creek Marsh outlet near Alturas.
h Computed from staff-gage readings.

Monthly discharge, in second-feet, 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	-	-	-	-		
November	-	-	-	-		
December 1946	130.7	5.2	3.6	4.22		
Calendar year	-	-	-	-		
January 1947	130.4	4.6	3.5	4.21		
February	163.6	19	3.0	5.84		
March	448.1	44	5.2	14.5		
April	567.7	44	4.5	18.9		
May	206.8	20	3.5	6.67		
June	2,640	157	29	88.0		
July	2,106	99	46	67.9		
August	1,481	71	29	47.8		
September	3,110	181	33	104		
Water year	-	-	-	-		
October 1947	3,175	141	77	102		
November	2,053	100	47	68.4		
December	2,042	94	53	65.9		
Calendar year 1947	18,123.6	181	3.0	49.7		
January 1948	2,436	160	35	78.6		
February	2,686	122	65	92.6		
March	1,866	82	40	60.2		
April	769.4	42	8.2	25.6		
May	205.2	20	2.7	6.62		
June	97.5	4.2	2.3	3.25		
July	674.2	71	3.2	21.7		
Anguet	3,465	166	57	112		
September	4,163	227	84	139		
Water year 1947-48	23,632.3	227	2.3	64.6		

Kissengen Spring near Bartow, Fla.

Location.- Staff gage, 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 1948 (discharge measurements only).

Extremes.- 1932-48: Maximum discharge measured, 43.6 second-feet Oct. 11, 1933; minimum discharge estimated, 0.2 second-foot June 19, 1947.

Remarks.- Discharge measurements made at outlet of pool.

Discharge measurements, in second-feet,
water year October 1947 to September 1948

Oct. 1	29.2	Jan. 21	a1.7	June 8	2.58
Nov. 6	13.4	Feb. 25	a1.8		
Dec. 18	3.50	Apr. 29	2.16		

a Discharge estimated.

Tamiami Canal outlets west of Miami, Fla.

Location.- Staff gage, lat. 25°46', long. 80°50', in T. 54 S., R. 35 E., at 40-mile bend on U. S. Highway 94, 38 miles west of Miami. Datum of gage is 0.87 foot below mean sea level, datum of 1929.

Records available.- November 1939 to September 1948.

Extremes.- Maximum daily discharge during year, 17,000 second-feet Oct. 12, from rating curve extended above 9,800 second-feet; minimum daily, 2.5 second-feet Aug. 26, June 4.
1939-48: Maximum daily discharge, that of Oct. 12, 1947; no flow Apr. 25 to May 16, 1945.

Remarks.- Records fair. Gage read once daily. Daily discharge computed on basis of 24 discharge measurements, gage heights, and weather records. Figures of daily discharge consist of runoff from Everglades as represented by flow through all outlets from Tamiami Canal from a point 55 miles west of Miami to a point 15 miles west of Miami, where an earth barrier aids in diverting flow through the 64 outlets to the area immediately south of canal.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,800	6,340	3,660	2,300	880	160	12	2.8	2.8	6.5	99	225
2	4,900	6,180	3,570	2,250	860	145	11	2.9	2.7	5.4	105	230
3	5,010	6,020	3,480	2,200	†838	130	11	3.0	2.6	4.2	105	235
4	5,110	5,860	3,390	2,150	810	115	10	3.0	†2.5	3.0	110	240
5	5,210	†5,700	3,300	2,100	785	97	10	3.1	3.4	11	115	245
6	a5,320	†5,600	3,190	2,040	755	87	9.8	3.2	4.3	19	120	250
7	a5,420	5,500	3,080	1,980	730	77	9.6	3.2	5.2	27	125	255
8	a5,530	5,400	†2,980	1,920	700	66	9.4	3.3	6.1	35	130	260
9	†5,630	5,300	†2,890	1,860	675	†56	9.2	3.4	7.0	44	130	265
10	†5,630	5,200	2,800	1,800	645	52	9.0	3.4	7.9	52	135	270
11	†a5,600	5,120	2,760	1,740	615	48	8.8	3.5	8.8	60	140	275
12	a17,000	5,040	2,710	1,680	585	43	8.6	3.6	9.7	68	†144	280
13	a16,000	4,960	2,670	1,630	560	39	8.4	3.6	11	†76	145	†288
14	14,800	4,880	2,620	1,580	530	34	8.2	3.7	12	77	150	295
15	13,800	4,800	2,580	1,530	500	30	†8.0	3.8	13	78	155	510
16	13,000	a4,750	2,570	†1,480	470	28	7.5	3.8	14	78	160	725
17	12,300	†4,700	2,560	1,420	445	26	7.0	3.9	14	79	160	940
18	11,600	4,640	2,540	1,370	420	24	6.5	†4.0	15	80	165	1,160
19	11,000	4,570	2,530	1,320	†394	22	6.0	3.9	16	80	170	1,380
20	†10,300	4,500	2,520	1,270	365	20	5.5	3.8	16	81	170	1,600
21	†9,790	4,430	2,540	1,230	340	19	5.0	3.7	17	82	175	a1,820
22	†9,390	4,360	2,560	1,190	310	18	4.5	3.6	†18	82	180	a2,040
23	9,000	4,290	†2,580	1,150	285	17	4.0	3.5	17	83	180	†2,260
24	8,600	4,220	2,560	1,110	260	16	3.5	3.5	16	84	185	2,380
25	8,200	4,150	2,530	1,080	245	15	3.0	3.4	14	84	190	2,500
26	7,920	4,070	2,500	1,050	225	15	†2.5	3.3	13	85	†193	2,620
27	7,630	3,990	2,470	1,020	210	14	2.6	3.2	12	86	200	2,740
28	7,350	3,910	2,440	990	190	a14	2.6	3.1	10	86	205	2,860
29	7,060	3,830	2,410	960	175	†13	2.7	3.0	8.8	†87	210	2,980
30	6,780	3,750	2,380	930	-	a13	2.8	3.0	7.6	91	215	3,090
31	6,500	-	2,360	900	-	a12	-	2.9	-	95	220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	266,180	17,000	4,800	8,586	528,000
November	146,060	6,340	3,750	4,869	289,700
December	85,730	3,660	2,360	2,765	170,000
Calendar year 1947	724,496	17,000	12	1,985	1,437,000
January	47,230	2,300	900	1,524	93,680
February	14,802	880	175	510	29,360
March	1,465	160	12	47.3	2,910
April	208.7	12	2.5	6.96	414
May	105.1	4.0	2.8	3.39	208
June	307.4	18	2.5	10.2	610
July	1,909.1	95	3.0	61.6	3,790
August	4,886	220	99	158	9,690
September	35,218	3,090	225	1,174	69,850
Water year 1947-48	604,101.3	17,000	2.5	1,651	1,198,000

† Discharge measurement made on this day.
a No gage-height record.

Imperial River near Bonita Springs, Fla.

Location.- Water-stage recorder and wooden control, lat. 26°20', long. 81°45', in sec. 36, T. 47 S., R. 25 E., 1½ miles east of Bonita Springs. Datum of gage is at mean sea level, datum of 1929.

Records available.- May 1940 to September 1948.

Extremes.- Maximum discharge during year, 1,240 second-feet Sept. 27 (gage height, 9.58 feet); minimum, 0.8 second-foot June 1.

1940-48: Maximum discharge observed, 2,890 second-feet Sept. 12, 1940 (gage height, 12.45 feet); no flow June 28 to July 3, 1940.

Remarks.- Records fair except those for periods of no gage-height record, which are poor.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 12

1.38	0.9	1.8	16	6.5	439
1.4	1.0	1.9	23	7.5	604
1.5	2.4	2.0	31	8.2	778
1.6	5.9	2.3	57	9.2	1,110
1.7	10	5.5	318		

June 13 to Sept. 30

2.0	31	3.2	107
2.2	49	5.5	318
2.8	81		

Note.- Same as preceding table below 2.0 and above 5.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1,100	h209	145	37	55	3.6	3.7	1.1	0.9	3.1	164	138
2	a900	a200	137	40	51	3.2	1.7	1.2	.9	12	156	160
3	a750	a190	129	38	48	2.9	1.5	1.2	.9	8.4	160	151
4	h647	a180	113	35	44	2.6	1.4	1.2	.9	20	138	124
5	a560	169	103	31	42	2.4	1.4	1.1	1.0	51	120	100
6	a500	161	92	29	39	2.1	1.4	1.1	1.1	65	100	87
7	a450	157	81	26	36	2.8	1.4	1.1	1.2	107	87	75
8	a410	149	75	25	34	4.1	1.4	1.0	1.1	128	72	70
9	h374	129	68	23	32	2.4	1.4	1.4	.9	146	64	65
10	386	121	63	22	35	2.4	1.2	1.4	.9	138	72	59
11	374	121	58	20	30	2.3	1.4	1.4	.9	146	107	56
12	a370	125	55	19	28	2.1	1.5	1.4	.9	146	96	64
13	a370	113	52	28	26	2.0	1.5	1.4	1.1	96	81	90
14	a370	103	48	44	23	2.0	1.5	1.4	1.1	68	68	93
15	a365	98	45	37	20	2.0	1.8	1.2	1.0	54	57	100
16	a360	90	109	33	19	2.0	1.5	1.2	1.0	50	53	142
17	a355	80	78	31	17	2.1	1.2	1.1	1.0	50	72	151
18	h350	72	74	31	16	2.0	1.2	1.0	1.0	54	75	169
19	a340	66	75	29	14	2.0	1.2	1.1	1.1	60	62	156
20	a330	59	76	29	12	1.8	1.2	1.2	1.1	56	50	151
21	a320	52	79	36	10	1.8	1.1	1.2	1.5	52	72	a170
22	a310	50	74	39	9.9	1.8	1.4	1.2	1.7	54	128	a1,090
23	a300	48	67	36	8.9	1.8	1.5	1.4	1.8	58	232	a1,040
24	a285	46	63	55	8.0	1.8	1.4	1.2	2.0	65	232	972
25	h273	55	59	59	7.1	1.7	1.4	1.2	2.0	192	250	906
26	a265	51	53	58	5.9	1.7	1.5	1.2	2.0	192	241	778
27	a255	60	50	59	5.5	1.7	1.5	1.1	2.1	178	218	906
28	a245	133	47	63	5.1	1.8	1.4	1.0	2.0	178	187	1,110
29	a235	157	44	62	4.3	1.7	1.2	1.0	2.0	200	160	939
30	a225	149	42	56	-	1.7	1.2	1.0	2.0	200	142	873
31	a215	-	39	60	-	1.5	-	1.0	-	196	151	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	12,589	1,100	215	406	24,970
November	3,393	209	46	113	6,730
December	2,293	145	39	74.0	4,550
Calendar year 1947	81,757.1	2,400	1.5	224	162,200
January	1,190	63	19	38.4	2,360
February	685.7	55	4.3	23.6	1,360
March	67.8	4.1	1.5	2.19	134
April	44.1	3.7	1.1	1.47	87
May	36.7	1.4	1.0	1.18	73
June	39.1	2.1	.9	1.30	78
July	3,023.5	200	3.1	97.5	6,000
August	3,867	250	50	125	7,670
September	10,985	1,110	56	366	21,790
Water year 1947-48	38,213.9	1,110	.9	104	75,800

Peak discharge (base, 310 sec.-ft.).- Sept. 22 (time unknown) 1,180 sec.-ft.; Sept. 27 (10 p.m.) 1,240 sec.-ft.

a No gage-height record; discharge computed on basis of 2 discharge measurements, recorded range in stage, and weather records.

h Computed from staff-gage reading.

Caloosahatchee Canal at Moore Haven, Fla.

Location.- Water-stage recorder, lat. 26°50', long. 81°05', in sec. 12, T. 42 S., R. 32 E., at Moore Haven, 0.5 mile downstream from hurricane gate and lock 1 at Lake Okeechobee Outlet and 15 miles upstream from lock 2. Auxiliary water-stage recorder a quarter of a mile upstream from Lake Hicpochee and 3.0 miles downstream from lock 1. Datum of each gage is 1.42 feet below mean sea level, datum of 1929.

Records available.- July 1938 to September 1948.

Extremes.- Maximum daily discharge during year, 5,320 second-feet Dec. 31.
1938-48: Maximum discharge measured, 5,930 second-feet Nov. 6, 1947; maximum daily, 5,660 second-feet Dec. 8, 1945; lock closed and flow consists of leakage and lockage (estimated as 10 second-feet) during several periods in each year.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Records given herein represent discharge through canal from Lake Okeechobee and do not include leakage or lockage. Discharge computed by using stage at auxiliary gage as a factor.

Cooperation.- Weekly average discharge for hurricane gate and lock 1 furnished by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,020	4,610	4,500	4,850	4,690	4,950	3,610			-		-
2	3,630	4,720	4,680	4,740	4,740	4,580	3,450			-		-
3	3,710	4,830	4,870	4,700	4,720	4,510	3,740			-		-
4	3,480	4,940	4,980	4,830	4,430	4,280	3,890			-		-
5	3,670	5,050	5,070	4,740	4,730	5,050	3,560			-		-
6	3,670	5,160	4,800	4,890	4,660	4,860	3,380			-		-
7	3,780	5,270	4,800	4,940	4,730	4,610	3,380			-		-
8	3,640	4,710	4,790	4,940	4,320	4,340	3,330			-		-
9	3,850	5,060	5,000	4,600	4,510	4,690	3,260			-		-
10	3,940	4,970	4,850	4,970	4,790	4,340	3,440			-		-
11	2,690	4,950	4,820	5,140	4,940	4,620	3,400			-		-
12	2,800	4,770	4,840	4,560	4,900	4,390	3,260			-		-
13	3,970	4,490	4,980	5,080	4,820	4,740	3,450			-		-
14	3,550	4,600	5,070	4,830	4,820	4,800	3,260			-		-
15	3,710	4,670	4,880	4,900	4,670	4,600	3,260			-		-
16	3,830	4,740	4,690	4,900	5,010	4,200	3,190			-		-
17	3,960	4,690	4,500	4,920	4,700	4,500	3,360			-		-
18	3,710	4,690	4,800	4,940	4,860	4,430	3,570			-		-
19	4,000	4,840	4,870	4,600	4,390	3,940	3,300			-		-
20	4,000	4,640	5,100	4,780	4,520	4,550	3,340			636		1,450
21	3,920	4,690	4,880	4,450	4,950	4,420	3,010			-		2,460
22	4,010	4,690	4,840	4,460	4,630	4,170	3,000			1,440		-
23	3,970	4,740	4,920	4,460	5,020	4,110	3,270			1,060		-
24	3,740	4,520	4,940	4,490	4,940	4,280	3,220			-		-
25	3,850	4,910	4,740	4,720	4,920	4,180	3,140			-		-
26	3,980	4,910	4,780	4,340	4,730	4,130	2,480			-		-
27	4,070	5,130	4,800	4,430	4,700	4,030	586			-		-
28	4,180	3,940	4,860	4,460	4,620	3,890	390			-		-
29	4,290	4,360	4,950	4,820	4,300	3,990	195			-		-
30	4,400	4,820	5,250	4,600	-	3,780	-			-		-
31	4,500	-	5,320	4,600	-	3,590	-			-		-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	116,500	4,500	2,020	3,758	231,100
November	143,330	5,270	3,940	4,778	284,300
December	150,990	5,320	4,500	4,871	299,500
Calendar year 1947	862,025	5,320	-	-	1,710,000
January	146,680	5,140	4,340	4,732	290,900
February	136,760	5,020	4,300	4,716	271,300
March	135,550	5,050	3,590	4,373	268,900
April	87,721	3,890	-	-	174,000
May	-	-	-	-	-
June	-	-	-	-	-
July	3,136	1,440	-	-	6,220
August	-	-	-	-	-
September	3,910	2,460	-	-	7,760
Water year 1947-48	924,577	5,320	-	-	1,834,000

Note.- No gage-height record at one or both gages Oct. 25 to Nov. 6, Dec. 15, 16, Apr. 28 to May 4; discharge interpolated for Oct. 25 to Nov. 6, Dec. 15, 16; discharge estimated for Apr. 28, 29 on basis of weekly average flow information furnished by Corps of Engineers; and characteristics of recorder graph for upper gage for Apr. 30 to May 4 and record of hurricane gate openings indicate no flow except leakage and lockage. On days for which no discharge is shown, flow consists of leakage and lockage through lock 1 (about 10 second-feet).

Peace Creek Marsh outlet near Alturas, Fla.

Location.- Water-stage recorder, lat. 27°55', long. 81°43', in sec. 34, T. 29 S., R. 26 E., at highway bridge half a mile north of State Highway 60, 3.5 miles north of Alturas, and 8¼ miles east of Bartow. Datum of gage is 97.67 feet above mean sea level, datum of 1929 (State Road Department bench mark).

Records available.- January 1947 to September 1948.

Extremes.- 1947: Maximum discharge during period January to September, 1,360 second-feet Sept. 19 (gage height, 10.88 feet); minimum, 11 second-feet Feb. 6, 7 (gage height, 2.89 feet).

1947-48: Maximum discharge during year, 1,640 second-feet Sept. 23 (gage height, 11.51 feet); minimum, 12 second-feet June 30 (gage height, 2.94 feet).

Maximum stage known, 13.3 feet in 1928, from information by local resident (discharge, 2,540 second-feet, from rating curve extended above 1,600 second-feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Discharge, in second-feet, 1947-48

1947

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a14	12	49	71	54	101	327	474	169
2					12	210	73	52	101	320	371	415
3					12	174	75	48	88	327	281	306
4					12	114	67	43	135	313	239	306
5					12	92	62	40	180	287	257	371
6					11	79	55	36	140	251	227	320
7					12	70	50	34	113	233	204	400
8					13	69	47	32	92	227	245	386
9					12	66	44	33	78	227	257	334
10					12	61	40	36	71	216	233	281
11					12	56	38	33	87	251	204	245
12					12	53	71	31	98	275	216	222
13				a13	30	47	444	29	105	386	222	198
14					88	75	430	27	488	400	233	180
15					67	122	444	26	945	334	216	180
16					56	334	342	24	918	294	239	163
17					50	306	245	22	837	263	233	192
18					44	192	210	20	729	227	216	918
19					41	275	198	20	653	210	275	1,320
20					44	459	174	19	567	227	269	1,240
21					57	349	152	18	518	257	251	1,110
22					49	257	131	17	474	263	239	1,020
23					44	210	111	18	459	239	222	1,170
24				a12	40	180	99	18	430	251	198	1,200
25					38	157	90	18	400	275	180	1,110
26					38	135	82	36	349	269	157	972
27					36	115	73	50	334	281	140	864
28					33	100	65	48	342	349	140	783
29					-	89	59	57	320	300	163	677
30				12	-	82	58	53	313	313	146	608
31				12	-	76	-	76	-	488	123	-

a No gage-height record; discharge computed on basis of records for Peace Creek at Bartow and drainage canal west of Dundee.

Discharge, in second-feet, of Peace Creek Marsh outlet near Alturas, Fla., 1947-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	549	251	188	109	371	107	74	101	19	16	334	306
2	503	239	174	109	334	103	78	89	20	18	364	281
3	459	222	165	106	313	99	82	80	23	22	430	269
4	415	210	156	103	287	96	74	71	24	24	488	281
5	400	193	147	98	269	102	68	64	25	26	400	263
6	386	178	142	92	257	101	63	58	26	34	306	257
7	371	170	138	88	245	134	59	53	34	41	263	287
8	334	165	134	84	233	257	56	48	38	37	233	269
9	306	160	124	82	227	275	54	44	39	43	204	251
10	306	147	124	79	239	222	50	45	38	63	227	287
11	488	138	118	76	227	188	47	43	36	75	444	320
12	459	156	115	73	216	174	44	40	32	61	488	415
13	400	160	116	98	204	170	42	37	31	53	533	415
14	342	156	117	198	198	156	39	34	31	72	587	386
15	300	147	117	165	193	142	106	31	30	56	587	356
16	275	142	138	a150	183	134	204	29	28	42	549	327
17	263	138	138	134	178	124	160	26	27	36	677	334
18	257	142	134	156	174	119	138	25	25	35	729	400
19	239	147	129	152	165	113	120	24	24	31	677	415
20	222	152	124	156	156	106	108	23	23	36	608	378
21	210	147	138	400	152	100	98	21	21	99	518	342
22	198	147	183	444	142	93	88	20	20	80	503	894
23	188	142	170	356	138	88	80	18	18	74	488	1,590
24	193	138	156	567	134	83	71	18	17	160	488	1,540
25	444	138	147	783	129	78	65	17	16	124	474	1,360
26	459	142	142	677	124	71	58	16	15	117	459	1,240
27	386	227	134	587	119	67	84	15	14	91	444	1,200
28	342	227	124	430	115	95	204	14	16	79	415	1,240
29	313	233	119	459	111	99	147	20	14	92	386	1,240
30	294	204	117	430	-	88	117	24	13	233	356	1,170
31	269	-	114	386	-	80	-	21	-	386	327	-

a No gage-height record; discharge interpolated.

Monthly discharge, in second-feet, 1947-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January 1947	407	-	12	13.1		
February	899	88	11	32.1		
March	4,653	459	47	150		
April	4,100	444	38	137		
May	1,068	76	17	34.5		
June	10,465	945	71	349		
July	8,880	488	210	286		
August	7,070	474	123	228		
September	17,660	1,320	163	589		
Water year	-	-	-	-		
October 1947	10,570	549	188	341		
November	5,158	251	138	172		
December	4,282	188	114	138		
Calendar year 1947	75,212	1,320	11	206		
January 1948	7,827	783	73	252		
February	5,833	371	111	201		
March	3,864	275	67	125		
April	2,678	204	39	89.3		
May	1,169	101	14	37.7		
June	737	39	13	24.6		
July	2,356	386	16	76.0		
August	13,986	729	204	451		
September	18,313	1,590	251	610		
Water year 1947-48	76,773	1,590	13	210		

Peace Creek at Bartow, Fla.

Location.- Water-stage recorder, lat. 27°54', long. 81°49', in sec. 4, T. 30 S., R. 25 E., at bridge on State Highway 60, 900 feet downstream from McKinney Branch and half a mile east of Bartow. Datum of gage is 89.63 feet above mean sea level, datum of 1929.

Drainage area.- 335 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 2,920 second-feet Sept. 29 (gage height, 6.13 feet); minimum, 17 second-feet June 30 (gage height, 0.97 foot).

1939-48: Maximum discharge, 4,140 second-feet Sept. 24, 1947 (gage height, 6.45 feet), from rating curve extended above 2,900 second-feet: minimum, 1.4 second-feet June 2, 1945 (gage height, 0.05 foot).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.0	18	2.0	58	3.2	245	4.4	894
1.2	22	2.4	88	3.5	336	5.9	2,190
1.4	28	2.6	111	3.7	416	6.0	2,430
1.7	41	2.8	148	4.0	587	6.1	2,810

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,750	a595	512	300	1,200	354	224	166	45	19	636	1,020
2	1,620	a562	483	297	1,150	362	227	140	42	29	643	954
3	1,540	a528	456	300	1,070	336	242	123	45	33	710	877
4	1,410	h494	426	297	1,020	326	232	110	51	36	724	828
5	1,360	451	399	288	963	333	212	101	74	42	732	779
6	1,320	436	382	276	911	323	197	91	53	48	687	748
7	1,240	407	366	267	869	336	189	81	50	57	608	710
8	1,150	390	354	253	819	441	184	74	54	65	536	680
9	1,070	369	351	248	779	542	175	78	54	62	483	643
10	1,030	354	340	242	772	574	159	78	53	72	477	601
11	1,110	333	333	235	764	561	146	74	51	86	615	608
12	1,110	340	329	219	732	517	134	70	48	92	756	636
13	1,070	362	333	242	694	506	132	64	40	90	911	672
14	989	358	336	369	657	472	123	59	38	91	1,110	680
15	903	347	329	407	636	426	144	53	42	98	1,200	672
16	811	343	343	394	601	403	248	49	42	82	1,200	643
17	748	336	362	362	574	390	313	46	40	70	1,320	643
18	h732	329	358	362	549	377	294	46	38	64	1,360	643
19	a688	333	354	377	523	362	248	46	34	56	1,410	650
20	h643	340	340	394	500	347	206	43	31	61	1,360	657
21	h615	347	347	549	483	329	187	34	28	86	1,410	672
22	h574	343	407	764	461	316	163	27	30	108	2,380	1,280
23	h549	343	436	869	446	300	152	28	31	126	1,790	2,010
24	h517	340	415	1,320	436	282	140	29	29	245	1,540	2,100
25	h536	343	399	1,580	412	276	126	28	26	288	1,450	2,060
26	a642	362	377	1,540	394	262	111	26	25	265	1,360	2,010
27	h748	421	358	1,490	382	245	106	25	22	237	1,320	2,060
28	h732	489	340	1,450	366	248	166	24	22	202	1,280	2,810
29	h710	529	326	1,360	354	267	235	31	22	204	1,240	2,770
30	h702	536	316	1,320	-	262	204	57	18	276	1,150	2,430
31	h629	-	310	1,280	-	240	-	54	-	456	1,070	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	29,248	1,750	517	943	2.81	3.25
November	12,060	595	329	402	1.20	1.34
December	11,518	512	310	372	1.11	1.28
Calendar year 1947	195,828	4,100	31	537	1.60	21.73
January	19,651	1,580	219	634	1.89	2.18
February	19,517	1,200	354	673	2.01	2.17
March	11,315	574	240	365	1.09	1.26
April	5,619	313	106	187	.558	.62
May	1,955	166	24	63.1	.188	.22
June	1,178	74	18	39.3	.117	.13
July	3,746	456	19	121	.361	.42
August	33,468	2,380	483	1,080	3.22	3.72
September	34,546	2,810	601	1,152	3.44	3.84
Water year 1947-48	183,821	2,810	18	502	1.50	20.43

Peak discharge (base, 600 sec.-ft.).- Oct. 27 (12 m.) 748 sec.-ft.; Jan. 25 (8 a.m.) 1,580 sec.-ft.; Aug. 5 (9 a.m.) 732 sec.-ft.; Aug. 22 (2 a.m.) 3,190 sec.-ft.; Sept. 29 (1 a.m.) 2,920 sec.-ft.

a No gage-height record; discharge interpolated.

h Computed from wire-weight gage readings.

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.- 830 square miles.

Records available.- September 1933 to September 1948.

Average discharge.- 15 years, 741 second-feet.

Extremes.- Maximum discharge during year, 11,600 second-feet Sept. 24 (gage height, 16.55 feet); minimum, 113 second-feet May 28 (gage height, 0.54 foot).
1933-48: Maximum discharge, 26,300 second-feet Sept. 6, 1933 (gage height, 20.05 feet); minimum, 50 second-feet May 5, 1943; minimum gage height, -0.28 foot May 2, 1945.

Remarks.- Records good except those for period of no gage-height record, which are fair.

Revisions.- W 892: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 27

2.3	425	7.8	2,240
4.5	955	10.3	4,040
5.8	1,410		

Jan. 28 to Sept. 30

0.5	107	4.5	1,040	13.0	6,120
0.7	140	6.9	1,840	14.8	8,430
2.3	454	8.1	2,430	16.4	11,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,740	1,010	955	574	1,930	595	391	342	170	126	1,420	1,660
2	3,230	955	904	586	1,760	569	382	324	163	127	1,420	1,620
3	2,860	929	855	574	1,620	569	422	284	150	150	1,420	1,560
4	2,500	904	805	562	1,520	569	411	265	172	168	1,360	1,460
5	2,240	879	756	539	1,420	556	411	255	191	205	1,390	1,390
6	2,060	830	731	516	1,360	544	391	236	211	a255	1,630	1,320
7	1,930	805	682	493	1,290	595	362	226	211	a312	1,660	1,230
8	1,800	805	658	493	1,230	788	352	213	193	a345	1,590	1,130
9	1,720	805	634	482	1,160	981	336	197	189	a358	1,290	1,070
10	1,600	780	610	470	1,160	981	324	219	172	342	1,070	1,160
11	1,680	756	598	447	1,160	952	324	223	180	304	924	1,130
12	1,760	731	610	436	1,130	924	294	219	191	284	896	1,130
13	1,680	731	658	470	1,100	868	284	211	205	314	1,130	1,420
14	1,560	706	706	780	1,070	788	275	180	226	304	1,520	1,360
15	1,480	682	706	780	1,010	711	304	174	191	314	1,880	1,190
16	1,410	682	756	731	952	685	556	172	172	275	2,100	1,190
17	1,330	682	780	731	924	634	659	174	161	247	2,650	1,590
18	1,330	658	756	805	896	608	556	178	167	304	3,080	1,420
19	1,480	658	682	855	841	569	518	172	172	391	2,790	1,260
20	1,520	731	658	830	814	531	492	159	159	342	2,720	1,100
21	1,330	731	634	929	788	518	443	157	153	294	2,360	1,100
22	1,150	682	731	1,600	762	505	372	151	146	255	2,240	3,450
23	1,040	682	756	1,880	736	479	324	146	142	372	2,430	7,450
24	1,040	682	731	2,150	711	466	314	170	131	422	3,010	11,200
25	1,110	658	731	3,010	685	443	294	148	131	608	3,670	10,000
26	1,150	658	706	3,740	685	432	284	144	122	896	3,380	8,430
27	1,080	780	658	4,040	634	411	294	135	126	868	3,010	7,060
28	1,040	904	634	3,670	621	401	284	116	127	981	2,500	6,930
29	1,080	1,040	610	3,010	608	432	275	136	119	1,130	2,150	8,150
30	1,080	1,010	598	2,430	-	411	324	168	126	1,190	1,970	8,880
31	1,040	-	574	2,150	-	411	-	182	-	1,320	1,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	51,050	3,740	1,040	1,647	1.98	2.29
November	23,546	1,040	658	785	.946	1.06
December	21,863	955	574	705	.849	.98
Calendar year 1947	539,054	19,700	131	1,477	1.78	24.15
January	40,763	4,040	436	1,315	1.58	1.83
February	30,577	1,930	608	1,054	1.27	1.37
March	18,926	981	401	611	.736	.85
April	11,249	659	275	375	.452	.50
May	6,076	342	116	196	.236	.27
June	4,969	226	119	166	.200	.22
July	13,803	1,320	126	445	.536	.62
August	62,520	3,670	896	2,017	2.43	2.80
September	99,040	11,200	1,070	3,301	3.98	4.44
Water year 1947-48	384,382	11,200	116	1,050	1.26	17.23

Peak discharge (base, 3,100 sec.-ft.).- *Jan. 27 (9 a.m.) 4,040 sec.-ft.; Aug. 25 (11 a.m.) 3,740 sec.-ft.; Sept. 24 (2 p.m.) 11,600 sec.-ft.*

a No gage-height record; discharge computed on basis of records for stations at Bartow and at Arcadia.

Peace Creek at Arcadia, Fla.

Location.- Water-stage recorder, lat. 81°52', long. 27°13', in sec. 26, T. 37 S., R. 24 E., at bridge on State Highway 70, half a mile west of Arcadia and about 5 miles upstream from Joshua Creek. Datum of gage is 8.25 feet above mean sea level, datum of 1929.

Drainage area.- 1,380 square miles.

Records available.- April 1931 to September 1948.

Average discharge.- 17 years, 1,220 second-feet.

Extremes.- Maximum discharge during year, 16,200 second-feet Sept. 28 (gage height, 15.06 feet); minimum, 112 second-feet June 27 (gage height, 0.57 foot).
1931-48: Maximum discharge, 36,200 second-feet Sept. 9, 1933 (gage height, 17.67 feet); minimum, 41 second-feet June 4, 5, 7, 1945 (gage height, -0.81 foot).
Maximum stage known, 18.3 feet in 1912, from information by county engineer (discharge, 43,000 second-feet, from rating curve extended above 30,000 second-feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions.- W 892: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.5	93	10.0	6,430
2.2	567	11.6	8,510
4.3	1,500	13.0	10,900
5.4	2,120	14.6	14,500
6.8	3,240	15.0	15,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,300	1,930	1,410	776	3,520	710	462	393	197	120	2,880	2,880
2	9,420	1,600	1,360	776	2,970	688	448	407	188	139	2,970	2,480
3	8,220	1,650	1,310	776	2,560	666	448	380	175	169	3,240	2,260
4	6,980	1,550	1,170	754	2,260	645	476	339	161	224	3,420	2,120
5	5,800	1,460	1,080	732	1,990	645	476	314	180	462	3,330	2,060
6	4,570	1,360	1,040	688	1,870	624	462	298	199	520	3,150	1,990
7	3,800	1,270	996	645	1,700	624	448	279	224	505	3,060	1,990
8	3,240	1,220	952	624	1,600	710	407	262	224	421	3,060	1,930
9	2,880	1,170	886	624	1,550	930	393	243	207	710	2,800	1,810
10	2,800	1,130	842	604	1,550	1,100	366	235	197	1,020	2,060	1,700
11	3,060	1,080	798	586	1,500	1,130	366	246	183	1,200	1,990	1,760
12	3,060	1,700	798	551	1,500	1,080	352	251	197	1,080	1,760	1,700
13	2,970	1,700	798	567	1,460	1,040	333	246	218	1,310	1,810	1,760
14	2,800	1,310	864	732	1,360	952	314	235	232	1,360	2,190	1,990
15	2,480	1,150	930	a940	1,310	886	366	207	257	1,240	2,480	1,990
16	2,260	1,080	996	a1,070	1,240	798	645	197	218	1,040	2,880	1,930
17	2,060	1,040	1,040	a1,050	1,200	754	820	197	202	688	3,240	2,060
18	1,990	1,020	1,080	974	1,150	710	798	197	191	776	3,610	2,560
19	1,990	996	1,020	1,040	1,080	666	666	202	180	952	4,080	2,720
20	1,990	1,020	952	1,080	1,040	624	604	197	186	1,020	4,670	2,560
21	2,060	1,080	908	1,150	996	586	567	180	169	820	5,390	2,260
22	1,870	1,150	952	1,360	952	567	505	175	155	754	5,280	4,770
23	1,650	1,130	1,040	1,700	930	551	448	178	142	908	4,770	8,510
24	1,550	1,040	1,020	2,400	886	520	393	172	134	1,080	4,370	9,740
25	1,760	996	a997	3,330	842	505	380	188	131	1,200	4,880	12,200
26	2,260	952	a975	3,800	820	490	366	178	123	1,500	5,800	14,500
27	2,330	974	952	4,170	798	476	604	167	115	1,650	5,800	15,800
28	2,190	1,150	908	4,570	754	462	586	213	115	1,760	5,490	15,800
29	2,120	1,360	864	4,670	732	448	476	167	120	1,870	4,980	15,100
30	2,120	1,460	842	4,470	-	476	407	164	128	1,990	4,170	14,500
31	2,060	-	798	3,980	-	462	-	188	-	2,330	3,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	104,640	10,300	1,550	3,375	2.45	2.82
November	37,728	1,930	952	1,258	.912	1.02
December	30,578	1,410	798	986	.714	.82
Calendar year 1947	996,554	23,600	156	2,730	1.98	26.87
January	51,189	4,670	551	1,651	1.20	1.38
February	42,120	3,520	732	1,452	1.05	1.14
March	21,525	1,130	448	694	.503	.58
April	14,382	820	314	479	.347	.39
May	7,295	407	164	235	.170	.20
June	55,348	257	115	178	.129	.14
July	30,818	2,330	120	994	.720	.83
August	113,030	5,800	1,760	3,646	2.64	3.05
September	155,430	15,800	1,700	5,181	3.75	4.19
Water year 1947-48	614,083	15,800	115	1,678	1.22	16.56

Peak discharge (base, 5,300 sec.-ft.).- Aug. 26 (11 p.m.) 5,900 sec.-ft.; Sept. 28 (1 p.m.) 16,200 sec.-ft.

a No gage-height record; discharge either interpolated or computed on basis of records for station at Zolfo Springs.

Drainage canal west of Dundee, Fla.

Location.- Water-stage recorder, lat. 28°01', long. 81°38', in sec. 29, T. 28 S., R. 27 E., at bridge on State Highway 542, 1.2 miles west of Dundee and 1.4 miles below Lake Hamilton Outlet. Datum of gage is 114.08 feet above mean sea level, datum of 1929.

Records available.- December 1946 to September 1948.

Extremes.- 1946-47: Maximum discharge during period December to September, 188 second-feet Sept. 18 (gage height, 6.86 feet); minimum, 2.7 second-feet Feb. 5 (gage height, 2.28 feet).

1947-48: Maximum discharge during water year, 231 second-feet Sept. 22 (gage height, 7.37 feet); minimum, 2.1 second-feet June 25 (gage height, 2.22 feet).

Remarks.- Records good except those for periods of no gage-height record, which are poor. Flow partly regulated by Lake Hamilton.

Discharge, in second-feet, 1946-48

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			a4.8	4.6	3.4	5.7	a7.4	12	29	98	71	33
2			a5.0	4.6	3.3	17	a7.6	11	32	96	65	59
3			a5.2	4.5	3.2	15	a7.8	10	32	96	59	56
4			a4.8	4.5	3.2	12	a7.2	8.8	97	92	59	76
5			a4.6	4.4	3.0	9.	a6.6	7.8	76	83	63	82
6			a4.5	4.5	3.0	7.8	a6.0	6.9	63	74	52	76
7			a4.4	4.4	3.1	6.9	a5.6	6.0	50	66	48	74
8			a4.3	4.3	3.1	7.0	a5.3	5.7	42	61	46	76
9			a4.2	4.4	3.1	6.9	a5.0	5.2	33	58	44	67
10			4.1	4.3	3.0	6.3	a4.7	4.9	29	56	45	61
11			4.1	4.3	3.0	5.9	4.5	4.4	32	67	44	56
12			3.9	4.3	3.0	5.5	10	4.2	40	71	41	50
13			3.9	4.4	6.2	a5.2	44	4.1	54	99	38	47
14			3.9	4.4	19	a8.2	40	3.9	157	86	38	44
15			3.7	4.2	16	a13	44	3.7	157	78	48	45
16			3.7	4.2	13	a28	35	3.7	140	71	45	44
17			3.6	4.2	9.0	a25	31	3.8	127	67	44	46
18			3.7	4.2	7.4	a18	32	3.6	112	61	44	148
19			3.7	4.2	6.9	a27	35	3.6	103	56	50	181
20			3.7	4.2	6.3	a44	31	3.5	99	63	63	175
21			3.7	4.2	6.9	a33	28	3.6	112	65	63	170
22			3.7	4.1	6.2	a25	25	4.1	135	61	59	161
23			3.6	4.1	5.7	a21	23	4.8	127	56	54	175
24			3.6	4.1	5.5	a18	23	5.3	117	52	48	175
25			4.1	4.1	4.8	a16	21	5.7	108	50	44	170
26			4.9	4.1	4.5	a14	19	6.2	108	48	42	161
27			4.8	3.9	4.3	a12	17	6.5	115	48	37	157
28			4.7	3.9	4.5	a10	15	8.0	108	46	34	153
29			4.6	3.7	-	a9.2	14	12	98	46	33	148
30			4.6	3.6	-	a8.4	13	14	108	61	31	144
31			4.6	3.5	-	a7.8	-	20	-	74	29	-

a No gage-height record; discharge computed on basis of records for Peace Creek at Bartow and Peace Creek Marsh outlet near Alturas.

Discharge, in second-feet, of drainage canal west of Dundee, Fla., 1946-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	141	74	94	52	122	62	h42	20	4.2	3.2	71	112
2	136	72	89	52	117	62	h41	18	4.0	3.2	93	108
3	127	69	83	50	115	59	a40	16	3.9	a3.7	a98	103
4	122	66	80	49	110	59	h40	15	3.9	h4.4	a105	103
5	120	62	75	46	108	64	h36	12	3.9	a5.2	a77	99
6	117	59	73	44	108	62	h34	10	3.8	a7.0	h67	99
7	115	56	69	42	106	65	h32	9.4	3.6	a9.0	65	105
8	110	58	67	41	103	79	h30	8.2	3.6	6.5	61	105
9	110	55	64	40	103	82	h29	7.3	3.5	11	a57	101
10	108	50	61	38	108	79	h26	7.1	3.4	25	a67	99
11	110	47	59	38	106	77	a25	6.8	3.5	30	a92	101
12	108	56	58	35	103	75	h24	6.1	3.4	23	a113	99
13	108	54	57	44	98	75	h22	5.5	3.4	19	h122	97
14	103	55	59	70	98	a71	h19	4.8	3.2	21	124	90
15	100	52	56	64	94	a68	24	4.3	3.1	19	122	86
16	98	51	61	56	92	a65	32	4.0	3.1	15	114	84
17	96	55	61	53	89	a62	29	3.6	3.1	13	122	122
18	94	66	59	61	86	a60	25	3.5	3.1	14	131	140
19	92	75	57	61	84	a57	22	3.5	3.0	16	120	127
20	89	77	55	63	82	a54	18	3.4	3.0	36	114	116
21	86	77	62	100	79	a52	16	3.0	3.0	59	116	110
22	83	76	77	106	77	a50	14	2.8	2.8	40	166	181
23	80	74	76	100	77	a48	12	2.8	2.7	27	161	227
24	83	72	72	146	75	a46	10	2.8	2.7	27	153	222
25	100	74	69	160	75	a44	9.2	2.7	2.3	27	148	222
26	100	77	66	151	70	a42	8.2	2.7	2.3	25	144	217
27	96	96	61	146	68	h40	19	2.7	2.8	24	140	217
28	94	100	58	141	68	a52	37	3.5	3.1	22	135	222
29	89	100	56	136	65	a60	30	4.6	3.0	25	127	227
30	83	98	55	127	-	a51	24	4.8	3.1	43	122	222
31	77	-	53	124	-	h44	-	4.3	-	71	118	-

a No gage-height record; discharge computed on basis of records for Peace Creek Marsh outlet near Alturas.
h Computed from staff-gage readings.

Monthly discharge, in second-feet, 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	-	-	-	-		
November	-	-	-	-		
December 1946	130.7	5.2	3.6	4.22		
Calendar year	-	-	-	-		
January 1947	130.4	4.6	3.5	4.21		
February	163.6	19	3.0	5.84		
March	448.1	44	5.2	14.5		
April	567.7	44	4.5	18.9		
May	206.8	20	3.5	6.67		
June	2,640	157	29	88.0		
July	2,106	99	46	67.9		
August	1,481	71	29	47.8		
September	3,110	181	33	104		
Water year	-	-	-	-		
October 1947	3,175	141	77	102		
November	2,053	100	47	68.4		
December	2,042	94	53	65.9		
Calendar year 1947	18,123.6	181	3.0	49.7		
January 1948	2,436	160	35	78.6		
February	2,686	122	65	92.6		
March	1,866	82	40	60.2		
April	769.4	42	8.2	25.6		
May	205.2	20	2.7	6.62		
June	97.5	4.2	2.3	3.25		
July	674.2	71	3.2	21.7		
August	3,465	166	57	112		
September	4,163	227	84	139		
Water year 1947-48	23,632.3	227	2.3	64.6		

Kissengen Spring near Bartow, Fla.

Location.- Staff gage, 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 1948 (discharge measurements only).

Extremes.- 1932-48: Maximum discharge measured, 43.6 second-feet Oct. 11, 1933; minimum discharge estimated, 0.2 second-foot June 19, 1947.

Remarks.- Discharge measurements made at outlet of pool.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Oct. 1	29.2	Jan. 21	a1.7	June 8	2.58
Nov. 6	13.4	Feb. 25	a1.8		
Dec. 18	3.50	Apr. 29	2.16		

a Discharge estimated.

Miakka River below Upper Miakka Lake, near Sarasota, Fla.

Location.- Water-stage recorder, lat. 27°15'50", long. 82°17'15", in sec. 14, T. 37 S., R. 20 E., in boat basin on south side of Upper Miakka Lake, 0.3 mile southeast of lake outlet and 15 miles southeast of Sarasota. Prior to June 6, 1946, staff gage at same site and datum. Datum of gage is at mean sea level, datum of 1929 (R. M. Angus, civil engineer, bench mark).

Records available.- January 1946 to September 1948.

Extremes.- 1946: Maximum discharge during period January to September, 1,480 second-feet Aug. 2 (gage height, 16.34 feet); no flow Apr. 4 to June 26.
1946-47: Maximum discharge during water year, 5,880 second-feet Sept. 20 (gage height, 19.32 feet); no flow on many days.
1947-48: Maximum discharge during water year, 4,980 second-feet Sept. 30 (gage height, 18.67 feet); no flow on many days.

Remarks.- Records good except those for periods of no gage-height record, which are poor. Losses in flow from Upper Miakka Lake and swampy areas because of seepage, transpiration, and evaporation.

Rating tables, Jan. 1, 1946, to Sept. 30, 1948 (gage height, in feet, and discharge, in second-feet)

Jan. 1, 1946, to Oct. 3, 1947, July 1 to Sept. 30, 1948

13.65	0	14.7	313
13.7	5.0	15.6	749
13.8	17	15.9	935
13.9	34	16.1	1,130
14.0	56	17.0	2,430
14.1	88	19.3	5,880

Oct. 4, 1947, to June 30, 1948

14.1	88	14.6	396
14.2	125	14.7	525
14.3	173	14.8	615
14.4	232	15.1	738
14.5	304	15.3	803

Note.- Same as preceding table below 14.1 feet.

Discharge, in second-feet, 1946-48

1946

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a23	a11	a50	a1.3		a0	a1.1	1,080	935
2						a54			a0	2.1	1,340	865
3						56			a0	14	1,410	805
4						a52	a0		a0	27	1,340	777
5						a48	a0		a0	42	1,130	749
6						45	a0		0	58	1,020	a725
7						a40	a0		0	76	935	a675
8						a36	a0		0	80	865	h632
9						a31	a0		0	72	777	a585
10					5	27	a0		0	66	749	a540
11				a14	a3.1	a2.4	a0		0	63	722	a505
12							a0		0	63	696	a465
13							a0		0	69	636	a440
14							a0		0	72	603	h420
15							a0		0	69	588	a435
16							a0		0	58	569	a520
17					1.0	24	0		a0	53	536	a620
18					a.7	a9.2	a0		a0	49	507	h671
19							a0		a0	60	473	a665
20							a0		a0	95	440	a640
21				a16			a0		a0	95	411	603
22							a0		0	99	396	569
23							a0		0	110	425	526
24					5		a0		a0	151	593	488
25					a25		a0		a0	206	749	483
26							a0		a0	297	900	492
27							0		a.6	411	1,020	550
28							a0			574	a1,100	531
29					-		a0			696	a1,070	497
30					-		a0			805	a1,030	464
31				19	-		-		-	935	978	-

Peak discharge (base, 1,100 sec.-ft.).- Aug. 2 (1 p.m.) 1,480 sec.-ft.; Aug. 28 (2 a.m.) 1,130 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations downstream.

Discharge, in second-feet, of Miakka River below Upper Miakka Lake near Sarasota, Fla., 1946-48--Continued

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	454	27	4.0		0	40	140	60	0	900	835	425
2	425	26	6.0		0	95	129	56	0	865	749	497
3	382	a23	.3		0	99	125	49	0	835	671	579
4	326	a21	0		0	110	110	45	0	777	584	636
5	285	a19	0		0	121	103	40	0	805	516	646
6	254	17	0		0	129	92	34	0	835	516	646
7	254	17	0		0	129	88	31	0	835	632	641
8	258	17	0		0	129	76	29	0	805	865	671
9	266	17	0		0	118	66	29	0	777	1,080	722
10	262	16	0		0	106	58	26	0	722	1,340	722
11	251	14	0		0	99	51	21	0	696	1,550	722
12	243	16	0		0	88	51	12	0	865	1,620	777
13	240	16	0		0	72	63	9	0	1,550	1,550	835
14	225	12	0		0	95	92	9	41	2,060	1,760	805
15	206	9	0		0	99	192	8	137	2,280	1,760	865
16	184	8	0		0	132	254	6	416	2,130	1,830	865
17	166	7	0		0	155	273	5	777	1,900	2,200	935
18	147	7	0		0	173	258	3	1,130	1,620	2,430	2,280
19	132	7	0		.8	221	229	1.5	1,410	1,410	2,360	4,680
20	114	6	0		9	336	214	.3	1,480	1,620	2,060	5,880
21	95	5	0		26	435	184	0	1,340	1,980	1,690	5,730
22	80	5	0		26	483	162	0	1,200	2,280	1,410	5,430
23	66	6	0		24	468	a137	0	978	2,360	1,200	5,280
24	56	5	0		27	416	a124	.2	835	2,500	978	4,980
25	47	5	0		27	368	a113	2	805	2,280	835	4,530
26	45	6	0		27	305	a104	0	696	2,060	696	4,080
27	40	5	0		26	262	a94	.1	622	1,980	593	3,400
28	36	5	0		26	225	a83	1	545	1,760	521	2,800
29	34	4	0		-	199	a74	0	593	1,410	473	2,200
30	29	3	0		-	177	66	0	805	1,130	420	1,690
31	29	-	0		-	158	-	0	-	935	392	-

Peak discharge (base, 1,100 sec.-ft.).- June 20 (6 a.m.) 1,480 sec.-ft.; July 15 (11 a.m.) 2,280 sec.-ft.; July 23 (11 p.m.) 2,580 sec.-ft.: Aug. 18 (6 p.m.) 2,430 sec.-ft.; Sept. 20 (10 p.m.) 5,880 sec.-ft.

a No gage-height record; discharge computed on basis of records for downstream stations.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,270	543	220	66	570	26	0	17		0	1,020	835
2	1,020	396	232	76	473	24	0	16		0	978	749
3	871	297	226	66	387	22	0	14		0	1,020	722
4	790	232	214	60	313	24	0	13		0	1,130	696
5	724	185	191	56	268	22	0	12		.7	1,200	646
6	660	154	163	49	226	14	0	9		2.0	1,270	593
7	570	130	144	47	197	13	0	11		8.6	1,130	540
8	460	125	121	45	168	17	0	9		36	1,020	502
9	350	106	114	42	149	14	0	6		95	900	459
10	282	92	99	40	154	14	0	7		129	835	416
11	261	76	88	38	135	13	0	6		140	805	411
12	246	154	76	34	121	16	0	4		162	805	435
13	226	191	76	42	114	17	0	2		203	865	464
14	197	185	80	66	110	12	0	.6		273	978	531
15	168	159	72	58	103	8	2.1	0		411	1,130	584
16	154	135	99	63	92	7	5.7	a0		497	1,200	579
17	135	114	110	69	84	7	7.0	a0		531	1,200	564
18	118	95	121	84	76	7	8.0	a0		531	1,270	540
19	103	88	130	84	66	7	7.0	a0		516	1,340	497
20	95	80	130	84	60	6	5.0	a0		502	1,410	444
21	84	69	139	114	56	6	3.0	a0		483	1,480	420
22	69	66	139	149	47	4	3.0	1		454	1,480	560
23	60	63	135	185	47	3	2.0	2		440	1,340	978
24	60	60	130	399	40	3	.2	a4		521	1,200	1,830
25	66	63	121	704	36	1	0	a6		646	1,080	2,200
26	168	63	110	790	32	0	.7	a5		777	1,340	2,200
27	635	88	103	797	31	0	16	a4		1,020	1,550	2,200
28	761	114	95	768	29	1.2	24	a3		1,130	1,550	3,030
29	754	154	88	724	27	0	22	a2		1,080	1,410	4,230
30	711	197	84	677	-	0	19	a1		1,020	1,200	4,830
31	650	-	76	640	-	0	-	a0		1,020	978	-

Peak discharge (base, 1,100 sec.-ft.).- Aug. 5 (6 p.m.) 1,270 sec.-ft.; Aug. 21 (9:30 p.m.) 1,550 sec.-ft.; Aug. 28 (3 a.m.) 1,550 sec.-ft.; Sept. 30 (10:30 p.m.) 4,980 sec.-ft.

a No gage-height record: discharge computed on basis of records for stations downstream.

Monthly discharge, in second-feet, of Miakka River below Upper Miakka Lake near Sarasota, Fla., 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January 1946	549	-	-	17.7		
February	232.8	-	-	8.31		
March	735.8	56	-	23.7		
April	3.9	-	0	.13		
May	0	0	0	0		
June	2.4	-	0	.08		
July	5,468.2	935	1.1	176		
August	25,088	1,410	396	809		
September	17,872	935	420	596		
Water year	-	-	-	-		
October 1946	5,631	454	29	182		
November	351	27	3	11.7		
December	10.3	6	0	.33		
Calendar year 1946	55,944.4	1,410	0	153		
January 1947	0	0	0	0		
February	218.8	27	0	7.81		
March	6,042	483	40	195		
April	3,805	273	51	127		
May	477.1	60	0	15.4		
June	13,810	1,480	0	460		
July	44,962	2,500	696	1,450		
August	36,116	2,430	392	1,165		
September	64,949	5,880	425	2,165		
Water year 1946-47	176,372.2	5,880	0	483		
October 1947	12,718	1,270	60	410		
November	4,474	543	60	149		
December	3,926	232	72	127		
Calendar year 1947	191,497.9	5,880	0	525		
January 1948	7,116	797	34	230		
February	4,211	570	27	145		
March	308.6	26	0	9.95		
April	124.7	24	0	4.16		
May	154.6	17	0	4.99		
June	0	0	0	0		
July	12,628.3	1,130	0	407		
August	36,114	1,550	805	1,165		
September	33,685	4,830	411	1,123		
Water year 1947-48	115,460.2	4,830	0	315		

Miakka River near Sarasota, Fla.

Location.- Staff gage, lat. 27°14', long. 82°19', in sec. 21, T. 37 S., R. 20 E., half a mile upstream from bridge on State Highway 72, 1½ miles downstream from Atlantic Coast Line Railroad bridge, and about 14 miles southeast of Sarasota. Datum of gage is 7.92 feet above mean sea level, datum of 1929 (National Park Service bench mark).

Drainage area.- 200 square miles.

Records available.- August 1936 to September 1948.

Average discharge.- 12 years, 265 second-feet.

Extremes.- Maximum discharge observed during year, 4,800 second-feet Sept. 30 (gage height, 9.92 feet); minimum, about 0.2 second-foot about June 28.

1936-48: Maximum discharge observed, 6,620 second-feet Sept. 21, 1947 (gage height, 10.78 feet); no flow for several days in some years.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Losses in flow from Upper Miakka Lake and swampy areas because of seepage, transpiration, and evaporation. Gage read once daily.

Cooperation.- Gage readings furnished by employees of Miakka River State Park.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 18 to Mar. 9)

2.0	0.4	4.0	22	6.3	300
2.5	1.4	4.4	39	6.6	430
3.2	3.5	4.8	60	6.9	600
3.3	4.0	5.2	86	7.2	840
3.4	5.2	5.4	111	7.5	1,160
3.5	7.3	5.8	174	9.0	3,170
3.6	10	6.1	238	9.9	4,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,360	283	141	126	540	44	1.9	21	1.9	0.4	985	840
2	985	252	157	126	480	36	2.0	20	1.7	.4	985	710
3	710	226	157	126	430	34	2.2	18	1.6	.4	930	635
4	570	193	157	118	380	32	a2.4	17	1.5	.6	1,040	670
5	455	174	149	118	340	30	2.6	15	1.4	.6	1,100	600
6	380	166	149	111	320	30	2.9	13	1.4	.6	1,160	540
7	320	149	141	104	283	24	2.6	10	1.3	.7	1,160	480
8	266	141	134	97	238	19	2.4	8.4	1.2	1.2	1,040	430
9	252	126	126	92	214	16	2.1	7.8	1.1	6.2	885	405
10	226	118	118	86	214	14	1.9	7.3	1.1	39	795	380
11	214	111	104	86	204	12	1.9	6.8	1.0	66	750	360
12	193	141	97	82	193	13	1.8	5.9	.9	92	710	380
13	184	157	92	78	184	12	1.6	4.6	.9	126	750	380
14	174	166	86	92	174	a12	1.6	3.9	1.0	166	840	430
15	157	157	92	111	157	11	1.9	a3.6	1.1	226	930	480
16	141	149	97	118	149	7.3	2.4	3.3	1.1	283	1,100	510
17	134	134	104	126	141	4.9	2.7	2.9	1.0	320	1,100	510
18	126	118	111	a138	134	4.2	3.2	2.7	1.0	340	1,160	455
19	118	111	118	149	126	3.8	4.0	2.5	.8	360	1,160	430
20	111	104	126	149	a115	3.6	5.9	2.8		360	1,220	380
21	104	97	126	184	104	3.4	5.9	3.0		360	1,290	380
22	97	92	141	214	92	3.3	4.3	2.9		340	1,360	455
23	92	86	149	238	86	3.1	3.6	2.9		320	1,290	710
24	86	82	149	340	82	3.0	3.3	2.8		340	1,160	1,360
25	82	82	a145	570	75	2.8	3.1	2.8	a.4	455	1,040	1,820
26	102	86	141	795	69	2.6	3.1	2.7		570	1,100	1,950
27	157	97	141	885	a63	2.5	6.8	2.5		840	1,420	2,080
28	238	104	134	840	57	a2.4	15	2.4		985	1,480	2,610
29	360	118	134	795	52	2.2	20	2.2		1,040	1,360	3,860
30	360	134	126	635	-	2.2	21	2.2		985	1,160	4,800
31	320	-	126	600	-	2.0	-	2.0		985	1,040	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,074	1,360	82	293	1.46	1.69
November	4,154	283	82	138	.690	.77
December	3,968	157	86	128	.640	.74
Calendar year 1947	210,293.8	6,620	0	576	2.88	39.10
January	8,329	885	78	269	1.34	1.55
February	5,696	540	52	196	.980	1.06
March	392.3	44	2.0	12.7	.064	.07
April	136.1	21	1.6	4.54	.023	.03
May	204.9	21	2.0	6.61	.033	.04
June	27.4	1.9	-	.91	.0046	.005
July	9,609.1	1,040	.4	310	1.55	1.79
August	33,500	1,480	710	1,081	5.40	6.23
September	30,030	4,800	360	1,001	5.00	5.58
Water year 1947-48	105,120.8	4,800	-	287	1.44	19.56

a No gage-height record; discharge computed on basis of records for stations below Upper Miakka Lake and Lower Miakka Lake near Sarasota.

Miakka River below Lower Miakka Lake, near Sarasota, Fla.

Location.- Water-stage recorder, lat. 27°13'05", long. 82°20'00", in sec. 32, T. 37 S., R. 20 E., 900 feet upstream from outlet of Lower Miakka Lake, 1.7 miles southwest of Miakka River State Park entrance, and 14 miles southeast of Sarasota. Prior to June 5, 1946, staff gage at same site and datum. Datum of gage is at mean sea level, datum of 1929 (R. M. Angus, civil engineer, bench mark).

Records available.- January 1946 to September 1948.

Extremes.- 1946: Maximum discharge during period January to September, 1,360 second-feet Aug. 5 (gage height, 14.64 feet, from floodmarks); no flow Apr. 17 to July 6.

1946-47: Maximum discharge during water year, 6,640 second-feet Sept. 21 (gage height, 18.17 feet, from recorded range in stage); no flow on many days.

1947-48: Maximum discharge during water year, 4,340 second-feet Sept. 30 (gage height, 17.04 feet, stage rising); no flow June 4 to July 10.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Losses in flow from Upper and Lower Miakka Lakes and swampy areas because of seepage, transpiration, and evaporation.

Rating tables, Jan. 1, 1946, to Sept. 30, 1948 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 6 to Dec. 10, 1947)

Jan. 1 to Nov. 5, 1946		Nov. 6, 1946, to Sept 21, 1947						Sept. 22, 1947, to Sept. 30, 1948					
9.0	0	9.1	0	11.1	79	13.7	675	9.1	0	10.7	53	13.6	810
9.1	.2	9.3	.2	11.5	114	14.2	990	9.2	.2	11.1	79	14.4	1,290
9.2	.9	9.4	1.0	11.9	164	14.7	1,410	9.3	.7	11.5	114	15.0	1,750
9.3	4.0	9.8	13	12.2	213	16.3	3,050	9.4	1.8	11.9	164	16.2	2,920
10.9	69	10.4	37	12.5	280	17.0	4,240	9.5	4.0	12.2	214	16.9	4,040
11.2	87	10.7	53	13.4	560	18.2	6,640	9.8	13	12.5	304	18.2	6,640
11.5	114							10.4	37	13.0	504		
Note.- Same as following table above 11.5 feet.													

Discharge, in second-feet, 1946-48

1946

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a22	a14	a18	a2.6			a0	a1,070	a742
2										h0		
3										a0		
4										a0		
5										a0		
6						19				h0		
7						a20				a46		
8											h920	
9							a.5				a830	
10					8.0	22					h763	
11				a17	a4.9	a24					a567	a505
12												
13												
14												
15												
16												
17					7.2		0					
18					a4.6		a0				430	
19							a0			a204	a371	
20							a0					
21				a11		a13	a0					
22							a0					
23							a0					
24					8.0		a0					
25					a11		a0					
26							a0				h453	502
27							0				a884	550
28							a0					550
29					-		a0					536
30					-		a0					518
31				13	-		-					-

Peak discharge (base, 1,020 sec.-ft.).- Aug. 5 (time unknown) 1,360 sec.-ft.; about Aug. 31 (time and discharge unknown).

a No gage-height record; discharge computed on basis of records for stations upstream.

Discharge, in second-feet, of Miakka River below Lower Miakka Lake near Sarasota, Fla., 1946-48--Continued

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	499	46	6.4	0.3	0	12	199	93	a1.7	871	1,190	a630
2	473	44	7.0	.2	0	20	178	a47		983	1,070	a615
3	442	41	5.2	.2	0	23	163			976	920	612
4	402	38	4.9	.2	0	26	141			934	814	639
5	362	35	4.6	.2	0	31	122			885	730	702
6	317	33	4.6	.2	0	38	107			878	680	838
7	302	30	4.6	.2	0	46	97			920	652	826
8	283	27	4.0	.2	0	55	88			941	790	820
9	258	25	4.0	.2	0	63	79			920	1,030	832
10	242	23	3.4	.2	0	69	72			864	1,280	838
11	229	21	2.8	.1	0	74	64		h1.3	820	1,460	878
12	219	20	2.2	.1	0	77	62	a9.3	a347	820	1,610	1,070
13	206	19	1.9	.1	.1	77	63			1,070	1,660	1,150
14	193	17	2.2	.1	.1	81	58			1,610	1,810	1,070
15	181	17	1.9	.1	.1	85	55			1,960	1,860	1,030
16	166	16	1.3	.1	.1	93	61			2,060	1,860	1,030
17	153	15	1.3	.1	.1	94	86			2,010	2,110	1,070
18	138	14	.9	.1	.1	99	126			1,810	2,310	a1,500
19	127	13	.9	.1	.1	118	163			1,710	2,310	a3,200
20	116	12	.6	0	.1	170	184			1,810	2,210	a6,000
21	106	11	.6	.1	.2	265	185		1,760	2,010	1,960	6,640
22	96	11	.6	.1	.2	414	179	a1.4	1,560	2,110	1,710	a6,600
23	87	11	.4	.1	.2	508	167		1,360	2,210	a1,600	a6,200
24	80	9.7	.2	.1	.9	528	153		1,150	2,360	a1,500	5,840
25	74	9.1	.3	.1	2.5	518	149		990	2,360	a1,350	5,240
26	68	8.5	.2	.1	4.9	473	138		906	2,260	a1,250	4,540
27	64	7.9	.2	.1	7.0	427	130		808	2,210	a1,140	3,780
28	60	7.6	.2	.1	8.2	374	123		724	2,110	a1,020	3,050
29	56	6.7	.2	.1	-	320	114		662	1,860	a910	2,610
30	52	6.4	.3	0	-	270	106		730	1,660	a810	2,160
31	49	-	.3	0	-	233	-		-	1,410	a710	-

Peak discharge (base, 1,020 sec.-ft.).- June 21 (time and discharge unknown); July 24 (9 p.m.) 2,410 sec.-ft.; Aug. 19 (2 p.m.) 2,360 sec.-ft.; Sept. 21, 6,640 sec.-ft.

a No gage-height record; discharge computed on basis of records for staticns upstream.

h Computed from staff-gage reading.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,750	574	79	a69	598	19	0.7	5.2	0.2	0	1,130	1,070
2	1,460	513	91	a61	527	17	1.3	5.8	.1	0	1,130	980
3	1,220	439	104	h54	456	15	2.2	5.8	.1	0	1,130	920
4	1,070	367	116	a50	394	14	1.8	5.8	0	0	1,130	892
5	920	294	124	a46	329	13	1.2	5.8	0	0	1,160	838
6	838	234	126	a42	273	11	1.0	5.5	0	0	1,190	782
7	723	192	124	a39	224	10	1.0	5.2	0	0	1,190	700
8	638	164	115	a36	189	11	.8	4.9	0	0	1,160	643
9	560	140	107	a33	166	9.7	.7	4.6	0	0	1,100	579
10	504	118	98	h31	149	9.7	.7	5.2	0	0	1,040	527
11	460	101	89	a29	130	9.7	.6	4.6	0	.1	1,010	473
12	422	122	80	a27	114	9.4	.6	3.8	0	.7	950	460
13	374	161	74	a26	102	9.4	.5	3.3	0	4.3	950	460
14	318	178	71	a32	91	8.5	.3	2.8	0	18	950	469
15	264	176	66	a40	81	7.9	1.2	2.4	0	37	1,010	509
16	222	174	66	a50	73	7.6	2.2	1.8	0	66	1,100	569
17	189	158	65	a62	65	7.3	2.0	1.5	0	120	1,190	598
18	164	140	64	a77	60	7.0	2.0	1.1	0	201	1,190	593
19	141	123	66	a92	54	6.4	1.5	1.3	0	304	1,190	564
20	122	107	69	a107	49	5.8	1.3	1.7	0	402	1,220	532
21	107	93	a75	a122	44	5.5	1.1	1.2	0	464	1,260	509
22	93	81	a82	a150	40	4.6	1.3	1.0	0	h509	1,290	564
23	81	72	a90	a195	36	4.0	1.5	.8	0	a525	1,290	695
24	73	65	a99	a280	33	3.8	1.3	.7	0	a535	1,260	1,040
25	64	61	a110	h500	30	3.5	1.2	.6	0	a540	1,190	1,460
26	59	56	a117	a670	27	3.3	1.0	.5	0	a550	1,220	1,660
27	63	57	a119	a790	25	2.4	3.1	.4	0	a580	1,290	1,750
28	135	58	a115	838	23	2.2	3.8	.3	0	a790	1,320	2,160
29	355	62	a103	810	21	2.0	4.3	.2	0	a910	1,320	2,860
30	569	68	a89	723	-	1.5	4.6	.2	0	1,050	1,260	3,950
31	613	-	a79	679	-	1.1	-	.2	-	1,130	1,160	-

Peak discharge (base, 1,020 sec.-ft.).- Aug. 28 (10 p.m.) 1,360 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations upstream.

h Computed from staff-gage reading.

Monthly discharge, in second-feet, of Miakka River below Lower Miakka Lake near Sarasota, Fla., 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January 1946	513	-	-	16.5		
February	250.2	-	-	8.94		
March	564	-	-	18.2		
April	24.8	-	0	.83		
May	0	0	0	0		
June	0	0	0	0		
July	3,204	-	0	103		
August	21,874	-	-	706		
September	18,125	-	-	604		
Water year	-	-	-	-		
October 1946	6,100	499	49	197		
November	594.9	46	6.4	19.8		
December	68.2	7.0	.2	2.20		
Calendar year 1946	56,716.2	-	0	155		
January 1947	3.9	.3	0	.13		
February	24.9	8.2	0	.89		
March	5,681	528	12	183		
April	3,612	199	55	120		
May	670.0	93	-	21.6		
June	13,791.3	1,760	1.3	460		
July	47,412	2,360	820	1,529		
August	42,316	2,310	652	1,365		
September	72,010	6,640	612	2,400		
Water year 1946-47	192,284.2	6,640	0	527		
October 1947	14,571	1,750	63	470		
November	5,148	574	56	172		
December	2,872	126	64	92.6		
Calendar year 1947	67,145.0	6,640	0	184		
January 1948	6,760	838	26	218		
February	4,403	598	21	152		
March	242.3	19	1.1	7.82		
April	46.8	4.6	.3	1.56		
May	84.2	5.8	.2	2.72		
June	.4	.2	0	.13		
July	8,736.1	1,130	0	282		
August	35,980	1,320	950	1,161		
September	29,806	3,950	460	994		
Water year 1947-48	108,649.8	3,950	0	297		

Manatee River near Bradenton, Fla.

Location.- Water-stage recorder, lat. 27°29', long. 82°18', in sec. 34, T. 34 S., R. 20 E., at bridge on State Highway 675, 1¼ miles upstream from Gillet Creek, 6¼ miles northwest of Verna, and 17 miles east of Bradenton.

Drainage area.- 94 square miles.

Records available.- April 1939 to September 1948.

Extremes.- Maximum discharge during year, 3,500 second-feet Sept. 28 (gage height, 22.22 feet); minimum, 1.8 second-feet June 23, 24, 27 (gage height, 2.68 feet).

1939-48: Maximum discharge, 6,170 second-feet Sept. 18, 1947 (gage height, 24.51 feet), from rating curve extended above 3,500 second-feet; minimum, 0.6 second-foot May 7, 1939; minimum gage height, 2.48 feet May 5, 6, 7, 1939.

Remarks.- Records fair except those for periods of no gage-height record, which are poor.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Jan. 25				Jan. 26 to Aug. 25						Aug. 26 to Sept. 30			
3.6	4.7	4.7	48	2.7	2.0	3.8	23	6.4	162	5.8	81	18.7	1,580
3.7	6.2	5.3	86	3.0	5.0	3.9	27	9.4	381	7.2	164	20.2	1,930
3.8	8.4	8.7	328	3.1	6.2	4.2	37	11.6	576	9.2	310	21.0	2,280
3.9	11	11.0	518	3.2	8.0	4.5	50	14.4	917	11.2	523	21.4	2,620
4.0	14	11.9	608	3.5	14	5.0	77	17.6	1,380	15.2	1,020		
4.2	22												

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	124	34	141	10	97	10	4.6	11	3.5	14	381	118
2	104	32	100	10	a77	a9.5	17	8.6	3.4	42	413	118
3	84	30	70	11	a62	a9.0	16	7.3	3.4	152	631	100
4	70	25	51	12	f52	a8.5	13	6.4	3.3	225	481	103
5	61	21	38	12	a44	a8.0	11	6.0	3.3	328	381	100
6	51	19	30	10	37	h74	7.6	5.6	3.3	190	261	81
7	45	16	22	8.7	32	a80	6.2	8.4	3.2	118	246	91
8	40	20	18	7.5	30	a85	5.5	6.0	3.1	71	204	456
9	36	23	15	6.6	28	91	5.0	5.6	3.0	44	121	227
10	87	24	13	6.0	62	74	6.2	5.6	2.9	38	106	206
11	69	21	11	5.8	60	51	21	5.5	2.8	115	456	136
12	47	20	10	5.4	54	34	19	5.2	2.9	100	527	220
13	40	18	10	21	46	24	15	4.8	3.1	68	537	206
14	35	17	14	85	h34	18	11	4.7	3.7	55	373	154
15	31	16	17	86	a30	14	20	4.5	3.5	162	665	124
16	28	14	65	81	a26	12	85	4.3	3.7	96	373	130
17	25	13	64	59	a24	11	118	4.2	3.2	56	518	139
18	22	12	55	44	a22	10	71	4.1	2.8	36	796	213
19	21	11	44	44	a20	9.6	41	4.4	2.6	27	986	220
20	20	14	34	60	a18	9.0	23	4.5	2.5	50	597	145
21	21	24	46	113	h17	7.8	15	4.1	2.4	97	665	115
22	20	31	90	218	a16	7.3	12	4.0	3.2	211	413	641
23	20	38	68	275	a15	6.6	9.6	4.0	2.4	313	313	1,580
24	28	33	55	397	a14	6.0	8.2	3.9	2.3	499	384	1,430
25	172	28	43	608	a13	5.7	7.3	4.1	2.3	786	1,380	713
26	275	35	33	597	a12	5.5	7.5	4.3	2.3	438	1,130	330
27	204	204	24	343	11	5.2	29	3.9	2.3	328	713	510
28	130	261	19	232	11	5.0	33	3.7	2.5	183	456	2,500
29	87	275	15	204	11	4.9	28	3.7	5.0	183	262	2,620
30	62	204	13	146	-	4.8	17	3.7	8.4	570	178	1,580
31	45	-	12	118	-	4.7	-	3.5	-	413	136	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,104	275	20	67.9	0.722	0.83
November	1,533	275	11	51.1	.544	.61
December	1,240	141	10	40.0	.426	.49
Calendar year 1947	64,200.8	5,010	5.2	176	1.87	25.40
January	3,836.0	608	5.4	124	1.31	1.52
February	975	97	11	33.6	.357	.39
March	705.1	91	4.7	22.7	.241	.28
April	682.7	118	5.0	22.8	.243	.27
May	159.6	11	3.5	5.15	.055	.06
June	96.3	8.4	2.3	3.21	.034	.04
July	6,009	786	14	194	2.06	2.38
August	15,083	1,380	106	487	5.18	5.97
September	15,306	2,620	81	510	5.43	6.06
Water year 1947-48	47,729.7	2,620	2.3	130	1.38	18.90

Peak discharge (base, 1,100 sec.-ft.).- Aug. 25 (7 a.m.) 1,470 sec.-ft.; Sept. 23 (8 p.m.) 1,870 sec.-ft.; Sept. 28 (10 p.m.) 3,500 sec.-ft.

a No gage-height record; discharge computed on basis of records for Little Manatee River near Wimauma.

f Computed on basis of partly estimated gage-height record.

h Computed from staff-gage reading.

Little Manatee River near Wimauma, Fla.

Location.- Water-stage recorder, lat. 27°40', long. 82°21', in sec. 25, T. 32 S., R. 19 E., at bridge on U. S. Highway 41, 1 mile upstream from Cypress Creek and 4 miles southwest of Wimauma.

Drainage area.- 157 square miles.

Records available.- March 1939 to September 1948.

Extremes.- Maximum discharge during year, 2,880 second-feet Sept. 29 (gage height, 10.06 feet); minimum, 4.9 second-feet June 11, 25, 28 (gage height, -0.05 foot).
1939-48: Maximum discharge, 9,450 second-feet June 24, 1945 (gage height, 14.44 feet); minimum, 1.2 second-feet June 6, 7, 1945 (gage height, -0.45 foot).

Remarks.- Records good except those for periods of fragmentary gage-height record, which are fair.

Revisions (water years).- W 1032: 1939(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 10

-0.1	3.2	0.8	50	6.3	1,030
0.0	6.6	1.2	82	7.3	1,380
.1	11	1.5	115	9.4	2,460
.2	16	3.4	384	9.7	2,630
.5	31	5.0	699		

July 11 to Sept. 30

1.2	97	3.4	400	7.5	1,470
1.7	151	5.6	839	9.5	2,520
2.7	283	6.7	1,160	9.9	2,750

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	107	f118	59	210	41	24	28	7.5	42	743	149
2	f217	100	f109	64	179	40	26	24	7.0	80	743	143
3	f197	98	f100	71	154	39	30	22	6.6	376	1,000	220
4	f183	90	f90	67	132	38	31	20	6.3	245	893	283
5	f172	86	f82	63	118	36	30	20	5.9	259	631	220
6	159	80	f75	59	104	37	27	18	5.9	301	400	182
7	152	78	f67	56	93	102	25	18	7.0	231	269	157
8	144	77	63	54	86	457	23	18	8.6	147	214	151
9	131	81	60	51	82	495	22	17	10	217	169	157
10	122	84	56	50	102	336	24	17	7.4	491	163	157
11	116	84	56	48	110	273	68	16	5.6	194	457	182
12	115	84	55	47	102	204	224	16	6.3	147	631	297
13	115	84	54	86	95	151	109	15	9.7	114	1,470	345
14	114	84	54	294	89	111	63	14	9.7	227	1,200	234
15	104	84	59	217	81	85	106	14	9.7	255	1,100	208
16	f98	84	62	179	75	71	392	12	11	135	631	220
17	f91	83	f80	162	71	61	294	12	17	105	592	631
18	f86	76	91	367	67	54	210	12	15	102	683	496
19	82	67	87	287	63	49	133	12	10	141	703	372
20	82	64	79	287	59	46	84	12	8.4	201	535	255
21	82	63	79	1,390	56	42	61	12	7.5	381	865	306
22	81	63	113	1,340	54	39	49	11	8.4	631	919	1,470
23	80	63	115	1,130	51	37	40	11	7.5	670	670	2,300
24	113	63	103	1,770	49	35	35	11	5.9	748	438	2,240
25	f245	63	94	2,630	49	32	30	10	5.6	728	612	1,030
26	f322	63	84	1,920	48	30	28	9.7	6.3	515	670	631
27	f294	63	77	865	46	29	28	8.8	5.6	496	612	1,110
28	238	72	71	495	44	28	32	8.8	5.2	320	428	2,350
29	197	105	67	344	42	28	36	8.8	9.7	262	312	2,750
30	155	120	63	280	-	27	33	8.8	18	790	241	2,130
31	127	-	63	238	-	26	-	8.4	-	790	188	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,659	322	80	150	0.955	1.10
November	2,413	120	63	80.4	.512	.57
December	2,426	118	54	78.3	.499	.57
Calendar year 1947	103,459	6,600	17	283	1.80	24.50
January	14,970	2,630	47	483	3.08	3.55
February	2,511	210	42	86.6	.552	.59
March	3,079	495	26	99.3	.632	.73
April	2,317	392	22	77.2	.492	.55
May	445.3	28	8.4	14.4	.092	.11
June	254.3	18	5.2	8.48	.054	.06
July	10,341	790	42	334	2.13	2.45
August	19,203	1,470	163	619	3.94	4.55
September	21,376	2,750	143	713	4.54	5.06
Water year 1947-48	83,994.6	2,750	5.2	229	1.46	19.89

Peak discharge (base, 1,400 sec.-ft.).- Jan. 21 (4 p.m.) 1,670 sec.-ft.; Jan. 25 (2 p.m.) 2,750 sec.-ft.; Aug. 13 (10 a.m.) 1,620 sec.-ft.; Sept. 23 (11 p.m.) 2,690 sec.-ft.; Sept. 29 (8 a.m.) 2,880 sec.-ft.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Alafia River at Lithia, Fla.

Location.- Water-stage recorder, lat. 27°52', long. 82°12', in sec. 16, T. 30 S., R. 21 E., at Marvinia Bridge, 1 mile northwest of Lithia and 1¼ miles downstream from Little Alafia River. Datum of gage is 9.71 feet above mean sea level, unadjusted.

Drainage area.- 336 square miles.

Records available.- January 1933 to September 1948.

Average discharge.- 15 years, 359 second-feet.

Extremes.- Maximum discharge during year, 6,270 second-feet Sept. 30 (gage height, 15.59 feet); minimum, 15 second-feet May 22, June 23-25; minimum gage height, -0.79 foot June 25.

1933-48: 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, 6.6 second-feet June 5, 6, 1945 (gage height, -0.91 foot).

Remarks.- Records good.

Revisions (water years).- W 782: 1933(m).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

-0.8	14	2.0	327	12.0	2,760
-.7	21	4.0	656	13.2	3,600
-.6	29	6.0	1,020	14.6	5,000
-.1	78	8.5	1,570	15.4	6,000
.8	178	10.8	2,280		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	940	282	314	208	844	178	107	60	39	18	1,820	690
2	827	270	276	208	793	172	111	55	33	33	1,550	554
3	742	288	251	214	776	172	150	53	30	100	1,600	588
4	690	276	226	202	588	172	138	44	29	178	1,470	810
5	656	257	214	190	519	172	122	35	30	320	1,160	776
6	622	238	208	178	468	166	112	38	30	263	960	690
7	588	226	196	166	417	178	103	38	27	184	810	605
8	537	244	184	160	384	376	95	27	19	178	725	588
9	485	301	178	153	362	571	90	27	19	149	588	468
10	468	282	172	149	537	605	89	30	23	160	451	468
11	759	244	166	147	554	605	143	31	21	139	742	468
12	725	270	166	141	485	656	214	30	29	125	1,100	468
13	588	354	166	280	408	519	172	27	45	103	1,550	485
14	502	347	196	1,080	362	417	130	23	54	178	2,140	426
15	426	301	220	940	334	320	108	23	40	151	2,070	384
16	392	270	288	759	314	270	226	27	45	112	1,400	347
17	376	257	334	537	294	232	232	30	45	97	1,040	347
18	369	320	320	759	282	208	202	26	36	123	1,020	340
19	340	327	294	793	270	208	178	20	31	238	1,280	320
20	320	308	263	759	251	232	149	17	24	196	1,600	282
21	301	276	288	1,300	238	238	123	16	19	220	2,070	257
22	282	257	434	1,650	232	196	104	15	18	220	2,350	588
23	276	257	426	1,620	220	166	92	20	16	434	3,600	1,550
24	308	270	384	2,210	214	153	82	26	15	1,180	2,930	2,570
25	519	244	334	4,340	214	135	71	25	15	1,120	2,140	2,530
26	862	251	294	4,240	208	124	59	20	17	1,260	1,940	1,760
27	793	294	263	2,870	196	117	54	17	18	1,140	1,670	1,450
28	554	340	238	1,880	190	135	74	23	16	1,000	1,400	2,460
29	426	376	226	1,260	184	160	72	17	26	759	1,080	4,440
30	347	354	220	1,000	-	135	61	40	34	940	862	6,000
31	308	-	220	881	-	116	-	50	-	1,200	708	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,328	940	276	527	1.57	1.81
November	8,581	376	226	286	.851	.95
December	7,959	434	166	257	.765	.88
Calendar year 1947	230,305	13,400	52	631	1.88	25.50
January	31,274	4,340	141	1,009	3.00	3.46
February	11,138	844	184	384	1.14	1.23
March	8,104	656	116	261	.777	.90
April	3,663	232	54	122	.363	.41
May	930	60	15	30.0	.089	.10
June	843	54	15	28.1	.084	.09
July	12,517	1,260	18	404	1.20	1.39
August	45,826	3,600	451	1,478	4.40	5.07
September	33,709	6,000	257	1,124	3.35	3.73
Water year 1947-48	180,872	6,000	15	494	1.47	20.02

Peak discharge (base, 1,700 sec.-ft.).- Jan. 25 (10 p.m.) 4,770 sec.-ft.; Aug. 1 (1 p.m.) 1,940 sec.-ft.; Aug. 14 (9 p.m.) 2,310 sec.-ft.; Aug. 23 (2 p.m.) 3,950 sec.-ft.; Sept. 24 (11 p.m.) 2,810 sec.-ft.; Sept. 30 (3 p.m.) 6,270 sec.-ft.

Hillsboro River near Zephyrhills, Fla.

Location.- Staff gage, lat. 28°09', long. 82°14', in sec. 8, T. 27 S., R. 21 E., at footbridge in Hillsboro River State Park, 2 miles downstream from Blackwater Creek and 7 miles southwest of Zephyrhills. Datum of gage is 33.28 feet above mean sea level (Corps of Engineers bench mark).

Drainage area.- 205 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge observed during year, 3,600 second-feet Jan. 25 (gage height, 12.02 feet); minimum observed, 63 second-feet June 19, 20, 26, 27 (gage height, 0.88 foot).

1939-48: Maximum discharge observed, 5,920 second-feet Sept. 19, 1947 (gage height, 13.71 feet); minimum observed, 48 second-feet June 11-17, 1945; minimum gage height observed, 0.78 foot June 3-6, 1944, June 11-17, 1945.

Remarks.- Records fair. Gage read once daily.

Cooperation.- Gage readings furnished by superintendent of Hillsboro River State Park.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.8	53	5.5	896	10.6	2,540
2.0	200	7.5	1,390	11.5	3,150
2.5	280	9.0	1,860	11.8	3,410

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,080	498	280	144	1,110	132	125	77	70	89	498	580
2	986	498	262	150	1,080	144	125	77	71	89	356	539
3	918	458	229	150	1,010	174	125	77	70	113	377	478
4	788	437	214	150	963	214	125	77	69	101	478	437
5	724	417	214	138	788	229	119	75	67	89	437	397
6	641	377	200	138	745	245	113	75	67	113	417	377
7	559	317	187	132	641	280	113	77	69	113	377	377
8	498	317	187	125	498	356	107	72	67	119	317	377
9	458	298	174	125	458	458	101	72	65	138	317	356
10	417	262	174	125	580	478	113	72	70	150	317	417
11	703	245	162	125	539	478	187	71	72	144	682	397
12	641	336	162	125	478	559	162	70	70	119	852	458
13	745	336	162	132	417	539	138	70	70	107	1,150	397
14	498	298	174	377	336	478	125	70	70	119	1,130	298
15	458	262	174	377	356	458	125	70	70	119	1,040	245
16	417	377	200	356	298	437	138	69	69	107	1,060	229
17	377	356	214	356	262	397	132	69	67	95	2,590	214
18	317	498	200	963	262	377	119	69	65	107	2,350	214
19	262	478	200	1,060	245	317	107	67	63	317	2,710	214
20	245	377	187	1,010	229	280	107	65	64	298	2,490	174
21	245	317	187	1,360	200	262	101	65	72	200	2,130	162
22	245	280	200	1,470	187	229	95	65	69	144	2,170	229
23	245	280	187	1,310	174	200	89	65	65	138	1,860	498
24	229	262	187	1,860	174	187	89	65	65	174	1,560	437
25	377	245	174	3,410	174	162	83	65	65	262	1,280	356
26	437	280	174	3,070	162	150	83	65	64	336	1,110	280
27	417	317	162	2,490	162	138	83	65	63	298	1,010	377
28	377	298	150	1,830	150	150	83	65	64	262	918	896
29	417	317	150	1,420	138	162	89	66	65	229	830	1,280
30	478	298	150	1,260	-	144	83	72	71	317	724	1,500
31	498	-	144	1,180	-	132	-	70	-	417	641	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15,697	1,080	229	506	2.47	2.85
November	10,336	498	245	345	1.68	1.88
December	5,821	280	144	188	.917	1.06
Calendar year 1947	161,371	5,470	72	442	2.16	29.31
January	26,918	3,410	125	868	4.23	4.88
February	12,816	1,110	138	442	2.16	2.32
March	8,946	559	132	289	1.41	1.62
April	3,384	187	83	113	.551	.61
May	2,169	77	65	70.0	.341	.39
June	2,028	72	63	67.6	.330	.37
July	5,423	417	89	175	.854	.98
August	34,178	2,710	317	1,102	5.38	6.20
September	13,190	1,500	162	440	2.15	2.39
Water year 1947-48	140,906	3,410	63	385	1.88	25.55

Hillsboro River near Tampa, Fla.

Location.- Water-stage recorder above spillway of Tampa Reservoir Dam, lat. 28°01'25", long. 82°25'40", in sec. 29, T. 28 S., R. 19 E., at Thirtieth Street, 5½ miles northeast of Tampa. Datum of gage is at mean sea level, datum of 1929 (city of Tampa, bench mark).

Drainage area.- 605 square miles.

Records available.- October 1945 to September 1948. October 1938 to September 1945 at site 1.4 miles upstream.

Average discharge.- 10 years, 634 second-feet.

Extremes.- Maximum daily discharge during year, 5,800 second-feet Oct. 1; maximum gage height, 22.32 feet Aug. 27; minimum daily discharge, 30 second-feet Apr. 27.

1938-48: Maximum discharge, 9,690 second-feet July 28-30, 1945; maximum gage height, 22.38 feet Sept. 25, 1947; no flow Nov. 30 to Dec. 2, 1945.

Maximum stage known, 25.6 feet, at former site and 0.66 foot higher datum, Sept. 7, 1933, from floodmarks, affected by backwater prior to failure of Tampa power dam, 1.4 miles below former gage. A discharge of 16,500 second-feet was measured Sept. 9, 1933.

Remarks.- Records good except those below 200 second-feet, which are fair. Flow regulated by Tampa Reservoir Dam. Capacity of reservoir insufficient to affect monthly figures of runoff.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,800	1,120	703	a324	3,470	336	263	220	f74	88	733	2,430
2	5,360	1,260	430	a314	3,150	322	252	220	74	92	903	2,050
3	4,910	829	471	a305	2,950	308	238	198	74	101	1,020	1,630
4	3,880	938	555	a295	2,620	297	229	184	72	106	930	1,630
5	3,550	1,030	507	286	2,430	298	214	170	70	122	1,110	1,440
6	3,150	908	429	274	2,080	298	201	160	70	134	1,000	1,120
7	2,830	840	431	264	2,090	322	187	a150	68	147	999	1,040
8	2,430	838	482	254	1,760	368	176	a141	66	154	657	1,030
9	2,210	791	380	245	1,630	420	164	a132	a65	160	905	928
10	1,760	793	380	238	1,480	560	158	122	64	168	1,490	534
11	1,480	759	370	230	1,230	494	170	116	64	171	1,090	835
12	1,310	820	357	229	1,040	902	164	111	70	181	1,300	431
13	1,380	456	356	229	1,300	934	163	106	76	188	1,380	540
14	1,130	771	358	237	1,210	617	164	101	79	f198	1,670	748
15	1,020	783	358	237	817	741	161	96	62	f209	1,710	704
16	1,160	702	371	237	834	823	201	92	79	205	1,820	540
17	880	853	379	263	828	843	214	92	f76	216	2,080	540
18	835	556	379	405	779	692	221	88	74	f431	2,430	540
19	1,040	494	380	799	697	847	229	a86	72	f122	2,610	528
20	1,020	697	382	899	624	748	236	a85	70	170	3,100	541
21	813	457	392	1,480	443	446	230	a84	68	498	3,620	352
22	823	f725	394	1,640	474	772	228	a82	66	341	3,480	426
23	f738	459	393	2,050	473	384	214	a80	66	718	3,960	432
24	f613	625	392	2,540	458	431	208	79	a65	535	4,100	356
25	763	765	382	2,660	444	421	194	78	a63	528	4,100	455
26	820	407	379	3,040	422	395	840	76	62	728	3,960	367
27	1,250	474	369	3,780	405	359	30	74	60	448	3,370	722
28	1,020	544	357	4,130	382	345	63	74	a62	337	3,520	525
29	1,330	473	347	4,130	405	322	128	72	63	722	3,170	540
30	1,350	493	343	3,950	-	298	188	f74	68	528	2,780	921
31	897	-	333	3,700	-	276	-	f76	-	528	2,610	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	57,352	5,800	613	1,650	3.08	3.53
November	21,660	1,260	407	722	1.19	1.33
December	12,539	703	333	404	.668	.77
Calendar year 1947	357,491	7,580	11	979	1.62	21.98
January	39,664	4,130	229	1,279	2.11	2.44
February	36,905	3,470	382	1,273	2.10	2.27
March	15,819	934	276	510	.843	.97
April	6,348	840	30	212	.350	.39
May	3,517	220	72	113	.187	.22
June	2,082	82	60	69.4	.115	.13
July	9,274	728	88	299	.494	.57
August	67,967	4,100	657	2,192	3.62	4.18
September	24,971	2,430	352	832	1.38	1.53
Water year 1947-48	298,098	5,800	30	814	1.35	18.33

a No gage-height record; discharge interpolated.
f Computed on basis of partly estimated gage-height record.

Crystal Springs near Zephyrhills, Fla.

Location.- Staff gage, lat. 28°11', long. 82°11', in sec. 35, T. 26 S., R. 21 E., 1½ miles west of village of Crystal Springs and 3½ miles south of Zephyrhills.

Records available.- 1933 (miscellaneous discharge measurements), October 1934 to September 1948 (discharge measurements only).

Extremes.- 1934-48: Maximum discharge measured, 147 second-feet July 19, 1941; minimum measured, 20.3 second-feet July 1, 1946.

Remarks.- Discharge measurements are either of Crystal Springs or of Hillsboro River made both above and below Crystal Springs to obtain discharge of the springs, which is the difference between that of the river at each of the two points. Flow regulated occasionally by manipulation of stop logs in dam at springs outlet for recreational purposes.

Revisions (water years).- W 1052: 1935, 1937-42, 1944-45.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Hillsboro River		Difference or spring flow
	Below springs	Above springs	
Nov. 6	-	-	51.9
Dec. 18	-	-	49.2
Jan. 21	-	-	61.7
Feb. 25	-	-	58.8
Mar. 30	75.7	15.3	60.4
Apr. 29	62.6	3.41	59.2
June 8	56.5	1.55	55.0
July 13	67.3	4.41	62.9

Hanna Lake Outlet near Lutz, Fla.

Location.- Water-stage recorder and concrete control, lat. 28°08'10", long 82°26'35", in sec. 18, T. 27 S., R. 19 E., at culverts under Hanna Road, 0.4 mile south of Sunset Lane and 1.5 miles southeast of Lutz. Datum of gage is 30.00 feet above mean sea level, datum of 1929.

Records available.- April 1946 to September 1948.

Extremes.- 1946: Maximum discharge during period April to September, 25 second-feet Sept. 18 (gage height, 30.18 feet); no flow May 31 (gage height, 28.61 feet).

1946-47: Maximum discharge during water year, 46 second-feet Sept. 24; maximum gage height, 31.77 feet Sept. 19; no flow Jan. 18 to July 29, Aug. 5-7, Sept. 13-17; minimum gage height, 28.76 feet Feb. 1.

1947-48: Maximum discharge during water year, 26 second-feet Oct. 1; maximum gage height, 31.70 feet Oct. 25; no flow Mar. 25 to July 31; minimum gage height, 30.26 feet May 28, 29.

Remarks.- Records good except those prior to completion of concrete control and those for periods of no gage-height record, which are fair. Flow regulated at station and at outlets of Lake Kell and Keene Lake above station by manipulation of stop logs in dams Some diversion to Lake Stemper 1 mile below Hanna Lake.

Discharge, in second-feet, 1946-48

1946

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	a0.6	a0.1	a2.1	5.8	11
2							-	h.6	a.1	a2.1	5.1	11
3							-	h.6	a.4	a2.2	5.4	9.6
4							-	a.5	a.9	a2.3	5.1	8.8
5							-		a1.3	a2.4	4.7	11
6							-		a1.3	a2.4	4.5	12
7							-		a1.3	a2.4	4.2	12
8							-		a1.3	a2.4	3.4	12
9							-		a1.3	2.4	3.3	10
10							-		a1.3	2.4	3.8	9.6
11							-	a.4	a1.3	2.9	4.2	9.6
12							-		a1.3	3.7	3.8	11
13							-		a1.3	4.1	3.8	10
14							-		1.3	3.9	3.8	a13
15							-		1.3	3.7	3.8	a16
16							-	a.8	1.4	3.4	3.7	a19
17							-		1.4	3.3	3.5	a22
18							1.5		a1.4	3.2	3.4	25
19							1.5		a1.4	2.9	3.4	a18
20							1.5	a1.2	a1.4	2.9	3.4	a10
21							1.5		a1.4	3.1	3.5	8.4
22							1.4		a1.4	3.2	3.5	9.2
23							1.4	1.0	a1.4	3.3	3.7	9.6
24							a1.1	1.0	a1.3	3.3	5.3	9.6
25								.9	h1.3	3.4	9.6	9.6
26								.8	a1.4	3.3	10	9.6
27								.6	a1.6	3.3	12	9.2
28								.6	a1.8	3.5	12	8.8
29							.8	.6	a1.9	4.1	12	7.6
30							.7	.6	a2.0	6.1	12	6.1
31							-	.1	-	5.4	12	-

a No gage-height record; discharge interpolated, or computed on basis of weather records and records for Lake Stemper and Hanna Lake.

h Computed from staff-gage reading.

Discharge, in second-feet, of Hanna Lake Outlet near Lutz, Fla., 1946-48--Continued

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	4.1	1.7	1.0						0	1.3	10
2	5.4	4.1	1.7	1.0						0	.8	12
3	4.7	3.9	1.7	1.0						0	.4	14
4	4.4	3.8	1.6	1.0						0	.2	16
5	4.2	3.8	1.6	1.0						0	0	26
6	3.4	3.7	1.6	.9						0	0	26
7	5.9	3.5	1.6	.9						0	0	21
8	13	3.4	1.6	.9						0	.2	18
9	12	3.4	1.6	.9						0	1.3	28
10	12	3.3	1.5	.9						0	1.6	14
11	11	3.3	1.5	.9						0	1.6	3.2
12	11	3.1	1.5	.8						0	1.8	.8
13	10	3.0	1.5	.8						0	3.0	0
14	9.6	2.6	1.5	.8						0	8.0	0
15	9.2	2.3	1.4	.8						0	7.0	0
16	8.8	2.4	1.4	.8						0	4.8	0
17	8.0	2.3	1.3	.8						0	3.9	0
18	7.6	2.3	1.2	0						0	3.2	3.0
19	7.2	2.1	1.1	0						0	2.7	19
20	6.8	2.0	1.0	0						0	2.7	32
21	6.5	2.1	1.0	0						0	3.2	32
22	6.1	2.0	1.0	0						0	6.1	30
23	5.8	1.9	1.0	0						0	8.0	38
24	5.4	1.9	1.0	0						0	9.0	45
25	5.1	1.8	1.1	0						0	8.5	42
26	4.9	1.8	1.1	0						0	8.0	39
27	4.7	1.7	1.1	0						0	7.0	36
28	4.5	1.7	1.1	0						0	11	32
29	4.4	1.8	1.1	0						0	23	30
30	4.2	1.8	1.1	0						.5	21	28
31	4.1	-	1.0	0						1.3	18	-

Note.- No gage-height record Dec. 31 to Jan. 22, Jan. 27-31, Feb. 15; discharge interpolated or computed on basis of records for Lake Stemper. Hanna Lake outlet control constructed during period Jan. 18-31.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	17	3.8	1.3	4.8	1.5					0.1	7.6
2	23	17	.1	1.5	3.9	1.5					.4	7.3
3	22	16	.8	1.3	3.6	1.5					1.0	8.2
4	20	15	1.0	1.1	3.4	2.0					1.1	12
5	18	15	1.0	1.1	3.2	2.7					1.1	12
6	17	14	1.0	1.0	3.2	2.7					1.1	10
7	16	13	1.0	.8	3.2	3.4					1.3	9.3
8	15	13	1.0	.8	3.2	3.9					1.1	9.3
9	14	12	1.0	.8	3.2	8.1					.8	7.9
10	13	12	[a]1.0	.8	4.8	3.6					1.3	7.6
11	6.4	11	[a].9	.7	4.3	3.9					4.8	7.0
12	3.9	13	[a].8	.6	3.9	3.9					6.1	7.0
13	4.3	13	[a]1.2	1.3	3.6	3.4					5.7	7.0
14	4.3	13	[h]1.6	1.8	3.4	2.9					5.2	6.6
15	4.8	12	[a]1.6	1.6	3.2	2.4					4.8	6.4
16	6.6	12	[a]1.5	1.5	2.9	2.2					3.9	6.0
17	8.5	11	[a]1.5	1.8	2.7	1.8					3.9	5.6
18	11	10	1.5	2.7	2.7	1.5					5.5	5.4
19	11	10	1.5	2.7	2.4	1.3					8.0	5.0
20	10	9.3	1.3	3.2	2.2	1.0					8.5	4.8
21	9.5	8.9	1.3	4.8	2.0	.6					9.5	4.6
22	9.0	8.5	1.3	3.9	1.8	.4					11	5.0
23	10	8.5	1.1	3.6	1.8	.3					11	5.4
24	14	8.2	1.1	10	1.6	.1					15	5.2
25	16	8.2	1.0	12	1.6	0					13	5.0
26	16	8.2	1.0	9.5	1.6	0					12	4.8
27	19	7.9	1.1	8.0	1.5	0					12	5.4
28	24	7.6	1.1	7.0	1.5	0					10	6.0
29	22	7.3	1.1	6.1	1.5	0					9.7	6.2
30	20	7.0	1.3	5.2	-	0					9.3	6.4
31	18	-	1.3	4.8	-	0					8.2	-

[a] No gage-height record; discharge interpolated, or computed on basis of records for Hanna Lake.
[h] Computed from staff-gage reading.

Monthly discharge, in second-feet, of Hanna Lake Outlet near Lutz, Fla., 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October						
November						
December						
Calendar year						
January	-	-	-	-		
February	-	-	-	-		
March	-	-	-	-		
April 18-30, 1946	15.8	1.5	0.7	1.22		
May	20.3	1.2	.1	.65		
June	38.3	2.0	.1	1.28		
July	99.1	6.1	2.1	3.20		
August	177.7	12	3.3	5.73		
September	348.3	25	6.1	11.6		
Water year	-	-	-	-		
October 1946	215.7	13	3.4	6.96		
November	80.9	4.1	1.7	2.70		
December	41.2	1.7	1.0	1.33		
Calendar year	-	-	-	-		
January 1947	15.2	1.0	0	.49		
February	0	0	0	0		
March	0	0	0	0		
April	0	0	0	0		
May	0	0	0	0		
June	0	0	0	0		
July	1.8	1.3	0	.06		
August	167.3	23	0	5.40		
September	595	45	0	19.8		
Water year 1946-47	1,117.1	45	0	3.06		
October 1947	431.3	25	3.9	13.9		
November	338.6	17	7.0	11.3		
December	37.8	3.8	.1	1.22		
Calendar year 1947	1,587.0	45	0	4.35		
January 1948	103.3	12	.6	3.33		
February	82.7	4.8	1.5	2.85		
March	56.6	8.1	0	1.83		
April	0	0	0	0		
May	0	0	0	0		
June	0	0	0	0		
July	0	0	0	0		
August	186.4	15	.1	6.01		
September	206.0	12	4.6	6.87		
Water year 1947-48	1,442.7	25	0	3.94		

Anclote River near Elfers, Fla.

Location.- Water-stage recorder, lat. 28°12'50", long. 82°40'00", in sec. 23, T. 26 S., R. 16 E., at bridge on State Highway 54, 3½ miles southeast of Elfers. Datum of gage is at mean sea level, datum of 1929.

Drainage area.- 61 square miles.

Records available.- May 1946 to September 1948.

Extremes.- Maximum discharge during year, 974 second-feet Jan. 26 (gage height, 20.54 feet); minimum, 3.0 second-feet June 19-27; minimum gage height, 6.87 feet June 24, 25.
1946-48: Maximum discharge, 1,160 second-feet Sept. 20, 1947 (gage height, 21.76 feet); minimum, that of June 19-27, 1948; minimum gage height, that of June 24, 25, 1948.

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	282	160	49	18	212	19	8.0	3.5	3.2	3.8	73	94
2	228	164	44	19	181	18	7.4	3.4	3.2	7.6	81	83
3	192	147	42	19	153	16	6.6	3.4	3.2	7.8	75	75
4	164	128	38	19	131	29	6.0	3.4	3.2	5.3	60	68
5	137	114	35	18	114	81	5.5	3.4	3.2	4.8	49	65
6	120	101	33	16	101	92	5.0	3.4	3.2	9.4	55	58
7	104	92	30	15	90	106	4.7	3.3	3.2	7.0	71	52
8	92	92	28	14	81	106	4.5	3.3	3.1	6.8	77	49
9	81	85	26	13	75	109	4.2	3.4	3.1	5.9	75	48
10	90	79	24	12	85	106	4.0	3.5	3.1	7.3	81	44
11	140	73	23	12	87	98	4.0	3.4	3.1	6.9	363	39
12	123	81	22	11	87	90	4.0	3.4	3.2	10	671	36
13	106	77	23	14	79	83	8.3	3.4	3.4	68	735	36
14	92	73	29	26	73	73	9.0	3.4	3.4	85	608	36
15	90	70	30	28	66	65	8.0	3.3	3.2	120	408	33
16	220	66	34	30	60	60	10	3.3	3.2	112	282	28
17	327	66	35	34	55	49	10	3.3	3.1	85	192	24
18	336	70	34	64	50	42	10	3.3	3.1	60	174	20
19	309	66	34	87	46	36	8.3	3.3	3.0	36	181	17
20	273	62	32	117	42	32	6.4	3.2	3.0	23	204	15
21	228	56	33	192	38	28	5.2	3.2	3.0	20	228	13
22	192	54	35	291	35	23	4.4	3.2	3.0	54	336	17
23	354	52	33	318	36	20	4.1	3.2	3.0	75	580	18
24	626	50	33	617	34	17	3.8	3.2	3.0	62	716	17
25	662	55	31	871	31	14	3.7	3.2	3.0	62	580	16
26	626	65	28	950	29	12	3.6	3.2	3.0	52	417	15
27	508	64	26	771	26	10	3.6	3.2	3.0	64	300	20
28	390	62	24	535	23	11	3.6	3.1	3.1	58	228	35
29	300	58	22	381	21	11	3.6	3.2	3.2	49	181	46
30	237	54	21	291	-	9.9	3.6	3.4	3.6	44	144	60
31	192	-	19	246	-	8.9	-	3.2	-	70	114	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	7,821	662	81	252	4.13	4.77
November	2,436	164	50	81.2	1.33	1.49
December	950	49	19	30.6	.502	.58
Calendar year 1947	46,221.3	1,090	3.4	127	2.08	28.20
January	6,049	950	11	195	3.20	3.69
February	2,141	212	21	73.8	1.21	1.31
March	1,474.8	109	8.9	47.6	.780	.90
April	173.1	10	3.6	5.77	.095	.11
May	102.6	3.5	3.1	3.31	.054	.06
June	94.3	3.6	3.0	3.14	.051	.06
July	1,281.6	120	3.8	41.3	.677	.78
August	8,339	735	49	269	4.41	5.08
September	1,177	94	13	39.2	.643	.72
Water year 1947-48	32,039.4	950	3.0	87.5	1.43	19.55

WEEKIWACHEE RIVER BASIN

Weekiwachee Spring near Brooksville, Fla.

Location.- Staff gage, 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 1948 (discharge measurements only).

Extremes.- 1931-48: Maximum discharge measured, 231 second-feet May 6, 1931; minimum measured, 106 second-feet Feb. 14, 1933.

Remarks.- Discharge measurements made at outlet of pool.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Oct. 24	193	Mar. 12	182	July 12	141
Dec. 15	183	June 4	135	Sept.21	178

Withlacoochee River at Trilby, Fla.

Location.- Water-stage recorder, lat. 28°29', long. 82°11, on line between secs. 14 and 23, T. 23 S., R. 21 E., at bridge on State Highway 35, 1½ miles northeast of Trilby and 10 miles upstream from Little Withlacoochee River. Datum of gage is 49.27 feet above mean sea level (Corps of Engineers bench mark).

Drainage area.- 630 square miles.

Records available.- October 1938 to September 1948. August 1928 to February 1929 and February 1930 to September 1938 at site 1½ miles downstream.

Average discharge.- 18 years (1930-48), 372 second-feet.

Extremes.- Maximum discharge during year, 2,250 second-feet Aug. 23 (gage height, 13.38 feet); minimum, 40 second-feet June 30 (gage height, 1.92 feet).

1928-29, 1930-48: Maximum discharge, 8,840 second-feet June 21, 1934 (gage height, 20.5 feet, site and datum then in use); minimum, 8.6 second-feet June 9-17, 1945 (gage height, 1.12 feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions.- W 872: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.9	39	5.8	339	10.5	1,280
2.6	76	7.4	549	12.8	2,010
3.5	139	8.2	715	13.4	2,250

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,010	492	362	231	1,170	362	387	147	55	48	318	1,880
2	2,010	534	362	231	1,250	425	362	139	53	64	328	1,820
3	1,980	582	362	223	1,310	438	339	135	50	81	339	1,720
4	1,910	645	362	223	1,340	438	318	127	48	72	362	1,630
5	1,880	715	362	218	1,370	478	300	120	48	64	412	1,560
5	1,820	738	362	214	1,370	492	282	112	48	60	492	1,500
7	1,750	761	362	210	1,340	492	265	106	47	66	601	1,440
8	1,690	784	362	206	1,310	492	257	98	46	67	738	1,340
9	1,630	784	362	197	1,250	492	240	95	46	72	808	1,250
10	g1,530	761	350	193	1,190	506	231	92	46	80	877	1,170
11	g1,470	738	339	189	1,140	534	231	92	49	80	1,120	1,090
12	g1,370	715	339	185	1,090	565	248	92	48	81	1,280	1,040
13	g1,280	691	328	185	1,020	582	257	88	46	80	1,370	947
14	g1,190	645	328	193	970	622	257	85	47	86	1,440	901
15	g1,120	601	318	189	924	668	248	80	46	102	1,470	831
16	1,040	565	318	185	854	668	248	77	44	102	1,470	761
17	994	565	309	185	808	691	240	74	44	92	1,590	715
18	947	565	300	189	761	715	223	69	42	88	1,780	a666
19	901	534	300	189	715	715	206	66	44	92	1,910	a618
20	854	506	291	193	668	715	193	63	50	102	2,010	a569
21	784	478	282	214	622	a705	176	61	50	109	2,090	520
22	738	451	282	218	582	a695	164	60	50	109	2,210	492
23	691	438	274	231	549	a675	156	58	46	112	2,250	464
24	668	412	274	328	520	a655	143	58	45	147	2,210	451
25	622	412	265	425	492	a630	135	58	44	185	2,210	425
28	582	387	265	520	464	a605	131	57	42	189	2,210	399
27	549	387	257	601	438	a575	131	54	42	189	2,170	387
28	534	374	248	715	412	a540	143	54	42	185	2,170	387
29	506	374	248	831	387	a505	147	52	41	193	2,090	399
30	492	a368	240	947	-	464	152	53	40	265	2,010	438
31	478	-	240	1,040	-	412	-	52	-	300	1,950	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	36,020	2,010	478	1,162	1.84	2.13
November	17,002	784	368	567	.900	1.00
December	9,653	362	240	311	.494	.57
Calendar year 1947	185,966	2,010	56	509	.808	10.98
January	10,098	1,040	185	326	.517	.60
February	26,316	1,370	387	907	1.44	1.55
March	17,551	715	362	566	.898	1.04
April	6,810	387	131	227	.360	.40
May	2,574	147	52	83.0	.132	.15
June	1,389	55	40	46.3	.073	.08
July	3,562	300	48	115	.183	.21
August	44,285	2,250	318	1,429	2.27	2.61
September	27,810	1,880	387	927	1.47	1.64
Water year 1947-48	203,070	2,050	40	555	.881	11.98

Peak discharge (base, SOO sec.-ft.).- Feb. 5, 6, 1,370 sec.-ft.; Aug. 23 (2 p.m.) 2,250 sec.-ft.

a No gage-height record; discharge either interpolated or computed on basis of records for station at Croom.

g Computed from graph based on gage readings.

Withlacoochee River at Croom, Fla.

Location.- Water-stage recorder, lat. 28°36', long. 82°13', in sec. 8, T. 22 S., R. 21 E., at county highway bridge at Croom, 2 miles downstream from Little Withlacoochee River. Datum of gage is 38.94 feet above mean sea level (Corps of Engineers bench mark).

Drainage area.- 900 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 3,100 second-feet Oct. 1, Aug. 25-28; maximum gage height, 9.62 feet Aug. 25; minimum discharge, 86 second-feet June 30 (gage height, 2.81 feet).

1939-48: Maximum discharge, 4,290 second-feet July 29, 30, 1945; maximum gage height, 10.44 feet July 29, 1945; minimum discharge, 19 second-feet June 17, 18, 1945 (gage height, 1.78 feet).

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.8	86	5.5	387	8.2	1,670
3.2	111	6.0	507	9.0	2,400
3.6	144	7.0	831	9.6	3,100
5.0	311	7.3	990		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,100	745	493	324	1,200	493	507	230	111	101	536	2,680
2	2,980	762	493	324	1,310	507	479	224	111	104	582	2,560
3	2,920	779	479	318	1,390	507	453	218	111	111	629	2,400
4	2,800	814	479	311	1,430	536	429	212	108	118	678	2,250
5	2,680	831	479	304	1,430	582	407	206	108	118	712	2,110
6	2,560	870	479	304	1,470	597	387	200	104	114	762	2,020
7	2,510	870	466	298	1,470	613	369	188	104	111	831	1,880
8	2,350	896	466	292	1,470	629	353	182	101	111	956	1,800
9	2,250	896	466	285	1,430	629	338	177	101	114	1,130	1,720
10	2,160	896	466	285	1,390	646	331	171	101	122	1,310	1,590
11	2,020	870	453	279	1,350	662	324	165	104	130	1,630	1,510
12	1,930	870	453	273	1,270	678	331	160	111	160	1,880	1,430
13	1,840	850	441	273	1,200	712	331	160	108	177	1,980	1,390
14	1,720	814	441	279	1,130	728	331	154	108	171	2,060	1,310
15	1,630	796	441	273	1,060	745	331	149	108	171	2,110	1,240
16	1,590	762	429	273	990	762	331	144	104	188	2,110	1,160
17	1,470	728	429	273	923	779	324	140	101	206	2,200	1,100
18	1,390	728	418	279	870	779	318	140	98	218	2,300	990
19	1,310	712	407	279	831	779	304	135	98	224	2,510	923
20	1,240	695	397	285	796	779	292	130	95	218	2,620	850
21	1,160	662	387	311	745	779	279	126	98	218	2,740	796
22	1,100	646	387	318	712	762	266	122	101	224	2,920	796
23	1,060	613	378	324	678	745	254	122	98	230	2,980	762
24	1,060	582	369	407	662	728	242	122	95	230	3,040	712
25	1,060	582	361	522	629	695	230	126	95	254	3,040	678
26	990	551	361	646	597	678	218	122	92	273	3,100	662
27	923	536	353	745	566	646	230	118	92	279	3,100	629
28	896	522	346	831	536	629	242	118	89	279	3,100	613
29	831	522	338	896	507	597	236	114	89	298	3,040	613
30	796	507	338	990	-	566	236	114	89	378	2,980	629
31	779	-	331	1,130	-	536	-	111	-	453	2,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	53,105	3,100	779	1,713	1.90	2.19
November	21,907	896	507	730	.811	.91
December	13,024	493	331	420	.467	.54
Calendar year 1947	248,648	3,160	112	681	.757	10.26
January	12,931	1,130	273	417	.463	.53
February	30,042	1,470	507	1,036	1.15	1.24
March	20,503	779	493	661	.734	.85
April	9,703	507	218	323	.359	.40
May	4,800	230	111	155	.172	.20
June	3,033	111	89	101	.112	.13
July	6,103	453	101	197	.219	.25
August	62,366	3,100	536	2,012	2.24	2.58
September	39,803	2,680	613	1,327	1.47	1.64
Water year 1947-48	277,320	3,100	89	758	.842	11.46

Peak discharge (base, 1,100 sec.-ft.).- Feb. 6-8, 1,470 sec.-ft.; Aug. 25-28, 3,100 sec.-ft.

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 200, 4½ miles northeast of Holder. Datum of gage is 27.52 feet above mean sea level (levels by Corps of Engineers).
Drainage area.- 1,590 square miles.
Records available.- August 1928 to February 1929, August 1931 to September 1948.
Average discharge.- 17 years (1931-48), 1,097 second-feet.
Extremes.- Maximum discharge during year, 3,970 second-feet Sept. 2-4; maximum gage height, 9.49 feet Sept. 2; minimum discharge, 448 second-feet June 29 (gage height, 0.60 foot).
1928-29, 1931-48: 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, -0.41 foot June 19, 1945.
Remarks.- Records good.
Revisions.- W 872: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,950	2,820	1,720	1,210	1,450	1,480	1,320	860	607	463	1,110	3,880
2	3,010	2,680	1,680	1,180	1,450	1,480	1,350	860	629	478	1,160	3,970
3	3,010	2,680	1,650	1,160	1,450	1,450	1,350	860	587	493	1,210	3,970
4	3,010	2,560	1,620	1,160	1,480	1,450	1,320	860	587	493	1,320	3,970
5	3,070	2,500	1,580	1,140	1,510	1,510	1,320	860	587	538	1,350	3,880
6	3,130	2,440	1,580	1,110	1,510	1,540	1,290	837	569	607	1,410	3,880
7	3,130	2,380	1,540	1,090	1,540	1,580	1,260	837	587	607	1,410	3,880
8	3,190	2,320	1,510	1,090	1,580	1,620	1,230	814	659	587	1,410	3,790
9	3,250	2,270	1,510	1,070	1,650	1,620	1,210	790	553	553	1,480	3,790
10	3,250	2,220	1,480	1,070	1,680	1,680	1,180	790	569	553	1,880	3,700
11	3,250	2,220	1,450	1,040	1,720	1,720	1,160	790	569	553	2,320	3,700
12	3,250	2,170	1,410	1,040	1,760	1,720	1,160	767	587	569	2,380	3,620
13	3,250	2,170	1,480	1,040	1,800	1,720	1,160	744	607	652	2,560	3,620
14	3,190	2,170	1,540	1,040	1,840	1,680	1,140	721	629	698	2,680	3,620
16	3,190	2,170	1,580	1,020	1,840	1,650	1,140	698	629	721	2,750	3,620
16	3,320	2,120	1,580	1,020	1,840	1,620	1,110	698	607	721	2,820	3,540
17	3,320	2,120	1,540	1,020	1,840	1,580	1,090	675	587	721	2,880	3,540
18	3,300	2,120	1,540	1,040	1,840	1,580	1,070	652	569	721	3,020	a3,450
19	3,230	2,080	1,510	1,040	1,800	1,540	1,040	629	538	721	3,230	a3,320
20	3,230	2,080	1,480	1,070	1,800	1,510	1,020	607	538	744	3,460	a3,200
21	3,090	2,040	1,450	1,110	1,800	1,510	1,000	607	538	744	3,540	3,090
22	3,090	2,000	1,450	1,140	1,760	1,480	1,000	587	523	767	3,620	3,090
23	3,020	1,960	1,410	1,140	1,720	1,480	976	569	508	790	3,620	3,020
24	2,950	1,920	1,380	1,320	1,680	1,480	953	569	493	837	3,700	3,020
25	2,950	1,920	1,380	1,410	1,650	1,450	930	569	478	953	3,700	2,950
26	3,020	1,880	1,350	1,450	1,620	1,450	906	569	463	930	3,700	2,950
27	3,090	1,840	1,320	1,450	1,580	1,410	906	553	463	906	3,790	2,820
28	3,020	1,800	1,290	1,450	1,540	1,380	883	569	463	883	3,790	2,820
29	3,020	1,760	1,260	1,450	1,510	1,350	883	569	448	883	3,790	2,750
30	2,950	1,760	1,230	1,450	-	1,320	883	587	463	976	3,880	2,750
31	2,880	-	1,230	1,450	-	1,320	-	607	-	1,070	3,880	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	96,610	3,320	2,880	3,116	1.96	2.26
November	65,170	2,820	1,760	2,172	1.37	1.52
December	45,730	1,720	1,230	1,475	.928	1.07
Calendar year 1947	538,941	3,320	552	1,477	.929	12.60
January	36,470	1,450	1,020	1,176	.740	.85
February	48,240	1,840	1,450	1,663	1.05	1.13
March	47,360	1,720	1,320	1,528	.961	1.11
April	33,240	1,350	883	1,108	.697	.78
May	21,704	860	553	700	.440	.51
June	16,544	629	448	551	.347	.39
July	21,932	1,070	463	707	.445	.51
August	82,850	3,880	1,110	2,673	1.68	1.94
September	103,200	3,970	2,750	3,440	2.16	2.41
Water year 1947-48	619,050	3,970	448	1,691	1.06	14.48

Peak discharge (base, 1,300 sec.-ft.).- Oct. 16, 17, 3,320 sec.-ft.; Feb. 14-18, 1,840 sec.-ft.; Sept. 2-4, 3,970 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Croom.

Rainbow Springs near Dunnellon, Fla.

Location.- Staff gage, lat. 29°06'05", long. 82°26'10", in sec. 12, T. 16 S., R. 18 E., at head of springs, 4 miles northeast of Dunnellon.
Records available.- 1907, 1917, 1929-30 (a single discharge measurement in each year), February 1931 to September 1948 (discharge measurements only).
Extremes.- 1931-48: Maximum discharge measured, 927 second-feet Nov. 9, 1935; minimum measured, 487 second-feet Oct. 3, 1932.
Remarks.- Discharge measurements made at bridge on State Highway 484, 5 miles downstream from springs. Surface inflow between springs and measuring section is negligible except after heavy rains.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Nov. 7	850	Jan. 29	764	Apr. 21	846	July 14	759
Dec. 18	778	Mar. 17	817	June 2	793	Aug. 24	792

Waccasassa River near Otter Creek, Fla.

Location.- Water-stage recorder, lat. 29°22', long. 82°44', in sec. 17, T. 13 S., R. 16 E., at bridge on State Highway 24, 2.8 miles northeast of village of Otter Creek and about 11 miles upstream from mouth of Otter Creek. Datum of gage is 23.52 feet above mean sea level, datum of 1929.

Records available.- May 1945 to September 1948.

Extremes.- Maximum discharge during year, 902 second-feet Mar. 12 (gage height, 6.39 feet), from rating curve extended above 600 second-feet; minimum, 15 second-feet part of each day June 26-30; minimum gage height, 1.67 feet June 26, 27, 30.

1945-48: Maximum discharge, that of Mar. 12, 1948; minimum, 6.5 second-feet June 11, 12, 1945; minimum gage height, 1.52 feet June 11, 12, 14, 15, 1945.

Remarks.- Records good except those for period of fragmentary gage-height record, which are poor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	182	241	118	100	262	66	112	32	21	19	306	112
2	153	233	108	97	244	64	105	32	22	29	315	112
3	135	225	102	92	227	64	94	30	21	34	324	104
4	99	217	94	87	210	94	85	29	21	32	368	98
5	70	201	87	83	194	156	78	28	21	31	429	93
6	59	193	83	78	178	147	74	28	20	35	536	89
7	50	183	76	72	164	192	71	28	20	30	494	89
8	46	217	70	69	152	262	68	27	19	30	399	85
9	40	249	66	65	149	306	65	26	19	32	359	82
10	35	289	63	62	154	558	62	25	25	37	399	80
11	31	305	60	58	140	738	59	24	31	37	450	77
12	33	337	58	57	132	880	56	24	28	37	388	74
13	31	321	76	58	126	816	53	24	26	40	414	72
14	29	297	105	69	121	687	52	23	24	43	388	71
15	59	273	113	60	113	580	52	23	23	55	368	72
16	337	265	151	63	108	472	55	22	22	63	342	71
17	377	249	150	65	107	388	54	22	21	60	333	67
18	388	233	140	75	106	342	51	21	21	57	324	63
19	361	233	132	75	102	306	50	21	21	52	315	60
20	329	225	127	129	97	280	48	20	20	52	306	57
21	321	217	134	297	92	253	47	20	19	53	306	55
22	329	209	145	257	91	218	46	20	18	56	298	53
23	305	198	143	241	87	218	45	20	17	65	271	51
24	305	190	140	361	85	244	44	19	16	85	244	49
25	321	180	135	369	80	204	42	19	16	90	218	46
26	321	166	131	359	79	171	41	18	16	97	196	45
27	305	156	124	333	75	168	39	18	15	100	178	46
28	297	147	118	298	72	197	38	18	15	100	161	48
29	289	137	111	271	69	168	36	23	16	100	144	50
30	273	127	108	244	-	140	34	23	15	190	126	52
31	257	-	103	262	-	121	-	21	-	298	112	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,167	388	29	199		
November	6,713	337	127	224		
December	3,371	151	58	109		
Calendar year 1947	30,953	388	12	84.8		
January	4,806	369	57	155		
February	3,816	262	69	132		
March	9,500	880	64	306		
April	1,756	112	34	58.5		
May	728	32	18	23.5		
June	609	31	15	20.3		
July	2,039	298	19	65.8		
August	9,811	536	112	316		
September	2,123	112	45	70.8		
Water year 1947-48	51,439	880	15	141		

Note.- Fragmentary gage-height record Oct. 1 to Nov. 9; discharge computed from partly estimated gage heights.

Otter Creek at Otter Creek, Fla.

Location.- Water-stage recorder, lat. 29°19', long. 82°46', in sec. 23, T. 13 S., R. 15 E., at bridge on State Highway 24, 0.5 mile southwest of village of Otter Creek and about 7 miles upstream from mouth. Datum of gage is 13.35 feet above mean sea level, datum of 1929.

Records available.- May 1945 to September 1948.

Extremes.- Maximum discharge during year, 1,350 second-feet Mar. 12 (gage height, 6.18 feet), from rating curve extended above 620 second-feet; no flow May 11 to June 10, June 18 to July 1; minimum gage height, 0.64 foot May 28.

1945-48: Maximum discharge, that of Mar. 12, 1948; no flow for several periods each year; minimum gage height observed, 0.00 foot June 9, 1945.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 3

3.1	27	4.0	100
3.3	38	4.1	123
3.7	64	5.4	542
3.9	84		

Mar. 4 to Sept. 30

1.1	0	1.8	3.8	3.2	43	4.6	247
1.3	.4	1.9	4.9	3.5	59	4.7	294
1.4	.8	2.0	6.3	3.8	80	4.9	426
1.5	1.4	2.2	9.9	3.9	90	6.2	1,350
1.6	2.1	2.4	14	4.1	119		
1.7	2.9	2.7	23	4.3	163		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	a180	52	49	239	32	88	2.5	0	0.1	433	58
2	82	a180	49	49	214	30	77	2.0	0	.2	378	63
3	65	a160	46	45	197	30	67	1.6	0	.3	326	60
4	55	a145	43	42	178	67	59	1.2	0	.3	426	54
5	46	a135	40	39	149	123	52	.9	0	.2	575	49
6	40	a122	37	36	129	123	48	.7	0	.3	731	46
7	36	a110	35	34	114	189	44	.6	0	.2	710	42
8	40	h126	32	33	97	378	41	.4	0	.2	639	39
9	37	a140	30	31	97	433	38	.3	0	.2	518	37
10	32	162	29	30	116	781	34	.2	.2	1.3	497	35
11	30	207	28	28	97	1,210	31	.1	.4	3.1	518	34
12	36	304	28	28	83	1,320	27	0	.2	3.6	454	33
13	38	301	36	30	76	1,140	24	0	.3	4.1	433	31
14	33	275	50	36	71	852	22	0	.6	4.1	319	30
15	82	246	54	37	65	632	20	0	.3	4.8	247	33
16	444	223	75	36	60	476	21	0	.1	8.4	225	34
17	g526	194	75	35	60	357	22	0	.1	11	238	31
18	g493	168	69	42	59	271	21	0	0	13	235	27
19	a420	162	67	43	56	229	19	0	0	14	211	24
20	a360	146	65	101	53	192	16	0	0	15	189	21
21	a310	129	70	321	50	163	13	0	0	22	173	19
22	a300	116	75	308	49	137	12	0	0	31	179	17
23	a285	105	73	275	47	137	10	0	0	64	176	15
24	g282	95	68	412	44	176	9.0	0	0	96	163	14
25	g259	84	65	405	42	168	7.7	0	0	77	139	13
26	a255	77	61	363	40	141	6.5	0	0	60	114	11
27	a250	69	58	324	37	131	5.7	0	0	53	94	10
28	a235	64	55	285	35	203	5.0	0	0	50	76	14
29	a220	59	53	249	33	181	4.1	0	0	73	71	17
30	a205	56	52	217	-	135	3.3	0	0	238	64	19
31	h194	-	50	246	-	106	-	0	-	392	56	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,806	526	30	187		
November	4,540	304	56	151		
December	1,620	75	28	52.3		
Calendar year 1947	20,744.2	526	0	56.8		
January	4,209	412	28	136		
February	2,587	239	33	89.2		
March	10,543	1,320	30	340		
April	847.3	88	3.3	28.2		
May	10.5	2.5	0	.34		
June	2.2	.6	0	.07		
July	1,240.4	392	.1	40.0		
August	9,607	731	56	310		
September	930	63	10	31.0		
Water year 1947-48	41,942.4	1,320	0	115		

a No gage-height record; discharge computed on basis of 1 discharge measurement, recorded range in stage, weather records and records for Waccasassa River near Otter Creek.
g Computed from graph based on gage readings.
h Computed from staff-gage reading.

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. Datum of gage is 91.90 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 925 square miles (watershed in Okefenokee swamp is indeterminate).

Records available.- January 1921 to September 1923 (gage heights only), January 1927 to December 1931, April 1937 to September 1948.

Average discharge.- 15 years (1927-31, 1937-48), 1,270 second-feet.

Extremes.- Maximum discharge during year, 10,800 second-feet Oct. 28, 29 (gage height, 19.6 feet); minimum, 192 second-feet June 16, 17.

1921-23, 1927-31, 1937-48: Maximum discharge, 12,700 second-feet Oct. 3, 1929; maximum gage height, 19.6 feet Oct. 3, 1929, Oct. 28, 29, 1947; no flow at times in 1931, 1943.

Remarks.- Records good except those for period of backwater, which are fair. Gage read twice daily. Some water diverted by pumping from pool at gage for railroad use.

Revisions.- W 822: Drainage area.

Rating table, water year 1947-48, except period of backwater (gage height, in feet, and discharge, in second-feet)

3.2	192	8.5	1,020	12.0	3,370
4.0	280	9.5	1,290	14.0	5,600
5.0	408	10.0	1,590	18.0	9,400
7.0	720	11.0	2,390	19.6	10,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,000	10,300	5,600	4,740	2,950	2,070	c6,600	1,910	555	555	1,750	1,220
2	5,800	10,100	5,290	4,740	3,050	1,990	c8,300	1,750	510	525	1,750	1,200
3	5,700	10,000	4,960	4,410	3,050	1,990	c9,100	1,590	436	495	1,750	1,140
4	5,500	9,940	4,740	4,070	2,950	2,070	c9,300	1,380	408	436	1,910	1,100
5	5,180	9,670	4,520	3,830	2,950	2,230	c9,300	1,250	380	408	2,070	1,100
6	4,960	9,490	4,190	3,710	2,950	2,310	c9,100	1,140	354	367	2,150	1,120
7	4,960	9,220	3,950	3,590	2,950	2,390	c8,900	1,120	328	341	2,150	1,140
8	4,850	9,040	3,590	3,480	2,950	2,570	c8,700	1,100	304	328	2,150	1,170
9	4,850	8,770	3,370	3,370	2,950	2,750	c8,400	1,070	280	341	2,070	1,200
10	4,740	8,500	3,150	3,150	2,850	4,190	c8,000	1,070	280	480	2,070	1,200
11	4,630	8,320	3,150	3,050	2,850	5,180	c7,700	1,040	258	619	1,990	1,200
12	4,630	8,320	3,260	2,950	2,750	6,000	c7,400	1,020	247	810	1,910	1,220
13	4,520	8,230	3,480	2,750	2,750	6,700	c7,000	995	236	1,250	1,830	1,220
14	4,520	8,230	3,830	2,750	2,660	7,100	c6,700	950	225	1,590	1,670	1,220
15	4,630	8,140	4,190	2,660	2,660	7,400	c6,500	910	214	1,910	1,510	1,220
16	5,800	7,960	4,630	2,570	2,660	7,600	c6,100	870	192	1,990	1,440	1,220
17	6,900	7,870	4,960	2,480	2,570	7,600	c5,900	830	203	1,990	1,380	1,200
18	7,780	7,690	4,950	2,480	2,570	7,500	c5,600	810	247	1,910	1,510	1,200
19	8,140	7,600	5,070	2,390	2,390	7,300	c5,300	792	292	1,750	1,910	1,170
20	8,320	7,600	5,180	2,390	2,390	7,200	c5,000	792	354	1,750	1,990	1,140
21	8,410	7,400	5,290	2,570	2,310	7,000	c4,700	792	394	1,590	2,070	1,120
22	8,500	7,300	5,400	2,570	2,230	6,800	4,410	774	450	1,440	2,070	1,070
23	8,500	7,100	5,600	2,570	2,230	6,600	4,070	774	495	1,330	2,070	995
24	8,950	7,000	5,800	2,570	2,230	6,300	3,590	774	525	1,290	1,990	950
25	9,940	6,800	5,800	2,570	2,230	6,000	3,150	756	525	1,330	1,910	910
26	10,300	6,700	5,700	2,570	2,150	5,800	2,950	703	571	1,380	1,910	870
27	10,700	6,500	5,600	2,570	2,150	5,500	2,570	652	619	1,510	1,830	850
28	10,800	6,400	5,400	2,660	2,070	5,180	2,390	619	635	1,670	1,750	830
29	10,800	6,000	5,290	2,750	2,070	4,850	2,230	603	619	1,750	1,590	830
30	10,700	5,800	5,180	2,750	-	4,520	2,070	587	587	1,750	1,440	850
31	10,500	-	4,950	2,850	-	c4,800	-	571	-	1,750	1,330	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	220,510	10,800	4,520	7,113	7.69	8.87
November	241,990	10,300	5,800	8,066	8.72	9.73
December	146,090	5,800	3,150	4,713	5.10	5.88
Calendar year 1947	977,515	10,800	258	2,678	2.90	39.32
January	94,560	4,740	2,390	3,050	3.30	3.80
February	75,520	3,050	2,070	2,604	2.82	3.04
March	157,490	7,600	1,990	5,080	5.49	6.33
April	181,030	9,300	2,070	6,034	6.52	7.27
May	29,994	1,910	571	968	1.05	1.21
June	11,723	635	192	391	.423	.47
July	36,635	1,990	328	1,182	1.28	1.46
August	56,920	2,150	1,330	1,836	1.98	2.28
September	32,875	1,220	830	1,096	1.18	1.32
Water year 1947-48	1,285,337	10,800	192	3,512	3.80	51.68

Peak discharge (base, 1,800 sec.-ft.).- Oct. 28-29, 10,800 sec.-ft.; Dec. 25 (10 a.m.) 5,900 sec.-ft.; Mar. 16-17, 7,600 sec.-ft.; Apr. 4-5, 9,300 sec.-ft.; July 15-17, 1,990 sec.-ft.; Aug. 6-8, 2,150 sec.-ft. Aug. 20-24, 2,070 sec.-ft.

c Backwater from Suwanoochee Creek.

Suwannee River at White Springs, Fla.

Location.- Water-stage recorder, lat. 30°20', long. 82°44', in sec. 8, T. 2 S., R. 16 E., at bridge on U. S. Highway 41, 1 mile southeast of White Springs. Datum of gage is 48.54 feet above mean sea level (Corps of Engineers bench mark).

Drainage area.- 1,990 square miles (watershed in Okefenokee Swamp is indeterminate).

Records available.- May 1906 to December 1908, February 1927 to September 1948.

Average discharge.- 23 years, 1,880 second-feet.

Extremes.- Maximum discharge during year, 28,500 second-feet Apr. 5, 6; maximum gage height, 36.65 feet Apr. 5; minimum discharge, 204 second-feet June 18 (gage height, 3.07 feet).

1906-8, 1927-48: Maximum discharge, that of Apr. 5, 6, 1948; maximum gage height, that of Apr. 5, 1948; minimum discharge, 4.8 second-feet Nov. 15, 1931; minimum gage height, 1.17 feet June 27, 1935.

Remarks.- Records excellent.

Revisions.- W 727: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.1	209	27.8	9,150
3.6	309	29.5	10,800
4.5	536	32.0	14,100
7.0	1,280	34.4	19,400
11.8	2,950	36.6	28,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,340	21,600	11,100	9,090	6,170	3,020	10,800	4,390	666	694	2,040	1,790
2	8,380	20,800	10,500	8,870	6,210	2,950	15,800	3,590	622	636	1,970	1,790
3	8,340	20,400	10,000	8,550	6,130	2,950	24,200	3,020	564	636	2,000	1,620
4	8,260	19,700	9,520	8,260	6,060	3,820	27,600	2,560	508	593	2,070	1,510
5	8,150	19,100	9,030	7,920	5,980	4,540	28,500	2,250	455	508	2,460	1,440
6	8,000	18,600	8,680	7,620	5,870	4,880	28,500	1,970	416	455	3,370	1,440
7	7,880	18,100	8,300	7,240	5,750	5,030	27,200	1,790	380	404	3,440	1,440
8	7,810	17,600	7,920	6,890	5,640	5,600	25,500	1,690	356	380	3,300	1,440
9	7,690	17,100	7,540	6,550	5,490	6,740	23,700	1,550	332	522	3,160	1,410
10	7,540	16,700	7,240	6,170	5,450	9,440	21,600	1,480	309	680	2,980	1,410
11	7,350	16,500	7,080	5,790	5,340	11,000	19,700	1,410	298	767	2,840	1,380
12	7,160	18,800	7,240	5,490	5,220	11,600	18,300	1,340	276	912	2,810	1,380
13	6,930	19,700	7,160	5,220	5,070	12,300	17,100	1,340	266	1,480	2,600	1,380
14	6,740	19,100	7,310	5,180	4,920	13,000	16,000	1,310	256	2,000	2,390	1,380
15	6,860	18,100	7,350	4,880	4,730	13,800	15,200	1,240	235	2,280	2,210	1,380
16	8,720	17,400	7,730	4,540	4,580	14,300	14,300	1,180	220	2,530	2,040	1,380
17	11,300	16,500	7,880	4,310	4,390	14,500	13,600	1,150	211	2,600	2,070	1,340
18	12,600	15,800	7,920	4,310	4,230	14,600	13,000	1,090	235	2,490	2,350	1,340
19	13,800	15,400	7,960	4,230	4,080	14,800	12,400	1,030	266	2,390	2,350	1,310
20	15,000	15,200	8,000	4,160	3,890	14,600	11,900	970	298	2,210	2,600	1,280
21	15,600	14,800	8,420	4,230	3,740	14,500	11,300	970	332	2,070	2,740	1,280
22	15,800	14,300	9,360	4,230	3,660	14,100	10,700	941	380	1,970	2,880	1,240
23	15,800	14,100	10,100	4,160	3,740	13,600	10,000	941	508	1,860	2,950	1,210
24	16,300	13,600	10,400	4,350	3,660	13,300	9,360	941	593	1,860	2,840	1,150
25	19,100	13,300	10,500	4,460	3,510	12,900	8,820	912	622	1,900	2,740	1,180
26	22,000	12,900	10,500	4,120	3,400	12,500	8,260	883	651	1,860	2,600	1,180
27	22,900	12,600	10,400	4,350	3,300	12,000	7,690	883	636	1,760	2,490	1,120
26	22,900	12,300	10,200	4,640	3,230	11,700	7,010	796	666	1,720	2,350	1,090
29	23,300	11,900	9,900	5,530	3,120	11,200	6,170	738	680	1,790	2,180	1,090
30	23,300	11,400	9,700	5,830	-	10,600	5,260	709	680	2,110	2,040	1,060
31	22,400	-	9,360	5,940	-	10,100	-	680	-	2,110	1,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	396,250	23,300	6,740	12,780	6.42	7.41
November	493,400	21,600	11,400	16,450	8.27	9.22
December	274,300	11,100	7,080	8,848	4.45	5.13
Calendar year 1947	1,732,884	23,300	328	4,748	2.39	32.39
January	177,120	9,090	4,120	5,714	2.87	3.31
February	136,560	6,210	3,120	4,709	2.37	2.55
March	319,970	14,800	2,950	10,320	5.19	5.98
April	469,470	28,500	5,260	15,650	7.86	8.77
May	45,744	4,390	680	1,476	.742	.85
June	12,917	680	211	431	.217	.24
July	46,177	2,600	380	1,490	.749	.86
August	78,720	3,440	1,860	2,539	1.28	1.47
September	40,440	1,790	1,060	1,348	.677	.76
Water year 1947-48	2,491,068	28,500	211	6,806	3.42	46.55

Peak discharge (base, 2,000 sec.-ft.).- Oct. 29 (1 a.m.) 23,700 sec.-ft.; Dec. 25, 26, 10,500 sec.-ft.; Mar. 19 (6 a.m.) 14,800 sec.-ft.; Apr. 5, 6, 28,500 sec.-ft.; July 17 (3:30 a.m.) 2,600 sec.-ft.; Aug. 6 (12 p.m.) 3,470 sec.-ft.

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 Air Line Railroad bridge, 200 feet downstream from Withlacoochee River, and a quarter of a mile upstream from bridge on U. S. Highway 90. Datum of gage is 27.82 feet above mean sea level (levels by Corps of Engineers).
Drainage area.- 6,580 square miles.
Records available.- January 1927 to September 1948.
Average discharge.- 21 years, 6,748 second-feet.
Extremes.- Maximum discharge during year, 95,300 second-feet Apr. 7, 8 (gage height, 40.88 feet, from floodmarks); minimum, 3,440 second-feet July 8, 9; minimum gage height, 4.30 feet July 9.
1927-48: Maximum discharge, that of Apr. 7, 8, 1948; minimum, 970 second-feet Dec. 13, 14, 24, 25, 1943; minimum gage height, 2.05 feet June 30, 1935, Dec. 13, 14, 24, 25, 1943.
Remarks.- Records good.
Revisions.- W 727: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 7				Apr. 8 to Sept. 30	
10.8	9,900	31.0	41,500	4.3	3,440
19.0	19,100	35.0	61,900	6.2	5,280
24.0	25,700	40.8	94,700	9.0	7,690
29.0	34,200			19.0	19,100

Note.- Same as preceding table above 19.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,900	32,100	33,800	31,900	17,600	12,700	36,000	20,700	5,770	3,880	5,190	5,930
2	10,100	31,900	32,900	30,700	17,900	12,500	41,900	19,000	5,690	3,980	5,110	5,770
3	10,300	31,500	32,100	29,500	18,200	12,300	48,000	17,500	5,530	3,880	5,110	5,690
4	10,300	31,500	31,400	28,200	18,200	12,700	56,300	16,200	5,440	3,770	5,190	5,440
5	10,400	31,900	30,700	26,800	18,200	13,700	g74,200	15,000	5,280	3,670	5,440	5,360
6	10,300	32,300	29,800	25,500	18,200	14,700	g87,800	14,000	5,190	3,670	5,930	5,280
7	10,200	32,500	29,000	24,200	18,100	15,600	g94,200	13,300	5,110	3,560	6,490	5,190
8	10,300	32,900	27,700	23,100	17,900	16,800	g94,700	12,800	5,020	3,440	6,730	5,110
9	10,600	32,900	26,600	22,000	17,800	18,400	g91,300	12,100	4,930	3,440	7,080	5,020
10	11,100	32,900	25,500	20,900	17,500	21,200	g85,600	11,700	4,750	3,560	7,380	4,930
11	11,500	33,100	24,600	20,000	17,200	24,200	g80,500	11,200	4,660	3,770	7,580	4,930
12	11,600	33,800	24,200	19,100	17,000	27,000	g74,200	10,900	4,560	3,880	7,690	4,930
13	11,600	34,200	23,900	18,500	16,800	29,800	g68,600	10,500	4,470	3,980	7,580	4,930
14	11,500	35,600	23,900	18,200	16,400	32,900	g63,600	10,200	4,470	4,370	7,380	4,840
15	11,400	37,000	24,100	17,800	16,100	39,300	g58,500	9,880	4,370	4,660	6,990	4,750
16	12,500	37,700	24,300	17,400	15,800	45,600	g53,700	9,650	4,270	4,930	6,810	4,660
17	15,100	38,100	25,100	16,900	15,700	49,000	50,000	9,320	4,180	5,280	6,810	4,560
18	17,900	38,500	26,300	16,500	15,600	51,100	46,100	8,880	4,080	5,440	7,080	4,470
19	19,900	39,300	27,900	16,300	15,600	51,600	43,300	8,440	3,980	5,530	7,280	4,370
20	21,300	39,300	29,600	16,300	15,500	51,600	40,600	8,110	3,980	5,530	7,280	4,370
21	22,700	39,300	31,500	16,200	15,400	51,100	38,100	7,690	3,980	5,530	7,480	4,270
22	22,900	39,800	34,000	16,200	15,100	49,500	36,300	g7,480	4,080	5,440	7,480	4,180
23	24,300	39,800	36,600	16,100	14,800	48,000	34,500	g7,180	3,980	5,280	7,690	4,180
24	24,900	39,300	38,500	16,000	14,600	46,100	33,100	g6,990	4,080	5,280	7,900	4,080
25	25,200	38,900	38,900	15,800	14,300	43,800	31,700	g6,810	4,180	5,280	8,000	3,980
26	25,900	38,100	38,900	15,700	14,000	41,900	30,300	6,570	4,180	5,280	7,900	4,080
27	27,100	37,300	37,700	15,600	13,600	39,800	28,500	6,410	4,080	5,110	7,480	3,980
28	28,800	36,300	36,600	15,800	13,300	38,100	26,600	6,250	3,980	5,110	7,080	3,980
29	30,400	35,300	35,300	16,200	12,900	36,600	24,600	6,170	3,980	5,110	6,810	3,980
30	31,500	34,500	34,200	18,800	-	35,300	22,500	6,010	3,980	5,110	6,490	4,080
31	32,100	-	32,900	17,100	-	34,500	-	5,930	-	6,190	6,170	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	543,600	32,100	9,900	17,540	2.67	3.07
November	1,067,600	39,800	31,500	35,590	5.41	6.03
December	948,500	38,900	23,900	30,600	4.65	5.36
Calendar year 1947	4,266,870	39,800	2,080	11,690	1.78	24.11
January	617,300	31,900	15,600	19,910	3.03	3.49
February	469,300	18,200	12,900	16,180	2.46	2.65
March	1,017,400	51,600	12,300	32,820	4.99	5.75
April	1,595,300	94,700	22,500	53,180	8.08	9.02
May	322,870	20,700	5,930	10,420	1.58	1.82
June	136,230	5,770	3,980	4,541	.690	.77
July	141,940	5,530	3,440	4,579	.696	.80
August	212,610	8,000	5,110	6,858	1.04	1.20
September	141,320	5,930	3,980	4,711	.716	.80
Water year 1947-48	7,213,970	94,700	3,440	19,710	3.00	40.76

Peak discharge (base, 7,000 sec.-ft.).- Nov. 22, 23, 39,800 sec.-ft.; Mar. 19, 20, 51,600 sec.-ft.; Apr. 7, 8, 95,300 sec.-ft.; Aug. 25 (8 a.m.) 8,000 sec.-ft.
g Computed from graph based on gage readings.

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., at bridge on State Highway 20 at Branford, 10¾ miles upstream from Santa Fe River. Datum of gage is 4.81 feet above mean sea level, datum of 1929.

Drainage area.- 7,090 square miles.

Records available.- July 1931 to September 1948.

Average discharge.- 17 years, 6,664 second-feet.

Extremes.- Maximum discharge observed during year, 83,900 second-feet Apr. 11 (gage height, 34.07 feet); minimum, 5,720 second-feet July 8-10; minimum gage height, 9.75 feet July 9.

1931-48: Maximum discharge observed, that of Apr. 11, 1948; minimum, 1,610 second-feet Dec. 12-21, 24, 1943; minimum gage height, 2.27 feet Dec. 17, 18, 1943.

Maximum stage known, that of Apr. 11, 1948.

Remarks.- Records good. Gage read once daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-30)

Oct. 1 to Nov. 25				Nov. 26 to Sept. 30					
14.4	11,600	26.4	30,600	9.8	5,720	19.4	16,600	30.4	47,800
18.0	16,200	27.0	32,500	13.2	8,360	25.8	29,000	32.0	61,100
24.0	25,400			16.2	11,800	28.2	36,800	34.0	82,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,800	25,400	31,200	31,200	18,000	14,200	34,100	27,200	8,560	6,070	6,650	8,080
2	11,800	26,100	30,900	30,600	18,200	13,900	34,500	25,800	8,360	6,070	6,650	7,810
3	11,800	26,300	30,600	30,000	18,600	13,600	34,500	24,200	8,170	6,000	6,720	7,640
4	11,800	26,400	30,300	29,200	18,800	13,700	35,600	22,800	8,080	5,930	6,800	7,480
5	11,800	26,400	29,800	28,500	18,800	13,900	37,600	21,300	7,900	5,790	7,020	7,400
6	11,700	26,600	29,500	27,800	18,900	14,300	40,800	20,200	7,720	5,860	7,250	7,250
7	11,700	26,800	29,000	27,000	18,900	15,000	47,800	18,900	7,640	5,790	7,560	7,100
8	11,600	27,200	28,200	26,200	18,800	15,600	59,000	18,000	7,480	5,720	7,900	7,020
9	11,600	27,200	27,800	25,200	18,800	17,200	70,700	17,200	7,400	5,720	8,260	6,950
10	11,700	27,400	27,200	24,400	18,800	18,900	79,500	16,300	7,320	5,720	8,660	6,870
11	11,900	27,800	26,800	23,800	18,400	20,400	82,800	15,600	7,250	5,790	8,960	6,720
12	12,100	28,200	26,200	22,700	18,200	22,100	80,600	15,000	7,100	5,790	9,270	6,720
13	12,200	28,500	25,600	22,100	18,000	24,000	77,300	14,500	7,020	5,790	9,380	6,720
14	12,200	28,700	25,200	21,300	17,900	25,200	75,100	14,000	6,950	5,860	9,380	6,650
15	12,500	29,200	25,000	20,600	17,500	27,000	71,800	13,600	6,870	6,070	9,270	6,650
16	12,700	29,500	24,800	20,000	17,300	28,200	61,100	13,100	6,720	6,210	9,160	6,570
17	13,400	30,000	24,800	19,500	17,200	30,000	56,000	12,800	6,650	6,350	9,060	6,430
18	14,300	30,600	24,800	18,900	17,000	32,100	51,100	12,400	6,570	6,570	9,060	6,430
19	16,000	31,200	25,000	18,400	16,800	33,800	47,800	12,000	6,500	6,650	9,160	6,280
20	17,300	31,200	25,400	18,200	16,600	35,600	44,300	11,500	6,430	6,720	9,160	6,210
21	18,500	31,800	26,200	18,000	16,500	36,800	42,300	11,300	6,430	6,800	9,160	6,140
22	19,500	31,800	26,800	17,700	16,500	37,600	39,800	10,900	6,350	6,720	9,160	6,070
23	20,200	32,100	27,600	17,500	16,100	38,100	38,100	10,600	6,280	6,720	9,160	6,070
24	21,000	32,500	28,200	17,500	15,800	38,500	36,800	10,300	6,280	6,720	9,160	6,000
25	21,400	32,500	29,200	17,300	15,600	38,100	35,300	10,000	6,280	6,650	9,270	5,860
26	21,700	32,500	30,000	17,000	15,300	37,600	34,100	9,820	6,350	6,650	9,270	5,860
27	22,200	32,100	30,600	17,000	15,200	37,200	32,800	9,490	6,280	6,570	9,160	5,860
28	22,700	32,100	31,200	17,000	14,800	36,800	31,500	9,270	6,210	6,500	8,960	5,860
29	23,300	31,800	31,500	17,200	14,500	35,600	30,000	9,160	6,210	6,500	8,760	5,790
30	24,200	31,500	31,500	17,300	-	34,900	28,500	8,960	6,140	6,570	8,460	5,790
31	24,700	-	31,200	17,700	-	34,500	-	8,760	-	6,570	8,260	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	491,300	24,700	11,600	15,850	2.24	2.58
November	881,400	32,500	25,400	29,380	4.14	4.62
December	872,100	31,500	24,800	28,130	3.97	4.57
Calendar year 1947	4,208,480	32,500	3,580	11,530	1.63	22.06
January	676,800	31,200	17,000	21,830	3.08	3.55
February	501,800	18,900	14,500	17,300	2.44	2.63
March	834,400	38,500	13,600	26,920	3.80	4.38
April	1,471,200	82,800	28,500	49,040	6.92	7.72
May	454,960	27,200	8,760	14,680	2.07	2.39
June	209,500	8,560	6,140	6,980	.984	1.10
July	193,440	6,800	5,720	6,240	.880	1.01
August	264,110	9,380	6,650	8,520	1.20	1.39
September	198,280	8,080	5,790	6,609	.932	1.04
Water year 1947-48	7,049,290	82,800	5,720	19,260	2.72	36.98

Suwannee River near Bell, Fla.

Location.- Water-stage recorder, lat. 29°48', long. 82°55', in sec. 16 or 17, T. 8 S., R. 14 E., at Rock Bluff Ferry, 4½ miles northwest of Bell and 10 miles downstream from Santa Fe River. Datum of gage is 2.75 feet above mean sea level (Corps of Engineers bench mark).

Drainage area.- 9,260 square miles.

Records available.- June 1932 to September 1948.

Average discharge.- 16 years, 9,274 second-feet.

Extremes.- Maximum discharge during year, 82,300 second-feet Apr. 13 (gage height, 27.43 feet); minimum, 8,880 second-feet about July 10 (gage height, 7.57 feet, from recorded range in stage).

1932-48: Maximum discharge, that of Apr. 13, 1948; minimum, 2,790 second-feet Dec. 17, 18, 1943 (gage height, 1.03 feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions (water years).- W 822: 1928(M).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 26		Nov. 27 to Sept. 30			
11.2	14,400	7.6	8,880	17.8	30,600
13.6	18,800	10.4	12,400	20.2	42,200
17.0	29,000	13.6	17,500	27.4	82,300
19.5	38,400				

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,200	29,000	37,900	36,900	21,600	18,000	44,500	36,400	13,000	9,320	a10,000	12,500
2	15,200	29,700	37,400	36,900	21,600	17,800	45,000	34,100	12,800	9,320	a10,200	12,400
3	15,200	30,400	36,900	36,400	21,900	17,500	44,500	31,900	12,500	a9,260	a10,400	12,100
4	15,100	30,400	36,400	35,900	22,200	17,500	45,000	29,800	12,200	a9,210	a10,700	11,800
5	14,900	30,700	35,900	35,000	22,200	17,500	46,100	28,100	12,100	a9,150	10,900	11,500
6	14,800	31,000	35,400	34,100	22,500	17,500	48,900	26,500	11,800	a9,100	11,400	11,400
7	14,600	31,000	34,500	32,700	22,500	18,000	53,400	25,300	11,700	a9,040	11,700	11,300
8	14,600	31,700	34,100	31,900	22,500	18,600	60,000	24,100	11,500	a8,990	12,100	11,000
9	14,400	31,700	33,600	30,600	22,900	20,100	67,200	22,900	11,400	a8,930	12,500	10,900
10	14,400	31,700	33,200	29,800	22,900	21,900	g73,900	21,900	11,300	a8,880	13,000	10,700
11	14,400	32,000	32,300	28,700	22,500	23,800	g78,900	21,000	11,100	a8,940	13,600	10,600
12	14,600	32,700	31,400	27,800	22,200	25,600	g81,700	20,400	11,000	f8,990	13,900	10,500
13	14,800	33,000	31,000	27,100	22,200	27,800	82,300	19,500	10,900	a9,000	14,200	10,500
14	14,800	33,000	30,200	26,500	21,900	30,200	81,100	18,900	10,700	a9,000	14,200	10,500
15	14,900	33,700	29,800	25,600	21,600	32,700	79,500	18,300	10,500	a9,010	14,200	10,500
16	15,400	34,000	29,500	24,700	21,600	35,000	77,200	17,800	10,400	a9,050	14,200	10,400
17	15,700	34,700	29,100	24,100	21,300	36,900	74,500	17,200	10,400	a9,200	14,000	10,200
18	16,400	35,100	28,700	23,800	21,000	38,400	71,100	16,800	10,200	a9,350	14,000	10,100
19	17,300	35,900	28,700	23,200	21,000	40,600	67,800	16,400	10,100	a9,600	13,900	10,000
20	18,500	36,400	28,700	22,500	20,700	42,800	64,500	16,100	10,000	a9,800	13,900	9,880
21	19,800	36,900	29,500	22,200	20,400	44,500	61,700	15,700	9,880	a10,000	13,900	9,760
22	21,200	37,400	29,800	21,900	20,400	45,600	58,400	15,400	9,760	a10,100	13,900	9,650
23	22,700	37,900	30,600	21,600	20,100	47,200	55,600	15,100	9,760	a10,200	13,700	9,540
24	23,600	38,400	31,400	21,600	19,800	47,800	52,800	14,800	9,650	a10,100	13,700	9,540
25	24,500	38,400	32,300	21,300	19,500	48,400	50,600	14,500	9,650	f10,000	13,700	9,320
26	24,800	38,400	33,600	21,000	19,200	48,400	47,800	14,300	9,650	a9,960	13,700	9,210
27	25,400	38,400	34,500	21,000	18,900	48,400	45,600	14,000	9,650	a9,920	13,700	9,210
28	25,800	38,400	35,400	21,000	18,600	48,400	43,400	13,700	9,540	a9,880	13,600	9,320
29	26,700	38,400	35,900	21,000	18,300	47,200	41,100	13,600	9,540	a9,840	13,300	9,210
30	27,400	37,900	36,400	21,000	-	46,100	38,900	13,600	9,430	a9,800	13,100	9,210
31	28,000	-	36,900	21,300	-	45,000	-	13,300	-	a9,760	12,800	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	575,100	28,000	14,400	18,550	2.00	2.31
November	1,028,300	38,400	29,000	34,280	3.70	4.13
December	1,021,000	37,900	28,700	32,940	3.56	4.10
Calendar year 1947	5,162,620	38,400	5,850	14,110	1.52	20.72
January	829,100	36,900	21,000	26,750	2.89	3.33
February	614,000	22,900	18,300	21,170	2.29	2.47
March	1,035,200	48,400	17,500	33,390	3.61	4.16
April	1,783,000	82,300	38,900	59,430	6.42	7.16
May	621,400	36,400	13,300	20,050	2.17	2.50
June	322,110	13,000	9,430	10,740	1.16	1.29
July	292,700	10,200	8,880	9,442	1.02	1.18
August	402,100	14,200	10,000	12,970	1.40	1.61
September	312,750	12,500	9,210	10,420	1.13	1.26
Water year 1947-48	8,836,760	82,300	8,880	24,140	2.61	35.50

Peak discharge (base, 12,000 sec.-ft.).- Nov. 24-29, 38,400 sec.-ft.; Apr. 13 (8 a.m.) 82,300 sec.-ft.; Aug. 13-16, 14,200 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at Branford.

f Computed on basis of partly estimated gage-height record.

g Computed from graph based on gage readings.

Alapaha River near Alapaha, Ga.

Location.- Water-stage recorder, 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. Datum of gage is 209.34 feet above mean sea level, datum of 1929.

Drainage area.- 644 square miles.

Records available.- April 1937 to September 1948.

Average discharge.- 11 years, 533 second-feet.

Extremes.- Maximum discharge during year, 12,700 second-feet Apr. 4 (gage height, 16.8 feet); minimum, 8.5 second-feet Sept. 27.

1937-48: Maximum discharge, that of Apr. 4, 1948; minimum observed, 0.2 second-foot Nov. 11-17, 21, 22, 1942.

Remarks.- Records good.

Revisions (water years).- W 872: 1937. W 1002: 1939(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 28 to Sept. 30)

0.5	7.0	2.8	130	8.0	830	12.0	3,520
.6	9.5	4.5	268	9.0	1,170	13.0	4,980
.9	19	5.5	372	10.0	1,660	15.0	8,620
1.4	40	6.0	430	10.5	1,980	16.7	12,400
2.0	73	7.0	590	11.0	2,400		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	444	448	4,660	1,550	2,060	1,720	5,740	297	224	61	208	53
2	361	1,090	3,940	1,500	2,060	1,600	9,020	259	287	52	172	45
3	297	1,500	3,280	1,400	1,980	1,660	12,000	224	297	73	184	45
4	259	2,400	2,700	1,350	1,840	2,060	12,400	200	259	107	200	41
5	241	3,280	2,220	1,300	1,720	2,220	11,200	180	259	118	297	36
6	224	3,400	1,900	1,350	1,600	2,800	9,880	165	259	111	458	41
7	317	3,520	1,660	1,550	1,550	3,160	8,020	233	216	84	472	58
8	536	3,520	1,450	1,550	1,450	3,280	6,160	224	176	85	394	89
9	520	3,280	1,300	1,450	1,450	3,800	4,360	200	138	145	339	87
10	406	2,920	1,350	1,300	1,500	5,140	3,280	196	104	111	277	64
11	418	2,800	1,780	1,170	1,450	5,800	2,600	208	80	86	216	52
12	504	3,520	3,520	1,010	1,400	6,340	2,300	233	64	238	188	55
13	520	3,520	6,160	980	1,350	5,980	2,060	317	52	394	176	57
14	444	4,220	8,020	1,010	1,400	5,800	1,980	339	40	430	192	51
15	394	4,500	8,020	950	1,450	5,460	2,220	307	32	458	287	44
16	728	4,220	7,830	890	1,550	4,660	2,400	259	35	383	372	36
17	1,300	4,080	7,260	830	1,720	3,940	2,220	216	42	307	361	30
18	1,210	4,080	6,700	890	1,840	3,280	1,980	184	67	287	430	27
19	950	4,220	5,980	890	1,780	3,280	1,780	149	102	430	520	24
20	830	3,940	5,300	950	1,660	3,800	1,550	122	180	504	444	22
21	735	3,940	4,660	1,090	1,550	3,800	1,350	100	134	430	418	20
22	655	4,080	4,220	1,250	1,450	3,520	1,130	82	96	328	383	19
23	536	4,080	3,660	1,400	1,350	3,040	950	69	90	241	287	18
24	590	4,080	3,160	1,500	1,300	2,800	805	59	86	188	208	16
25	655	4,080	2,800	1,600	1,350	2,400	705	52	78	157	200	14
26	554	4,220	2,500	1,600	1,450	2,300	590	52	67	134	196	11
27	520	4,500	2,220	1,720	1,550	2,400	520	44	64	126	172	9.2
28	536	4,980	1,980	1,840	1,660	2,220	458	47	57	115	142	11
29	536	5,300	1,840	1,900	1,720	1,900	394	75	50	96	111	13
30	488	5,140	1,780	1,980	-	1,720	339	82	57	104	87	20
31	430	-	1,660	2,060	-	1,660	-	184	-	172	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	17,138	1,300	224	553	0.859	0.99
November	108,858	5,300	448	3,629	5.64	6.29
December	115,510.1	8,020	1,300	3,726	5.79	6.68
Calendar year 1947	426,655.1	8,020	11.3	1,169	1.82	24.66
January	41,810	2,060	830	1,349	2.09	2.41
February	46,190	2,060	1,300	1,593	2.47	2.66
March	103,540	6,340	1,600	3,340	5.19	5.98
April	110,391	12,400	339	3,680	5.71	6.37
May	5,358	339	44	173	.269	.31
June	3,692	297	32	123	.191	.21
July	6,555	504	52	211	.328	.38
August	8,457	520	66	273	.424	.49
September	1,108.2	89	9.2	36.9	.057	.06
Water year 1947-48	568,607.2	12,400	9.2	1,554	2.41	32.83

Peak discharge (base, 1,500 sec.-ft.).- Nov. 29, 5,300 sec.-ft.; Dec. 14 (2 p.m.) 8,220 sec.-ft.; Jan. 31 (11 p.m.) 2,140 sec.-ft.; Mar. 12, 6,340 sec.-ft.; Apr. 4 (1 a.m.) 12,700 sec.-ft.

Alapaha River at Stateville, 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. Datum of gage is 76.77 feet above mean sea level (levels by Georgia State Highway Department).

Drainage area.- 1,400 square miles.

Records available.- January to June 1921, December 1931 to September 1948.

Average discharge.- 16 years (1932-48), 1,025 second-feet.

Extremes.- Maximum discharge during year, 27,300 second-feet Apr. 6 (gage height, 29.8 feet, from graph based on gage readings); minimum observed, 131 second-feet July 4-6.

1921, 1931-48: Maximum discharge, that of Apr. 6, 1948; minimum observed, 17 second-feet Dec. 21, 28-31, 1931.

Flood of Apr. 30 or May 1, 1928, reached a stage of 28.5 feet (discharge, 18,400 second-feet).

Remarks.- Records good. Gage read twice daily.

Revisions (water years).- W 822: 1936, drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 1 to Sept. 30)

1.8	131	20.0	5,150	28.0	15,900
2.6	265	24.0	6,600	29.0	21,400
3.4	424	25.0	7,650	29.7	26,500
6.0	1,030	26.0	9,400		
12.0	2,650	27.0	12,000		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,420	2,430	6,060	5,010	3,040	2,150	7,050	1,160	212	154	321	302
2	1,340	2,860	5,990	4,360	2,950	2,090	8,400	1,060	212	146	321	265
3	1,290	3,580	5,850	4,120	2,890	2,170	9,400	910	229	146	340	247
4	1,240	4,030	5,780	3,610	2,890	2,370	12,000	814	229	131	390	229
5	982	4,330	5,740	3,280	2,830	3,250	21,400	718	265	131	512	212
6	646	4,450	5,710	2,770	2,830	3,550	26,500	814	340	138	512	204
7	862	4,390	5,680	2,770	2,890	4,210	21,400	934	340	170	600	195
8	1,260	4,360	5,570	2,590	2,890	5,010	17,400	838	340	195	838	178
9	1,470	4,390	5,500	2,260	2,800	5,820	14,600	694	321	195	832	162
10	1,960	4,560	5,080	2,200	2,710	6,860	12,300	646	302	195	838	154
11	2,170	4,840	4,660	2,010	2,650	8,250	11,100	646	302	195	838	146
12	2,090	5,820	4,180	1,930	2,650	9,400	10,000	622	265	229	730	146
13	2,040	6,130	4,150	2,150	2,650	10,500	8,800	694	229	360	736	162
14	2,040	6,360	4,210	2,370	2,590	10,800	8,100	766	229	556	694	162
15	2,590	6,560	4,420	2,260	2,540	11,400	6,950	766	195	670	534	162
16	4,390	6,710	4,660	1,930	2,590	12,000	6,650	646	178	646	556	178
17	6,280	6,780	5,400	2,200	2,650	11,400	5,850	600	170	742	578	265
18	7,500	6,860	7,650	1,980	2,680	11,400	5,290	600	170	838	646	360
19	7,800	7,050	13,400	2,260	2,650	10,200	4,700	556	186	790	814	360
20	7,350	7,350	13,000	2,310	2,540	9,400	4,180	512	229	694	910	321
21	6,780	7,650	13,000	2,400	2,480	9,400	4,060	446	265	646	836	283
22	6,360	7,800	12,000	2,170	2,480	8,800	4,000	402	247	600	932	340
23	5,540	7,800	10,200	2,040	2,510	7,950	3,880	380	229	578	1,110	321
24	5,150	7,650	10,200	1,980	2,540	7,050	3,520	340	229	556	1,210	302
25	5,990	7,050	9,800	1,930	2,540	6,710	3,100	302	229	600	1,030	265
26	6,280	6,860	9,200	1,820	2,480	6,360	2,620	265	229	534	838	247
27	6,160	6,650	8,250	1,980	2,400	6,280	2,060	265	170	446	646	229
28	5,570	6,600	7,500	2,150	2,310	6,130	1,680	247	162	380	430	229
29	4,520	6,360	6,520	2,310	2,200	5,780	1,470	229	154	340	424	247
30	3,490	6,280	6,360	2,510	-	5,570	1,370	247	138	340	330	247
31	2,830	-	6,100	2,980	-	5,010	-	229	-	360	340	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	115,390	7,800	646	3,722	2.66	3.07
November	174,540	7,800	2,430	5,818	4.16	4.64
December	221,820	13,400	4,150	7,155	5.11	5.89
Calendar year 1947	821,193	13,400	60	2,250	1.61	21.80
January	78,640	5,010	1,820	2,537	1.81	2.09
February	76,850	3,040	2,200	2,650	1.89	2.04
March	217,270	12,000	2,090	7,009	5.01	5.78
April	249,830	26,500	1,370	8,328	5.95	6.64
May	18,348	1,160	229	592	.423	.49
June	6,995	340	138	233	.166	.19
July	12,701	838	131	410	.293	.34
August	21,016	1,210	321	678	.484	.56
September	7,120	360	146	237	.169	.19
Water year 1947-48	1,200,520	26,500	131	3,280	2.34	31.92

Peak discharge (base, 2,500 sec.-ft.).- Oct. 19 (6 a.m.) 7,950 sec.-ft.; Nov. 22-23, 7,800 sec.-ft.; Dec. 19 (11 p.m.) 13,800 sec.-ft.; Jan. 31 (6 p.m.) 3,190 sec.-ft.; Mar. 16-17, 12,000 sec.-ft.; Apr. 6 (8 a.m.) 27,300 sec.-ft.

Withlacoochee River near Quitman, Ga.

Location.- Wire-weight gage, lat. 30°47', long. 83°27', at bridge on U. S. Highway 84, 500 feet upstream from Tiger Creek, 800 feet downstream from Atlantic Coast Line Railroad bridge, a quarter of a mile east of Blue Springs, 4 miles upstream from Piscola Creek, and 6 miles east of Quitman, Brooks County. Datum of gage is 84.30 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,560 square miles.

Records available.- October 1920 to March 1921, published as Withlacoochee River near Ousley; September 1928 to December 1931, published as Withlacoochee River at Blue Springs; June 1937 to September 1948 (discontinued).

Average discharge.- 14 years (1928-31, 1937-48), 1,216 second-feet.

Extremes.- Maximum discharge during year, 66,000 second-feet Apr. 4 (gage height, 31.7 feet, from floodmark); minimum not determined, occurred during period of no gage-height record.

1920-21, 1928-31, 1937-48: Maximum discharge, that of Apr. 4, 1948; minimum observed, 5.9 second-feet Nov. 11-13, 1940, Nov. 21, 1942.

Flood about Aug. 19, 1928, reached a stage of 31.3 feet, present datum, from floodmark (discharge, 62,000 second-feet).

Remarks.- Records fair Oct. 1 to Apr. 13, poor thereafter. Gage read twice daily.

Revisions (water years).- W 852: 1929(M), drainage area. W 872: 1923(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	568	3,920	5,730	3,340	3,200	1,760	6,940	a900	a150	a330	a950	a300
2	568	4,620	5,360	3,020	3,130	1,800	10,600	a800				
3	500	4,970	4,870	2,800	3,090	1,910	26,100	a700				
4	376	4,820	4,430	2,590	3,020	2,400	61,000	a650				
5	346	4,820	3,920	2,440	3,060	2,800	54,300	a600				
6	290	5,540	d3,500	2,250	3,060	3,340	34,200	a700				
7	262	6,540	d3,000	2,100	2,980	4,220	21,000	a900				
8	852	7,300	d2,400	1,990	2,910	6,380	14,500	a1,100				
9	1,420	7,210	d2,000	1,830	2,700	10,100	11,100	a1,300				
10	1,680	6,620	1,950	1,800	2,520	13,200	8,930	a1,000				
11	1,800	6,010	2,400	1,760	2,370	16,000	7,030	a850				
12	1,640	5,540	3,090	1,720	2,290	18,900	5,660	744				
13	1,260	5,240	3,670	1,720	2,210	21,000	4,520	a800				
14	1,040	5,420	4,300	1,720	2,140	20,000	a4,000	a1,000				
15	960	7,700	4,770	1,680	2,210	17,400	a4,500	a800				
16	2,840	9,680	9,680	1,680	2,590	16,000	a5,000	a650				
17	3,880	10,200	20,300	d1,700	2,800	13,400	a6,000	a550				
18	4,340	9,960	19,600	d1,700	2,980	10,900	a7,000	a450				
19	4,820	9,420	17,100	d1,700	3,090	9,550	a8,000	a370				
20	5,300	8,930	15,000	d1,900	d3,100	8,570	a6,000	a300				
21	d5,500	8,450	12,800	d2,200	d2,800	8,230	a5,000	a250				
22	d5,200	7,900	11,100	2,520	d2,600	d8,000	a4,000	a210				
23	d5,100	7,700	9,820	2,480	d2,400	d7,200	a3,500	a180				
24	d5,200	7,600	8,810	2,520	d2,300	d6,700	a3,000	148				
25	d5,400	7,400	8,010	2,550	d2,100	6,700	a2,500	124				
26	d5,300	7,210	7,030	2,660	1,910	6,460	a2,000	113				
27	d5,100	7,120	6,150	2,800	1,720	6,150	a1,500	107				
28	4,770	6,940	5,420	2,950	1,680	5,600	a1,300	107				
29	4,260	6,620	4,770	3,060	1,720	5,020	a1,100	103				
30	3,700	6,220	4,190	3,090	-	5,120	a1,000	85				
31	3,130	-	3,740	3,200	-	6,150	-	82	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	87,402	5,500	262	2,819	1.81	2.09
November	207,620	10,200	3,920	6,921	4.44	4.95
December	218,910	20,300	1,950	7,062	4.53	5.22
Calendar year 1947	818,654	20,300	17	2,243	1.44	19.52
January	71,470	3,340	1,680	2,305	1.48	1.71
February	74,680	3,200	1,680	2,575	1.65	1.78
March	270,960	21,000	1,760	8,741	5.60	6.46
April	331,280	61,000	1,000	11,040	7.08	7.90
May	16,673	1,300	82	538	.345	.40
June	4,500	-	-	150	.096	.11
July	10,230	-	-	330	.212	.24
August	29,450	-	-	950	.609	.70
September	9,000	-	-	300	.192	.21
Water year 1947-48	1,332,175	61,000	-	3,640	2.33	31.77

Peak discharge (base, 2,700 sec.-ft.).- Oct. 21 (time unknown) 5,600 sec.-ft.; Nov. 8 (5 p.m.) 7,400 sec.-ft.; Nov. 17 (12 m.) 10,400 sec.-ft.; Dec. 17 (6 p.m.) 21,000 sec.-ft.; Jan. 31 (11 p.m.) 3,240 sec.-ft.; Feb. 19 (10 p.m.) 3,130 sec.-ft.; Mar. 13 (6 p.m.) 21,400 sec.-ft.; Apr. 4 (7 p.m.) 66,000 sec.-ft.

a No gage-height record; discharge computed on basis of records for Little River near Adel, Ga., and Withlacoochee River near Pinetta, Fla.

d Doubtful gage-height record; discharge computed as explained in footnote a.

Withlacoochee River near Pinetta, Fla.

Location.- Water-stage recorder, lat. 30°36', long. 83°16', on line between secs. 6 and 7, T. 2 N., R. 11 E., at highway bridge a quarter of a mile west of Bellville and 5 miles east of Pinetta. Datum of gage is 47.21 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 2,220 square miles.

Records available.- December 1931 to September 1948.

Average discharge.- 17 years, 1,617 second-feet.

Extremes.- Maximum discharge during year, 79,400 second-feet Apr. 5 (gage height, 38.64 feet, from floodmarks), from rating curve extended above 58,000 second-feet; minimum, 281 second-feet July 8 (gage height, 7.14 feet).

1931-48: Maximum discharge, that of Apr. 5, 1948; minimum, 86 second-feet Oct. 29, 30, 1943 (gage height, 6.42 feet).

Maximum stage known, that of Apr. 5, 1948.

Remarks.- Records good.

Revisions (water years).- W 972: 1941-42.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

7.1	267	32.5	20,500
7.6	460	33.8	23,900
7.9	608	34.7	28,700
19.9	8,200	35.4	35,000
26.5	13,200	38.2	73,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	714	5,200	9,950	7,030	4,650	2,470	13,500	1,570	460	367	592	672
2	744	4,590	9,450	6,120	4,590	2,470	14,900	1,420	443	382	565	672
3	744	4,850	f8,930	5,420	4,470	2,530	18,400	1,350	431	370	649	672
4	678	5,340	f8,240	4,890	4,340	3,220	48,100	1,230	426	333	879	603
5	544	5,830	7,450	4,440	4,340	3,780	g73,600	1,180	426	329	1,280	592
6	452	6,510	f6,600	4,040	4,340	4,220	g70,700	1,160	418	322	1,470	660
7	439	7,240	5,620	3,700	4,340	4,900	50,800	1,250	410	299	1,650	660
8	643	7,880	4,590	3,420	4,220	6,090	30,800	1,380	402	285	1,780	649
9	1,340	8,400	3,760	3,140	4,030	7,410	21,900	1,340	394	310	1,970	637
10	1,720	8,840	3,300	2,920	3,780	10,300	18,200	1,310	378	402	2,090	666
11	1,900	9,050	3,570	2,810	3,590	14,200	16,000	1,380	367	478	2,150	775
12	1,840	9,260	4,340	2,710	3,400	18,500	13,900	1,410	359	496	2,030	879
13	1,650	9,080	4,960	2,720	3,220	21,800	11,800	1,440	351	520	1,780	879
14	1,410	8,840	5,400	2,930	3,150	25,200	10,400	1,410	348	515	1,500	787
15	1,280	8,960	6,160	2,930	3,150	25,700	9,500	1,410	340	544	1,310	702
16	2,590	9,740	7,170	2,800	3,280	23,500	8,810	1,380	333	818	1,440	614
17	4,650	10,700	9,220	2,750	3,530	21,600	8,580	1,280	325	972	1,900	554
18	4,970	11,900	13,900	2,880	3,840	20,300	8,570	1,100	333	941	2,150	520
19	5,340	12,700	19,000	3,200	4,090	19,100	8,610	941	329	818	1,970	482
20	5,780	13,000	20,700	3,390	4,220	17,900	8,740	818	351	738	1,840	443
21	6,030	12,900	20,500	3,650	4,150	16,600	8,850	769	443	678	1,840	418
22	6,080	12,800	19,400	3,780	3,970	15,300	8,750	702	418	654	1,900	394
23	5,900	12,500	18,100	3,720	3,650	13,400	8,350	654	402	654	2,090	378
24	5,680	12,100	16,700	3,720	3,340	12,400	7,510	620	520	672	2,220	359
25	5,550	11,700	15,300	3,650	3,090	11,800	6,020	581	505	631	2,090	414
26	5,410	11,300	13,800	3,720	2,840	11,400	4,450	539	456	544	1,720	505
27	5,620	10,900	12,000	3,840	2,650	11,100	3,280	515	410	515	1,410	435
28	5,940	10,700	11,000	4,030	2,530	10,700	2,550	492	374	534	1,220	515
29	6,440	10,500	10,100	4,220	2,530	10,200	2,110	487	348	654	1,100	637
30	6,280	10,200	9,240	4,340	-	9,600	1,780	492	351	750	910	666
31	6,020	-	8,170	4,530	-	9,710	-	474	-	637	775	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	104,378	6,440	439	3,367	1.52	1.75
November	283,510	13,000	4,590	9,450	4.26	4.75
December	316,620	20,700	3,300	10,210	4.60	5.30
Calendar year 1947	1,115,796	20,700	168	3,057	1.38	18.69
January	117,440	7,030	2,710	3,788	1.71	1.97
February	107,320	4,650	2,530	3,701	1.67	1.80
March	387,400	25,700	2,470	12,500	5.63	6.49
April	519,460	73,600	1,780	17,320	7.80	8.70
May	32,084	1,570	474	1,035	.466	.54
June	11,851	520	325	395	.178	.20
July	17,162	972	285	554	.250	.29
August	48,270	2,220	565	1,557	.701	.81
September	17,839	879	359	595	.268	.30
Water year 1947-48	1,963,334	73,600	285	5,364	2.42	32.90

Peak discharge (base, 3,000 sec.-ft.).- Nov. 20 (12 m.) 13,000 sec.-ft.; Dec. 21 (12:30 a.m.) 20,900 sec.-ft.; Feb. 1 (6 p.m.) 4,650 sec.-ft.; Mar. 15 (4 a.m.) 26,200 sec.-ft.; Apr. 5 (about 9 p.m.) 79,400 sec.-ft.

f Computed on basis of partly estimated gage-height record.

g Computed from graph based on gage readings.

Note.- Backwater from Suwannee River Oct. 21 to Dec. 18, Dec. 27 to Jan. 20, Mar. 23 to Apr. 3, Apr. 8 to May 5; discharge computed by using gage heights for Suwannee River at Ellaville as a factor.

Little River near Adel, Ga.

Location.- Water-stage recorder, lat. 31°09', long. 83°33', 500 feet downstream from bridge on State Highway 37, half a mile downstream from Georgia & Florida Railroad bridge, 5½ miles upstream from Bear Creek, 6 miles downstream from Warrior Creek, and 7 miles west of Adel, Cook County. Datum of gage is 171.08 feet above mean sea level, datum of 1929.

Drainage area.- 547 square miles.

Records available.- June 1940 to September 1948.

Extremes.- Maximum discharge during year, 38,800 second-feet Apr. 2 (gage height, 21.0 feet), from rating curve extended above 13,000 second-feet on basis of contracted-opening determination at gage height 21.0 feet; minimum, 3.9 second-feet July 8.

1940-48: Maximum discharge, that of Apr. 2, 1948; minimum, 1.5 second-feet Nov. 25, Dec. 13, 14, 1943.

Flood in August 1928 reached a stage of 20.5 feet, from information by Georgia Highway Department (discharge, 33,200 second-feet, from rating curve extended as explained above).

Remarks.- Records good except those for period of no gage-height record, which are fair.

Revisions (water year).- W 1082: 1944.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-9, Oct. 14 to Nov. 1, May 16 to July 14, July 24 to Aug. 4, Aug. 27 to Sept. 7, Sept. 12-30)

1.6	3.9	5.1	256	14.5	2,830	18.0	11,800
1.7	7.0	6.5	460	15.0	3,320	19.0	19,100
1.9	15	8.5	820	16.0	4,690	20.0	29,100
2.2	29	11.0	1,400	16.5	5,780	20.7	35,400
2.7	60	13.0	1,980	17.0	7,240		
4.3	173	14.0	2,460	17.5	9,150		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	412	481	2,190	1,300	1,610	989	11,300	250	70	20	173	53
2	244	1,580	1,790	1,220	1,610	800	35,400	216	81	16	196	46
3	165	1,980	1,500	1,150	1,640	1,010	29,100	191	70	12	165	45
4	129	2,240	1,250	1,100	1,580	2,530	14,500	169	54	11	201	56
5	101	2,060	1,080	1,040	1,480	3,430	7,930	173	48	9.2	476	57
6	85	1,980	966	989	1,380	4,210	4,870	250	42	7.0	880	59
7	89	1,850	900	1,040	1,250	5,290	3,110	390	37	5.1	780	122
8	118	1,730	840	1,130	1,080	5,530	2,240	630	33	4.2	388	244
9	f173	1,550	800	1,100	989	6,320	1,850	558	30	5.1	324	303
10	a170	1,300	880	966	989	7,930	1,610	460	29	11	352	250
11	a200	1,430	1,250	840	1,100	8,300	1,670	476	28	14	244	186
12	a300	2,830	4,360	740	1,350	7,930	1,910	524	24	25	169	146
13	a350	3,930	9,600	740	1,520	6,920	1,940	594	19	46	165	143
14	f331	4,690	12,400	900	1,640	5,530	1,820	460	16	207	196	154
15	f296	4,870	10,600	1,010	1,790	4,360	2,200	268	13	232	201	140
16	f460	4,210	8,300	1,040	1,760	3,800	3,930	178	13	191	211	104
17	780	3,550	6,610	1,040	1,580	3,010	2,920	140	12	178	396	91
18	740	2,750	5,530	1,010	1,420	2,670	2,240	126	47	173	630	79
19	630	2,530	4,690	989	1,300	2,920	1,850	108	53	206	900	71
20	666	2,600	4,070	1,010	1,130	3,210	1,580	93	56	345	1,080	61
21	702	3,210	3,670	1,180	989	3,550	1,400	82	42	404	860	51
22	684	3,670	3,110	1,320	900	3,110	1,130	74	43	296	524	45
23	594	3,800	2,530	1,420	880	2,460	966	65	34	182	345	39
24	740	3,800	2,190	1,580	943	2,100	684	57	26	143	256	33
25	760	3,800	1,940	1,700	1,040	1,980	558	52	31	136	211	28
26	594	3,320	1,820	1,760	1,180	1,730	492	47	37	132	173	24
27	508	2,920	1,730	1,760	1,300	1,520	428	42	36	143	132	22
28	476	3,010	1,640	1,670	1,320	1,450	388	41	30	122	112	24
29	444	2,830	1,550	1,520	1,200	1,480	338	42	28	98	88	23
30	412	2,530	1,480	1,480	-	1,550	296	40	26	94	76	21
31	404	-	1,380	1,550	-	1,500	-	52	-	129	62	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,757	780	85	412	0.753	0.87
November	83,031	4,870	481	2,768	5.06	5.64
December	102,646	12,400	800	3,311	6.05	6.98
Calendar year 1947	344,608.3	12,400	7.0	944	1.73	23.43
January	37,294	1,760	740	1,203	2.20	2.54
February	37,950	1,790	880	1,309	2.39	2.58
March	109,119	8,300	800	3,520	6.44	7.42
April	140,650	35,400	296	4,688	8.57	9.56
May	6,848	630	40	221	.404	.47
June	1,108	81	12	36.9	.067	.07
July	3,596.6	404	4.2	116	.212	.24
August	10,966	1,080	62	354	.647	.75
September	2,720	303	21	90.7	.166	.19
Water year 1947-48	548,685.6	35,400	4.2	1,499	2.74	37.31

Peak discharge (base, 1,500 sec.-ft.).- Nov. 4 (7 a.m.) 2,290 sec.-ft.; Nov. 15, 4,870 sec.-ft.; Dec. 14 (1 p.m.) 13,100 sec.-ft.; Jan. 26-27, 1,760 sec.-ft.; Feb. 15 (10 p.m.) 1,850 sec.-ft.; Mar. 11 (10 p.m.) 8,700 sec.-ft.; Apr. 2 (7 p.m.) 38,800 sec.-ft.; Apr. 16 (11 a.m.) 4,210 sec.-ft.

a No gage-height record: discharge computed on basis of records for nearby stations.

f Computed on basis of partly estimated gage-height record.

Santa Fe River at Worthington, Fla.

Location.- Wire-weight gage, lat. 29°55', long. 82°26', on line between secs. 32 and 33, T. 6 S., R. 19 E., at bridge on State Highway 23, half a mile south of Worthington and three-quarters of a mile downstream from New River. Datum of gage is 42.91 feet above mean sea level (Corps of Engineers bench mark).

Records available.- November 1931 to September 1948.

Average discharge.- 16 years (1932-48), 465 second-feet.

Extremes.- Maximum discharge observed during year, 14,900 second-feet Mar. 12 (gage height, 24.60 feet); minimum observed, 17 second-feet June 30, July 1 (gage height, 7.72 feet).

1931-48: Maximum discharge, 17,500 second-feet June 17, 1934; maximum gage height, 24.94 feet Oct. 21, 1944; minimum discharge observed, 1.3 second-feet May 17, June 1, 1932.

Remarks.- Records fair. Gage read once daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

7.7	16	13.8	681	20.3	6,150
7.8	22	14.8	939	22.5	10,200
8.1	44	15.8	1,350	24.0	13,300
10.9	285	16.6	1,860	24.5	14,700
13.0	546	17.6	2,640		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,370	1,650	574	560	1,460	356	973	296	86	17	908	416
2	1,580	1,400	533	507	1,520	368	1,510	246	70	30	939	442
3	1,460	1,300	494	455	1,580	368	,980	238	61	47	851	455
4	1,250	1,350	468	442	1,460	533	7,340	229	57	44	939	442
5	1,050	1,460	429	416	1,300	1,170	6,150	221	53	39	1,520	416
6	824	1,460	416	368	1,170	1,860	4,640	229	46	31	2,290	392
7	851	1,520	404	356	1,010	2,370	3,240	238	43	26	3,240	429
8	879	1,650	380	332	879	2,540	2,290	204	39	21	3,240	404
9	1,050	1,930	356	308	824	3,240	1,860	128	37	20	2,870	416
10	1,350	2,140	368	275	1,170	7,340	1,520	137	36	20	2,450	442
11	1,300	2,140	356	275	1,350	13,100	1,210	145	32	20	2,140	546
12	1,170	2,750	368	255	1,580	14,700	1,050	145	33	22	2,540	1,050
13	1,090	3,750	404	238	1,580	11,800	879	154	34	57	2,750	1,170
14	1,010	4,000	455	275	1,400	8,230	725	154	35	112	2,140	908
15	1,090	4,000	589	265	1,210	5,820	702	137	32	170	1,580	798
16	2,220	2,870	851	255	1,090	4,380	939	137	33	212	1,250	624
17	3,750	2,290	1,130	255	908	3,240	1,350	128	61	221	1,090	574
18	5,400	2,000	1,350	275	798	2,450	1,300	120	103	196	1,090	494
19	5,530	2,000	1,350	285	681	2,140	1,250	108	90	162	1,210	442
20	4,890	1,580	1,250	308	606	1,860	1,250	108	66	145	1,170	404
21	3,750	1,460	1,250	416	533	1,580	1,130	99	57	154	1,130	356
22	2,750	1,400	1,250	468	481	1,460	939	82	46	204	939	296
23	2,140	1,300	1,300	560	494	1,250	773	82	41	212	973	221
24	1,930	1,210	1,460	939	494	1,170	624	82	38	296	973	229
25	2,290	1,090	1,460	1,460	468	1,010	533	74	35	246	798	238
26	3,750	973	1,210	2,220	468	879	468	74	32	275	908	212
27	4,260	879	1,090	2,540	442	879	416	70	23	416	798	212
28	4,130	798	939	2,540	416	851	380	66	26	533	661	212
29	3,500	681	798	2,290	392	879	344	70	19	661	560	204
30	2,640	624	725	1,930	-	939	296	82	18	939	546	196
31	2,070	-	624	1,650	-	939	-	86	-	939	468	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	73,324	5,530	824	2,365		
November	53,655	4,000	624	1,788		
December	24,631	1,460	356	795		
Calendar year 1947	314,463	14,400	27	862		
January	23,718	2,540	238	765		
February	27,764	1,580	392	957		
March	99,701	14,700	356	3,216		
April	52,061	7,340	296	1,735		
May	4,369	296	66	141		
June	1,382	103	18	46.1		
July	6,487	939	17	209		
August	44,961	3,240	468	1,450		
September	13,640	1,170	196	455		
Water year 1947-48	425,693	14,700	17	1,163		

Santa Fe River near High Springs, Fla.

Location.- Water-stage recorder, lat. 29°51', long. 82°38', in sec. 29, T. 7 S., R. 17 E., at bridge on State Highway 20, 150 feet upstream from Atlantic Coast Line Railroad bridge and 2 miles northwest of High Springs. Datum of gage is 25.78 feet above mean sea level (Corps of Engineers bench mark).

Records available.- January 1931 to September 1948.

Average discharge.- 17 years, 809 second-feet.

Extremes.- Maximum discharge during year, 12,700 second-feet Mar. 14 (gage height, 15.71 feet, from floodmarks); minimum, 767 second-feet July 13-16; minimum gage height, observed, 2.28 feet July 13.

1931-48: Maximum discharge, that of Mar. 14, 1948; minimum, 71 second-feet about June 27, 1935 (gage height, 0.46 foot).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Backwater from Suwannee River Mar. 15 to May 31)

Oct. 1 to Mar. 14				Mar. 15 to Sept. 30	
3.0	1,040	9.0	4,800	2.3	767
4.0	1,570	11.0	6,880	4.7	1,990
7.6	3,720	15.7	12,700	8.5	4,360

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,080	3,860	2,210	2,050	2,380	1,240	3,090	1,820	1,140	839	a1,130	1,710
2	4,210	3,590	2,100	1,930	2,320	1,220	a3,700	1,750	1,110	815	a1,210	1,610
3	3,590	3,260	2,050	1,810	2,260	1,220	a4,500	1,730	1,110	815	1,360	f1,560
4	3,140	3,000	1,930	1,750	2,320	1,220	a5,400	1,660	1,080	815	1,410	1,510
5	2,760	2,820	1,870	1,630	2,320	1,320	a6,500	1,630	1,060	815	1,560	1,510
6	2,490	2,710	1,810	1,570	2,260	1,510	a7,400	1,610	1,060	a805	1,760	1,460
7	2,320	2,660	1,690	1,480	2,210	1,870	6,840	1,580	1,040	a800	2,050	1,460
8	2,100	2,660	1,690	1,420	2,100	2,210	6,090	1,550	1,040	a800	2,410	a1,340
9	1,990	2,610	1,570	1,360	2,050	2,490	5,290	1,510	1,010	a795	2,710	a1,320
10	1,930	2,610	1,570	1,290	1,930	3,000	4,630	1,520	986	a790	2,890	a1,310
11	1,930	2,660	1,510	1,240	1,930	4,440	4,150	1,490	986	a785	2,950	a1,320
12	1,930	2,760	1,480	1,220	2,050	8,800	3,800	1,450	986	a780	3,010	a1,350
13	1,870	2,880	1,420	1,190	2,150	f12,100	3,580	1,450	a975	h767	2,950	a1,400
14	1,810	3,260	1,420	1,160	2,210	f12,700	3,340	1,410	a960	767	3,010	a1,450
15	1,870	3,720	1,480	a1,120	2,150	f11,800	3,140	1,360	a950	767	3,070	a1,490
16	1,990	4,000	1,570	a1,090	2,100	f10,200	3,000	1,360	a940	767	3,010	a1,490
17	2,210	4,000	1,630	a1,080	2,050	f7,760	2,810	1,320	936	791	2,830	a1,470
18	2,760	3,860	1,810	a1,070	1,930	4,790	2,790	1,320	936	791	2,650	a1,460
19	3,330	3,720	1,990	a1,060	1,870	3,970	2,710	1,270	936	815	2,470	a1,440
20	4,000	3,460	2,050	a1,070	1,750	f3,650	2,690	1,280	936	791	2,410	a1,410
21	4,280	3,260	2,150	a1,080	1,690	f3,530	2,700	1,280	936	815	2,350	a1,390
22	4,280	3,140	2,150	a1,100	1,570	f3,370	2,660	1,230	912	815	2,290	a1,340
23	4,070	3,070	2,150	1,160	1,510	f3,250	2,580	1,230	888	815	2,230	a1,290
24	3,790	2,940	2,260	1,290	1,420	f3,200	2,430	1,210	888	839	2,170	1,240
25	3,520	2,820	2,320	1,360	1,390	f3,060	2,340	1,180	888	839	2,110	1,180
26	3,400	2,760	2,380	1,570	1,360	2,880	f2,230	1,190	888	a860	2,110	1,160
27	3,590	2,610	2,380	1,930	1,340	2,750	f2,170	1,160	863	a890	2,050	1,140
28	4,000	2,490	2,320	2,210	1,320	2,640	f2,060	1,140	863	a930	1,930	1,140
29	4,210	2,380	2,260	2,380	1,260	2,550	f1,940	1,140	839	a970	1,930	1,110
30	4,280	2,260	2,150	2,430	-	2,540	1,880	1,140	839	a1,010	1,810	1,080
31	4,140	-	2,100	2,430	-	2,560	-	1,120	-	a1,070	1,710	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	96,870	5,080	1,810	3,125		
November	91,830	4,000	2,260	3,061		
December	59,470	2,380	1,420	1,918		
Calendar year 1947	470,995	8,680	321	1,290		
January	46,530	2,430	1,060	1,501		
February	55,200	2,380	1,260	1,903		
March	129,840	12,700	1,220	4,188		
April	108,440	7,400	1,880	3,615		
May	43,090	1,820	1,120	1,390		
June	28,981	1,140	839	966		
July	25,763	1,070	767	831		
August	69,540	3,070	1,130	2,243		
September	41,140	1,710	1,080	1,371		
Water year 1947-48	796,694	12,700	767	2,177		

Peak discharge (base, 1,500 sec.-ft.).- Oct. 21 (11 p.m.) 4,360 sec.-ft.; Nov. 16 (9 p.m.) 4,070 sec.-ft.; Dec. 26 (8 p.m.) 2,380 sec.-ft.; Jan. 31 (2 a.m.) 2,430 sec.-ft.; Mar. 14 (time unknown) 12,700 sec.-ft.; Apr. 6 (time and discharge unknown); Aug. 15 (10 a.m.) 3,070 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations at Worthington and near Fort White.

f Computed on basis of partly estimated gage-height record.

h Computed from staff-gage reading.

Note.- Backwater from Suwannee River Mar. 15 to May 31; discharge computed on basis of gage-height record for station near Fort White as a factor.

Santa Fe River near Fort White, Fla.

Location.- Water-stage recorder, lat. 29°51', long. 82°43', in sec. 28, T. 7 S., R. 16 E., 2 miles upstream from county highway bridge on road between Williford and Fort White, 5 miles south of Fort White, and 15 miles upstream from mouth. Datum of gage is 21.28 feet above mean sea level (Corps of Engineers bench mark). Auxiliary wire-weight gage at bridge on State Highway 49, 1.7 miles upstream from mouth, 13.1 miles downstream from base gage, at datum 17.8 feet lower.

Records available.- October 1927 to January 1930, June 1932 to September 1948.

Average discharge.- 18 years (1927-29, 1932-48), 1,644 second-feet.

Extremes.- Maximum discharge during year, 12,300 second-feet Mar. 14; maximum gage height observed, 13.70 feet Apr. 12; minimum daily discharge, 1,640 second-feet July 12-17, 21, 23; minimum gage height, 1.59 feet July 13-15.

1927-30, 1932-48: Maximum discharge, that of Mar. 14, 1948; maximum gage height observed, that of Apr. 12, 1948; minimum discharge, 670 second-feet June 4, 5, 1932; minimum gage height, 0.58 foot June 26-28, July 5, 1935.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Discharge determined by using auxiliary gage heights as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,020	4,660	2,870	2,570	3,260	h2,230	3,940	3,210	2,060	1,730	f2,130	2,680
2	5,360	4,480	2,790	2,670	3,170	a2,170	4,330	3,370	2,070	1,730	2,120	2,560
3	4,320	4,300	2,710	2,520	3,150	a2,180	4,770	3,330	2,010	1,740	2,190	2,490
4	4,330	4,070	2,630	2,510	3,140	2,190	5,800	3,270	2,010	1,690	2,260	2,500
5	3,920	3,810	2,680	2,480	3,200	2,260	7,140	3,310	2,020	1,700	2,460	2,440
6	3,590	3,660	2,600	2,420	3,190	2,370	g7,790	3,220	2,030	1,700	2,640	2,440
7	3,270	3,590	2,590	2,440	3,100	2,610	g7,560	3,100	1,950	1,700	2,830	2,380
8	3,120	3,510	2,550	2,430	3,020	2,880	g6,180	2,960	1,950	1,700	3,030	2,390
9	2,900	3,450	2,510	2,380	2,940	3,310	g5,710	2,860	1,950	1,700	3,320	2,320
10	2,840	3,420	2,520	2,400	2,940	3,740	g4,220	2,790	1,920	1,650	3,480	2,330
11	2,760	3,450	2,470	2,370	2,880	4,550	g3,810	2,690	1,920	a1,650	3,700	2,330
12	2,760	3,560	2,520	2,380	2,890	f7,160	g3,730	2,660	1,920	a1,640	3,770	2,400
13	2,750	3,600	2,490	2,290	2,980	f10,000	g3,840	2,560	1,930	a1,640	3,750	2,460
14	2,680	3,820	2,500	2,280	3,070	f11,800	g3,960	2,530	1,890	a1,640	3,760	2,530
15	2,670	4,270	2,510	2,270	3,020	f11,800	g4,160	2,480	1,890	a1,640	3,840	2,530
16	2,930	4,610	2,580	2,210	3,030	f10,700	g4,270	2,450	1,850	a1,640	3,840	2,470
17	2,980	4,790	2,660	2,230	2,960	f9,790	g4,690	2,400	1,860	a1,640	3,760	2,470
18	3,330	4,650	2,690	2,210	2,890	8,680	g4,680	2,360	1,860	a1,690	3,600	2,410
19	3,790	4,570	2,790	2,130	2,770	7,710	g4,630	2,330	1,860	1,690	3,430	2,340
20	4,290	4,310	2,840	2,160	a2,700	h6,910	g4,800	2,330	1,860	a1,690	3,350	2,340
21	4,660	4,070	2,910	2,180	a2,630	h6,230	g4,760	2,280	1,860	a1,640	3,270	2,280
22	4,750	3,850	2,850	2,150	a2,570	h5,760	4,700	2,240	1,870	a1,690	3,200	2,280
23	4,770	3,730	2,810	2,160	a2,520	h5,020	4,460	2,250	1,820	a1,640	3,120	2,210
24	4,610	3,590	2,850	2,290	h2,420	a4,710	4,090	2,200	1,820	a1,690	3,050	2,210
25	4,490	3,530	2,850	2,320	a2,430	f4,490	3,950	2,200	1,820	f1,690	2,980	2,140
26	4,270	3,340	2,800	2,460	a2,380	4,270	3,970	2,150	1,770	f1,730	2,970	2,140
27	4,230	3,340	2,840	2,620	a2,320	4,210	3,780	2,160	1,770	1,730	2,900	2,140
28	4,450	3,170	2,690	2,910	a2,280	4,140	3,590	2,100	1,770	1,770	2,850	2,070
29	4,660	3,040	2,680	3,060	a2,280	4,000	3,560	2,100	1,730	f1,810	2,780	2,070
30	4,830	2,950	2,680	3,220	-	3,950	3,180	2,110	1,730	f1,900	2,720	2,070
31	4,750	-	2,610	3,290	-	3,880	-	2,050	-	f1,980	2,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	121,080	6,020	2,670	3,906		
November	115,190	4,790	2,950	3,840		
December	83,070	2,910	2,470	2,680		
Calendar year 1947	742,460	7,980	1,050	2,034	------	------
January	76,010	3,290	2,130	2,452		
February	82,130	3,260	2,280	2,832		
March	165,700	11,800	2,170	5,345		
April	140,050	7,790	3,180	4,668		
May	80,050	3,370	2,050	2,582		
June	56,770	2,070	1,730	1,892		
July	52,870	1,980	1,640	1,705		
August	95,700	3,840	2,120	3,087		
September	70,420	2,680	2,070	2,347		
Water year 1947-48	1,139,040	11,800	1,640	3,112		

a No gage-height record at one of the gages; discharge computed on basis of record for station near High Springs.
f Computed on basis of partly estimated gage-height record.
g Computed from graph based on gage-readings.
h Computed from staff-gage readings.

Ichatucknee Springs near Hildreth, Fla.

Location.- Measuring section, lat. 29°58', long. 82°47', in sec. 23, T. 6 S., R. 15 E., on Ichatucknee River, at bridge on State Highway 20, 1 mile east of Hildreth, 2 miles upstream from mouth, and 2½ miles downstream from head of springs.

Records available.- 1917, 1929-30 (a single measurement in each year), January 1931 to September 1948 (discharge measurements only).

Extremes.- 1931-48: Maximum discharge measured, 578 second-feet Apr. 29, 1948; minimum measured, 243 second-feet Aug. 20, 1935.

Remarks.- Discharge measurements made at bridge.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge
Nov. 11	338	Apr. 29	578
Feb. 19	479	July 19	478

FENHOLLOWAY RIVER BASIN

Fenholloway River at Foley, Fla.

Location.- Water-stage recorder, lat. 30°04', long. 83°32', in sec. 9, T. 5 S., R. 8 E., at road bridge in Foley. Prior to June 24, 1947, staff gage at same site and datum. Datum of gage is 29.40 feet above mean sea level, datum of 1929 (levels by R. M. Angus, civil engineer).

Records available.- September 1946 to September 1948.

Extremes.- 1946: Maximum discharge observed during September, 774 second-feet Sept. 21 (gage height, 13.65 feet); minimum daily, 75 second-feet Sept. 13.

1946-47: Maximum discharge during water year, 282 second-feet Sept. 25 (gage height, 11.84 feet); minimum observed, 9.2 second-feet June 18 (gage height, 6.56 feet).

1947-48: Maximum discharge during water year, 2,640 second-feet Mar. 10 (gage height, 16.03 feet); minimum observed, 8.0 second-feet June 15 (gage height, 6.60 feet).

Remarks.- Records good except those for periods of partly estimated or no gage-height record, which are fair. Gage read twice daily prior to June 24, 1947.

Discharge, in second-feet, 1946-48

1946

Day	Discharge	Day	Discharge	Day	Discharge	Day	Discharge	Day	Discharge
Sept.1	a185	Sept.7	91	Sept.13	a75	Sept.19	312	Sept.25	470
2	a163	8	87	14	a90	20	624	26	387
3	a146	9	100	15	a94	21	757	27	282
4	131	10	91	16	a100	22	725	28	229
5	115	11	83	17	a125	23	596	29	201
6	98	12	a79	18	175	24	470	30	175
								31	-

a No gage-height record; discharge computed on basis of 2 discharge measurements and weather records.

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	23	11	10	87	70	131	26	20	24	70	75
2	118	23	11	10	89	94	166	24	17	22	56	64
3	104	23	11	10	81	96	195	21	16	19	45	56
4	91	22	11	10	75	96	214	18	16	18	39	52
5	81	21	11	11	75	79	211	19	22	16	45	46
6	74	20	11	11	72	79	188	16	21	14	44	38
7	72	19	11	11	70	79	156	16	18	11	37	34
8	a73	19	11	13	70	100	137	15	16	10	32	38
9	a74	18	10	12	68	106	120	14	12	11	30	40
10	a75	17	11	12	64	104	108	14	11	9.6	33	41
11	a76	17	11	12	60	98	98	13	11	10	32	37
12	a74	16	11	12	54	94	89	12	12	11	30	39
13	a69	16	11	12	54	81	83	12	11	12	49	33
14	a64	15	11	11	58	87	85	11	11	10	185	32
15	58	14	11	12	58	94	75	12	12	11	243	26
16	54	14	11	11	54	131	83	11	12	12	225	28
17	50	13	10	11	53	134	91	10	10	14	195	30
18	45	13	10	11	46	134	89	10	9.8	20	160	42
19	42	13	10	11	45	134	79	10	9.8	31	137	74
20	39	13	12	12	46	198	75	10	12	49	120	83
21	36	13	13	13	49	201	70	11	14	43	118	81
22	33	13	13	11	47	192	62	11	35	40	128	72
23	31	13	13	11	43	166	60	11	31	35	147	91
24	29	13	12	11	42	156	52	9.8	24	30	195	221
25	27	13	12	11	40	172	51	11	24	25	188	274
26	26	12	12	11	36	166	44	17	39	25	156	248
27	24	12	11	11	35	134	40	12	50	40	144	204
28	23	12	11	11	41	120	32	15	41	56	137	163
29	24	11	11	11	-	125	32	18	33	64	120	125
30	25	11	10	12	-	122	30	20	26	96	104	102
31	24	-	10	50	-	125	-	22	-	83	89	-

Peak discharge (base, 400 sec.-ft.).- No peak above base.
a No gage-height record; discharge computed on basis of 1 discharge measurement and weather records.

Discharge, in second-feet, of Fenholloway River at Foley, Fla., 1946-48--Continued

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	106	150	128	695	108	456	39	11	14	234	70
2	75	211	137	120	610	104	1,790	37	11	20	234	68
3	66	282	122	112	512	104	1,840	33	11	23	291	60
4	60	312	112	104	400	137	1,200	30	11	23	498	58
5	54	274	106	96	291	267	862	31	11	21	680	75
6	46	229	102	92	234	336	695	30	10	19	844	122
7	44	201	96	87	208	374	582	32	9.2	20	791	128
8	46	254	91	83	208	484	470	29	9.2	22	638	118
9	47	291	89	79	214	710	336	27	9.2	30	512	102
10	45	248	106	75	201	2,470	260	26	9.2	89	498	96
11	41	334	110	72	195	2,150	221	25	8.8	192	638	89
12	38	900	166	68	178	1,690	198	25	8.8	291	680	81
13	34	1,080	201	77	169	1,240	178	26	8.4	442	610	74
14	31	881	267	96	166	920	160	24	8.4	456	470	68
15	41	757	348	92	160	741	166	24	8.0	442	376	64
16	178	652	526	89	147	610	169	21	13	428	291	58
17	336	540	624	89	137	498	150	20	9.2	374	312	54
18	374	442	568	115	160	414	137	17	9.2	302	387	50
19	312	414	484	125	153	348	122	17	10	234	374	44
20	254	428	374	147	140	291	110	17	9.6	204	282	38
21	218	400	336	188	131	248	96	16	9.2	214	243	38
22	195	361	348	192	131	221	85	15	9.2	214	218	32
23	175	348	312	175	147	201	79	14	9.2	214	195	27
24	153	312	267	182	144	188	75	13	9.2	234	166	25
25	156	267	229	195	134	169	70	12	11	324	140	22
26	150	234	208	178	125	150	62	11	15	282	120	20
27	137	218	192	166	118	147	56	9.8	17	234	102	29
28	144	201	172	204	115	185	52	11	14	204	92	108
29	137	182	156	400	115	175	48	14	13	188	81	156
30	118	166	147	638	-	156	43	13	11	208	70	188
31	104	-	134	710	-	166	-	11	-	234	62	-

Peak discharge (base, 400 sec.-ft.).- Nov. 12 (12 p.m.) 1,140 sec.-ft.; Dec. 17 (9 a.m.) 624 sec.-ft.; Jan. 31 (11 p.m.) 725 sec.-ft.; Mar. 10 (2 p.m.) 2,640 sec.-ft.; Apr. 2 (6 p.m.) 2,200 sec.-ft.; July 14 (12 m.) 470 sec.-ft.; Aug. 6 (4 p.m.) 881 sec.-ft.; Aug. 12 (7 a.m) 695 sec.-ft.; Aug. 18 (11 p.m.) 414 sec.-ft.

Note.- Discharge May 3 to June 1, Aug. 25, 26, Sept. 20-23 computed on basis of partly estimated gage-height record. Discharge June 2-24 computed on basis of once-daily staff gage readings.

Monthly discharge, in second-feet, 1946-48

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January	-	-	-	-		
February	-	-	-	-		
March	-	-	-	-		
April	-	-	-	-		
May	-	-	-	-		
June	-	-	-	-		
July	-	-	-	-		
August	-	-	-	-		
September 1946	7,256	757	75	242		
Water year	-	-	-	-		
October 1946	1,785	150	23	57.6		
November	472	23	11	15.7		
December	345	13	10	11.1		
Calendar year	-	-	-	-		
January 1947	388	50	10	12.5		
February	1,612	89	35	57.6		
March	3,767	201	70	122		
April	2,946	214	30	98.2		
May	451.8	26	9.8	14.6		
June	596.6	50	9.8	19.9		
July	871.6	96	9.6	28.1		
August	3,333	243	30	108		
September	2,489	274	26	83.0		
Water year 1946-47	19,057.0	274	9.6	52.2		
October 1947	3,896	374	31	126		
November	11,525	1,080	106	384		
December	7,280	624	89	235		
Calendar year 1947	39,156.0	1,080	9.6	107		
January 1948	5,174	710	68	167		
February	6,338	695	115	219		
March	16,002	2,470	104	516		
April	10,768	1,840	43	359		
May	669.8	39	9.8	21.6		
June	313.0	17	8.0	10.4		
July	6,196	456	14	200		
August	11,129	844	62	359		
September	2,162	188	20	72.1		
Water year 1947-48	81,452.8	2,470	8.0	223		

Fenholloway River near Perry, Fla.

Location.- Measuring section, lat. 30°04', long. 83°40', in sec. 6, T. 5 S., R. 7 E., at county road bridge 0.6 mile south of Hampton Springs Hotel and 6 miles southwest of Perry.

Records available.- August 1946 to September 1948 (discharge measurements only).

Extremes.- 1946-48: Maximum discharge measured, 1,260 second-feet Mar. 12, 1948; minimum measured, 63.2 second-feet June 20, 1947.

Remarks.- Discharge measurements made at county road bridge.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Nov. 3	290	Mar. 5	274	July 9	123
Dec. 10	217	12	1,260	Aug. 19	569
Jan. 23	293	May 28	102	Sept.30	254

Rocky Creek near Perry, Fla.

Location.- Measuring section, lat. 30°05', long. 83°40'. in sec. 6, T. 5 S., R. 7 E., at bridge on State Highway 30 at Hampton Springs Hotel and 5½ miles southwest of Perry.

Records available.- August 1946 to September 1948 (discharge measurements only).

Extremes.- 1946-48: Maximum discharge measured, 1,920 second-feet Mar. 11, 1948: minimum measured, 51.2 second-feet Jan. 10, 1947.

Remarks.- Discharge measurements made at bridge on State Highway 30.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Discharge	Date	Discharge	Date	Discharge
Nov. 3	384	Mar. 11	1,920	Aug. 19	952
Dec. 10	236	15	1,230	Sept.30	376
Jan. 23	323	May 28	108		
Mar. 5	366	July 9	77.1		

ST. MARKS RIVER BASIN

Wakulla Spring near Crawfordville, Fla.

Location.- Staff gage, lat. 30°14', long. 84°18', in sec. 11, T. 3 S., R. 1 W., at head of spring, 6 miles northeast of Crawfordville and 14 miles south of Tallahassee.

Records available.- 1917, 1929, 1930 (a single measurement in each year), February 1931 to June 1932, July 1941 to September 1948 (discharge measurements only).

Extremes.- 1931-32, 1941-48: Maximum discharge measured, 892 second-feet Aug. 18, 1948; minimum measured, 25.2 second-feet June 18, 1931.

Remarks.- Discharge measurements of Wakulla River made at bridge 3 miles below spring, and of inflow through two culverts near head of spring, and of MacBrides Slough 1½ miles below spring. The discharge of spring is difference between that of river and the combined inflow at head of spring and slough.

Discharge measurements, in second-feet, water year October 1947 to September 1948

Date	Wakulla River	McBrides Slough and other surface inflow	Difference or spring flow
Nov. 4	405	78.4	327
Dec. 9	586	125	461
Jan. 22	343	55.7	287
Mar. 4	417	59.7	357
May 27	270	40.6	229
July 8	352	49.9	302
Aug. 18	1,280	388	892
Sept.29	526	100	426

Ochlockonee River near Thomasville, Ga.

Location.- Water-stage recorder, lat. 30°52', long. 84°03' (corrected), 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. Datum of gage is 133.6 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 550 square miles.

Records available.- August 1937 to September 1948.

Average discharge.- 11 years, 518 second-feet.

Extremes.- Maximum discharge during year, 72,000 second-feet Apr. 2 (gage height, 29.1 feet, from floodmark), from rating curve extended above 25,000 second-feet by logarithmic plotting; minimum, 12 second-feet June 16-19.

1937-48: Maximum discharge, that of Apr. 2, 1948; minimum observed, 2.6 second-feet Oct. 17, 18, 1938.

Revisions.- The figures of maximum discharge for some water years have beer revised or corrected, as shown in the following table. They supersede those published in the water-supply papers indicated.

Water-Supply Paper	Water year	Date	Gage height (feet)	Discharge (second-feet)
852.........	1937†	Sept. 21	17.59	9,090
872.........	1939	Mar. 3	13.98	3,240
1032........	1945	July 12	15.3	4,680

† Period Aug. 11 to Sept. 30.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions.- Revised figures of discharge for high-water periods in the period Aug. 11 to Sept. 30, 1937, and the water year 1939 are given herewith. They supersede those published in Water-Supply Papers 852 and 872.

Day (period)	Discharge (second-feet)	Day (water year)	Discharge (second-feet)
Aug. 11 to Sept. 30, 1937	-	1938-39	
		Mar. 3............	3,080
Sept. 21........	6,410	4............	2,930
22........	7,000		
23........	4,400		
24........	2,930		

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
September 1937...........	31,741	7,000	91	1,058	1.92	2.14
March 1939..............	25,853	3,080	165	834	1.52	1.75
Water year 1938-39.....	113,090.1	3,080	2.6	310	.564	7.65
Calendar year 1939.....	114,110.2	3,080	6.5	313	.569	7.72

Discharge, in second-feet, of Ochlockonee River near Thomasville, Ga., water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	264	a1,200	926	1,600	h712	13,600	184	30	26	a500	98
2	104	703	a1,000	904	1,600	a900	g57,400	168	30	21	a400	85
3	90	1,110	a880	882	1,570	a1,100	g26,100	152	34	18	a500	76
4	68	1,230	a790	838	1,410	a1,400	g8,650	131	32	38	a800	79
5	53	1,180	a750	772	1,230	a2,000	4,820	119	26	37	a1,500	198
6	47	1,140	a690	712	1,040	a3,800	3,240	113	23	22	a2,500	561
7	156	1,040	h672	653	948	h5,480	2,300	121	21	17	a3,000	860
8	311	948	a650	615	882	a8,500	1,820	125	20	20	a2,200	992
9	354	860	a630	597	838	a10,000	1,440	162	18	27	1,790	970
10	332	692	a700	579	838	a10,000	1,160	214	17	62	1,140	794
11	238	803	a1,000	561	816	a9,000	1,140	238	17	120	882	561
12	226	2,470	a2,200	525	1,090	7,800	1,160	220	16	157	712	362
13	136	5,480	a4,200	597	1,460	6,410	1,140	179	16	a400	597	277
14	126	a5,400	h6,220	926	1,620	4,980	1,140	152	15	a900	440	226
15	131	a4,400	a6,400	1,020	1,740	3,720	1,740	117	13	882	519	184
16	315	h3,240	a6,400	1,040	1,710	2,860	2,180	92	12	653	970	162
17	615	a2,900	6,030	1,040	1,490	2,340	2,340	76	12	543	1,230	146
18	692	a2,700	5,140	992	1,230	3,000	2,060	67	12	408	1,380	131
19	634	a2,600	4,040	904	1,090	3,820	1,650	59	13	318	1,540	109
20	543	a2,700	3,160	882	992	3,240	1,230	53	24	a350	1,440	90
21	424	a2,900	2,600	1,160	904	2,490	904	49	34	a450	1,040	78
22	325	a3,100	2,300	1,310	882	2,060	712	46	40	a570	904	68
23	318	h3,160	2,120	1,360	860	1,740	561	40	36	h634	1,020	59
24	508	a3,200	2,000	1,510	838	1,510	525	37	38	a620	794	53
25	970	a3,200	1,820	1,680	794	1,360	424	34	a34	a600	525	49
26	1,040	a2,900	1,650	1,680	732	1,210	325	32	a28	a540	325	44
27	816	a2,400	1,490	1,650	712	1,140	304	29	25	474	251	41
28	543	a2,100	1,330	1,540	712	1,140	270	30	20	318	226	44
29	400	a1,700	1,210	1,440	712	1,020	232	37	19	a300	190	45
30	325	h1,460	1,140	1,330	-	904	208	43	35	a300	152	44
31	284	-	992	1,440	-	1,230	-	34	-	a350	118	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	11,226	1,040	47	362	0.658	0.76
November	67,980	5,480	264	2,266	4.12	4.60
December	71,404	6,400	630	2,303	4.19	4.83
Calendar year 1947	294,112.5	6,620	19.5	806	1.47	19.92
January	32,065	1,680	525	1,034	1.88	2.17
February	32,340	1,740	712	1,115	2.03	2.19
March	106,866	10,000	712	3,447	6.27	7.23
April	140,775	57,400	208	4,692	8.53	9.52
May	3,153	238	29	102	.185	.21
June	710	40	12	24	.044	.05
July	10,175	900	17	328	.596	.69
August	29,585	3,000	118	954	1.73	1.99
September	7,486	992	41	250	.455	.51
Water year 1947-48	513,765	57,400	12	1,404	2.55	34.75

Peak discharge (base, 1,800 sec.-ft.).- Nov. 13 (5 p.m.) 6,220 sec.-ft.; Dec. 15 or 16 (time unknown) about 6,600 sec.-ft.; Mar. 9 or 10 (time unknown) 10,300 sec.-ft.; Mar. 19 (9 a.m.) 3,920 sec.-ft.; Apr. 2 (8 a.m.) 72,000 sec.-ft.; Apr. 17 (7 a.m.) 2,440 sec.-ft.; Aug. 7 (time and discharge unknown).

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for station near Havana, Fla.

g Computed from graph based on wire-weight gage readings and high-water mark.

h Computed on basis of wire-weight gage reading.

Ochlockonee River near Havana, Fla.

Location.- Wire-weight gage, lat. 30°33', long. 84°23', in sec. 24, T. 2 N., R. 2 W., at bridge on U. S. Highway 90, three-quarters of a mile upstream from Seaboard Air Line Railroad bridge, 4 miles downstream from Mill Creek, and 5 miles southeast of Havana.

Drainage area.- 1,020 square miles.

Records available.- December 1928 to September 1948.

Average discharge.- 20 years, 1,036 second-feet.

Extremes.- Maximum discharge observed during year, 55,900 second-feet Apr. 4 (gage height, 35.08 feet); minimum observed, 95 second-feet June 17, 19, 20; minimum gage height observed, 12.20 feet June 17, 20.

1928-48: Maximum discharge observed, that of Apr. 4, 1948; minimum observed, 24 second-feet Nov. 14, 15, 17, 1933; minimum gage height observed, 11.15 feet Nov. 5-7, 1943. Maximum stage known, that of Apr. 4, 1948.

Remarks.- Records good. Gage read once daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 2 to July 6)

Oct. 1 to Apr. 4

12.5	210	23.6	3,100	29.8	13,800
14.2	458	24.6	3,950	31.4	19,800
16.4	885	26.0	5,440	32.7	27,500
20.2	1,840	27.0	6,990	33.6	35,700
22.6	2,560	28.2	9,420	34.9	53,100

Apr. 5 to Sept. 30

12.1	95	18.0	1,240
14.6	444	22.6	2,560
15.8	685		

Note.- Same as preceding table above 22.6 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	325	643	4,240	2,520	2,690	1,370	7,170	1,060	245	163	1,430	826
2	282	885	3,760	2,370	2,600	1,320	16,700	926	218	142	1,570	708
3	253	1,200	2,970	2,200	2,520	1,350	48,900	851	190	190	1,870	641
4	239	1,420	2,480	2,090	2,520	1,550	53,100	778	163	163	2,230	685
5	224	1,550	2,170	2,010	2,480	1,820	31,600	708	149	149	2,740	1,240
6	210	1,660	1,900	1,900	2,440	2,120	19,800	641	142	135	4,340	1,950
7	239	1,740	1,710	1,820	2,340	2,910	13,200	619	135	128	5,200	2,600
8	368	1,820	1,550	1,710	2,200	4,640	9,910	557	128	121	5,990	2,740
9	528	1,790	1,470	1,600	2,060	8,500	7,900	537	121	273	5,700	2,910
10	624	1,710	1,580	1,520	1,920	11,500	6,460	498	114	1,080	5,320	2,970
11	624	1,710	2,010	1,450	1,820	12,900	5,440	479	121	1,430	5,200	2,640
12	547	2,200	2,230	1,400	1,760	14,500	4,740	479	121	1,480	4,960	2,310
13	458	2,310	2,440	1,370	1,760	14,200	4,140	498	108	1,840	4,340	1,920
14	382	2,480	2,970	1,660	1,870	12,900	3,660	479	102	1,730	3,320	1,480
15	339	3,240	3,950	1,680	2,060	11,500	4,140	444	102	1,760	2,480	1,190
16	325	5,320	5,990	1,740	2,230	9,660	4,040	413	102	1,980	2,140	1,000
17	382	6,460	8,290	1,820	2,370	9,420	4,040	384	95	2,060	2,310	901
16	528	6,460	9,180	1,900	2,400	9,180	4,340	342	102	1,870	2,790	778
19	701	5,990	9,180	1,900	2,400	7,900	4,440	314	95	1,510	2,910	708
20	761	5,320	8,500	1,900	2,310	7,710	4,340	286	95	1,240	2,850	641
21	761	4,960	7,530	1,950	2,170	7,530	4,040	273	204	1,080	3,050	577
22	682	5,320	6,810	1,950	1,980	7,170	3,570	245	231	1,080	3,100	517
23	604	5,440	5,990	1,980	1,870	6,460	2,970	218	245	1,480	2,910	479
24	547	5,440	5,440	2,170	1,840	5,700	2,440	204	204	1,570	2,600	444
25	528	5,320	4,960	2,310	1,820	5,080	2,140	190	149	2,060	2,230	413
26	682	5,320	4,540	2,400	1,740	4,540	1,950	176	204	2,230	2,090	384
27	908	5,320	4,240	2,520	1,630	4,140	1,790	170	273	2,280	1,840	356
28	1,080	5,200	3,850	2,640	1,520	3,570	1,570	163	204	2,230	1,490	356
29	1,120	4,960	3,400	2,850	1,420	3,170	1,320	204	190	1,950	1,110	356
30	980	4,640	3,030	2,850	-	2,850	1,190	245	190	1,680	976	384
31	721	-	2,740	2,790	-	2,600	-	286	-	1,480	876	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,952	1,120	210	547	0.536	0.62
November	107,828	6,460	643	3,594	3.52	3.93
December	131,100	9,180	1,470	4,229	4.15	4.78
Calendar year 1947	577,385	9,180	140	1,582	1.55	21.06
January	62,970	2,850	1,370	2,031	1.99	2.30
February	60,740	2,690	1,420	2,094	2.05	2.21
March	199,760	14,500	1,320	6,444	6.32	7.26
April	281,040	53,100	1,190	9,368	9.18	10.25
May	13,667	1,060	163	441	.432	.50
June	4,742	273	95	158	.155	.17
July	38,564	2,280	121	1,244	1.22	1.41
August	91,962	5,990	876	2,967	2.91	3.35
September	35,104	2,970	356	1,170	1.15	1.28
Water year 1947-48	1,044,429	53,100	95	2,854	2.80	38.08

Ochlockonee River near Bloxham, Fla.

Location.- Water-stage recorder, lat. 30°23', long. 84°39', in sec. 20, T. 1 S., R. 4 W., at bridge on State Highway 20, 3,000 feet downstream from power plant and dam and 1½ miles southwest of Bloxham.

Drainage area.- 1,660 square miles.

Records available.- June 1926 to September 1948.

Average discharge.- 22 years, 1,715 second-feet (unadjusted).

Extremes.- Maximum discharge observed during year, 50,200 second-feet Apr. 5 (gage height, 23.50 feet), from rating curve extended above 38,800 second-feet; minimum daily, 104 second-feet Oct. 12.

1926-48: Maximum discharge observed, that of Apr. 5, 1948; no flow except indeterminate and negligible amount of leakage on several days in most years.

Remarks.- Records fair above 300 second-feet and poor below. Flow regulated by power plant above station and storage in Lake Talquin (capacity, 3,030,000,000 cubic feet).

Revisions (water years).- W 1002: 1940-43.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	474	1,780	4,870	4,700	4,540	2,180	17,600	2,940	946	954	3,780	2,410
2	446	3,530	4,810	4,480	4,480	2,520	32,400	2,210	1,000	820	3,730	2,030
3	501	3,210	4,760	4,320	4,210	2,580	38,300	2,650	1,020	716	4,430	2,060
4	668	3,100	4,700	4,060	4,160	4,020	g43,500	2,880	976	501	4,870	2,490
5	118	2,810	4,740	3,520	4,060	3,040	g49,500	3,050	792	398	7,570	2,830
6	747	2,360	4,260	3,170	4,060	3,720	g42,800	2,790	810	930	8,230	4,680
7	888	2,440	3,690	3,120	3,890	4,320	g22,700	2,380	824	940	7,770	9,500
8	810	3,070	3,600	3,080	3,680	4,770	g11,800	2,040	1,260	834	6,840	6,310
9	966	3,380	2,850	3,010	3,700	11,200	13,300	1,570	1,240	1,840	7,870	4,810
10	1,040	3,130	3,160	2,940	3,690	12,600	10,700	1,660	1,240	3,280	7,260	4,700
11	774	2,640	3,960	1,440	3,630	14,100	9,760	2,240	1,090	4,650	7,840	4,700
12	104	4,370	4,230	2,580	2,910	16,100	7,070	1,770	835	4,430	7,600	4,650
13	488	4,480	4,260	2,940	3,060	17,600	5,190	1,870	491	4,650	5,950	4,480
14	683	4,370	4,480	3,120	2,670	16,100	5,710	1,770	1,150	4,260	5,790	4,150
15	808	4,430	4,890	3,380	1,790	10,900	6,600	1,520	1,310	4,590	4,810	3,860
16	960	4,680	6,230	3,510	2,830	10,700	7,070	1,350	940	4,370	4,810	3,420
17	886	5,180	7,800	3,510	3,480	12,500	7,700	1,740	761	4,210	4,810	2,900
18	726	5,480	9,600	3,470	4,060	14,500	8,260	1,630	913	3,830	4,880	1,910
19	1,220	7,960	10,200	3,360	4,110	12,100	5,630	1,410	716	3,110	4,700	950
20	798	6,770	10,200	3,250	4,060	10,900	4,990	1,240	1,260	3,040	4,540	1,980
21	748	7,600	9,280	3,420	3,640	9,450	5,190	1,390	1,350	3,130	4,700	2,540
22	928	10,000	8,020	3,470	2,980	8,120	5,120	1,110	1,650	2,800	5,160	2,300
23	936	9,170	6,940	3,480	3,020	8,850	5,120	554	1,690	2,610	6,470	1,710
24	1,200	7,260	6,540	3,600	3,080	7,570	5,050	1,290	1,480	2,620	4,700	1,640
25	864	6,810	6,150	4,160	3,070	6,030	4,810	1,180	1,600	4,170	4,590	1,190
26	708	6,460	5,540	4,160	3,120	6,120	4,760	1,530	1,070	4,210	4,430	852
27	982	6,500	5,410	4,160	3,000	5,550	4,650	1,710	606	4,160	4,590	1,610
28	1,390	5,700	4,760	4,370	2,600	5,260	4,370	812	1,250	4,210	4,430	1,940
29	1,500	4,810	4,810	4,480	2,080	5,120	4,060	693	1,550	4,260	3,400	1,670
30	2,010	4,810	4,760	4,590	-	4,930	3,480	1,110	1,020	4,210	2,620	1,280
31	1,360	-	4,870	4,590	-	5,550	-	894	-	4,210	2,680	-

Month	Observed				Change in contents (equivalent, second-feet)†	Adjusted for change in lake contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	26,731	2,010	104	862	+202	1,064	0.641	0.74
November	148,290	10,000	1,780	4,943	+189	5,132	3.09	3.45
December	174,370	10,200	2,850	5,625	0	5,625	3.39	3.91
Calendar year 1947	927,434	12,500	71	2,541	+26.3	2,567	1.55	21.00
January	111,440	4,700	1,440	3,595	-48.5	3,546	2.14	2.46
February	99,660	4,540	1,790	3,437	-144	3,293	1.98	2.14
March	259,000	17,600	2,180	8,355	+217	8,572	5.16	5.95
April	397,190	49,500	3,480	13,240	-305	12,940	7.80	8.70
May	52,983	3,050	554	1,709	-153	1,556	.937	1.08
June	32,840	1,690	491	1,095	0	1,095	.660	.74
July	92,943	4,650	398	2,998	+280	3,278	1.97	2.28
August	165,750	8,230	2,580	5,347	-175	5,172	3.12	3.59
September	91,552	9,500	852	3,052	+65.6	3,118	1.88	2.10
Water year 1947-48	1,652,749	49,500	104	4,516	+11.7	4,528	2.73	37.14

† Change in contents in Lake Talquin.
g Computed from graph based on gage readings.

Tired Creek near Cairo, Ga.

Location.- Water-stage recorder, lat. 30°54', long. 84°16', 140 feet upstream from county road bridge, a quarter of a mile downstream from Wolf Creek, 1 mile downstream from Atlantic Coast Line Railroad bridge, and 3 miles west of Cairo, Grady County.

Drainage area.- 55 square miles.

Records available.- July 1943 to September 1948.

Extremes.- Maximum discharge during year, 28,100 second-feet Apr. 1 (gage height, 16.3 feet, from floodmark), from rating curve extended above 2,500 second-feet on basis of slope-area determination; minimum, 5.6 second-feet (date unknown), from recorded range in stage.

1943-48: Maximum discharge, that of Apr. 1, 1948; minimum, 1.2 second-feet June 27, 1944.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Revisions (water year).- W 1052: 1944.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 6-30)

0.9	5.9	3.4	70	5.2	202	6.1	540
1.2	11	4.0	94	5.4	244	6.4	775
1.7	21	4.5	125	5.6	302	6.8	1,150
2.3	36	4.9	162	5.9	426	7.2	1,610

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	39	79	89	174	a340	a520	42	18	a8	150	28
2	14	133	76	96	125			40	15	a20	187	33
3	13	74	72	89	102			39	13	a20	212	32
4	12	68	72	81	92			38	11	a10	538	66
5	12	51	70	76	87			38	10	a7	860	636
6	12	99	70	72	87			39	9.6	a15	a1,500	610
7	61	70	68	70	83			38	9.4	a30	a500	350
8	102	74	64	68	83			33	11	a60	a150	174
9	54	56	68	68	87			30	9.6	a45	76	100
10	33	42	111	66	99			28	8.9	a100	74	72
11	25	349	403	64	106			27	9.2	a200	81	64
12	22	1,200	442	62	402			28	9.2	a480	66	66
13	21	293	426	96	299			27	a10	a450	57	63
14	20	156	516	156	168			25	a10	a200	50	58
15	19	146	464	111	118			22	7.5	a100	94	62
16	54	212	984	79	94			20	7.2	a45	138	56
17	51	156	371	72	89			20	8.0	a25	251	45
18	32	125	212	83	89			19	8.4	a100	345	40
19	26	263	162	79	83			17	10	a250	134	38
20	24	263	142	182	77			16	35	a290	79	34
21	22	162	162	174	108			15	64	a300	102	32
22	20	327	180	142	162			14	30	a250	108	32
23	23	407	151	105	133			13	16	212	94	32
24	26	232	125	228	96			12	a10	244	60	28
25	64	174	125	260	81			12	a10	262	48	25
26	74	138	138	151	74		h72	12	a9	95	42	23
27	36	114	122	105	70		h60	12	a10	190	39	25
28	28	96	105	125	68		56	13	a20	118	35	54
29	28	87	96	146	66		48	35	a15	77	35	51
30	25	83	94	138	-		45	32	a10	197	32	38
31	22	-	92	180	-		-	23	-	155	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	989	102	12	31.9	0.580	0.67
November	5,689	1,200	39	190	3.45	3.85
December	6,262	984	64	202	3.67	4.23
Calendar year 1947	34,584.5	2,180	7.8	94.8	1.72	23.39
January	3,513	260	62	113	2.05	2.36
February	3,402	402	66	117	2.13	2.30
March	10,540	-	-	340	6.18	7.12
April	13,281	-	45	443	8.05	8.98
May	779	42	12	25.1	.456	.53
June	424.0	64	7.2	14.1	.256	.29
July	4,555	480	7	147	2.67	3.08
August	6,166	1,500	29	199	3.62	4.17
September	2,967	636	23	98.9	1.80	2.01
Water year 1947-48	58,567.0	-	7	160	2.91	39.59

Peak discharge (base, 1,800 sec.-ft.).- Nov. 12 (2 a.m.) 2,110 sec.-ft.; Apr. 1 (time unknown) 28,100 sec.-ft.; Aug. 5 (time unknown) 2,640 sec.-ft.

a No gage-height record; discharge computed on basis of records for Ochlockonee River near Thomasville.

h Computed from staff-gage readings.

Chattahoochee River near Leaf, Ga.

Location.- Water-stage recorder, lat. 34°35', long. 83°38', 700 feet upstream from bridge on State Highway 115, 1½ miles east of Leaf, White County, 2½ miles downstream from Blue Creek 3 miles upstream from Soque River, and 7½ miles southeast of Cleveland. Datum of gage is 1,219.47 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 150 square miles.

Records available.- May to December 1907 (fragmentary), February 1940 to September 1948.

Extremes.- Maximum discharge during year, 6,350 second-feet Aug. 4 (gage height, 8.50 feet); minimum daily, 93 second-feet Oct. 5, 6.

1940-48: Maximum discharge, 14,100 second-feet Jan. 7, 1946 (gage height, 13.6 feet); minimum daily, 72 second-feet Oct. 26, 1941.

Remarks.- Records good. Diurnal fluctuation at low flow caused by mill dams above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 29 to Sept. 30)

1.5	80	1.9	174	3.8	1,360
1.6	96	2.1	253	5.0	2,400
1.7	117	2.4	408	6.4	3,840
1.8	143	3.0	775		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	155	174	334	326	336	903	326	331	219	801	211
2	96	291	171	342	281	496	742	326	295	189	1,330	207
3	96	240	168	258	253	454	645	321	272	181	1,300	207
4	94	196	165	232	245	420	603	380	258	171	3,740	319
5	93	228	171	219	245	374	585	331	245	162	980	435
6	93	200	171	211	331	826	585	326	232	162	652	482
7	96	232	158	200	431	2,370	567	336	272	155	543	374
8	167	276	196	192	1,050	896	565	305	249	152	478	300
9	165	215	192	192	697	697	555	291	236	178	431	267
10	130	192	272	189	591	603	519	286	224	332	397	253
11	117	763	281	178	501	543	525	281	219	1,660	380	249
12	117	397	245	178	1,880	496	519	281	211	1,510	374	232
13	109	276	224	342	1,280	460	490	291	215	567	347	228
14	106	240	207	253	1,810	443	490	276	204	585	331	228
15	106	594	547	a230	980	425	466	262	272	924	326	224
16	278	386	732	a220	756	449	454	253	272	1,000	331	219
17	410	291	420	a210	645	449	437	249	215	664	316	207
18	219	262	326	a200	567	402	420	240	232	431	300	200
19	162	295	281	a190	519	437	414	236	245	374	291	196
20	143	253	258	a190	490	425	408	228	207	347	276	192
21	130	232	240	a190	460	402	402	224	192	316	267	189
22	125	215	228	a190	472	391	391	224	411	305	272	189
23	120	232	215	181	425	1,520	380	211	249	272	281	189
24	275	253	207	196	402	814	374	215	224	249	276	196
25	300	232	219	174	402	615	374	228	200	236	272	185
26	224	215	204	185	391	550	358	253	192	228	245	171
27	181	204	204	204	374	1,230	352	240	178	219	236	171
28	380	196	196	276	374	814	342	571	178	253	228	249
29	232	185	192	236	347	664	336	736	352	249	224	211
30	181	178	185	262	-	597	331	443	258	258	219	192
31	165	-	181	408	-	1,120	-	374	-	416	224	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,204	410	93	168	1.12	1.29
November	8,124	763	155	271	1.81	2.08
December	7,630	732	158	246	1.64	1.89
Calendar year 1947	114,905	5,410	93	315	2.10	28.47
January	7,062	408	174	228	1.52	1.75
February	17,525	1,880	245	604	4.03	4.35
March	20,723	2,370	336	668	4.45	5.13
April	14,552	903	331	485	3.23	3.60
May	9,544	736	211	308	2.05	2.36
June	7,340	411	178	245	1.63	1.82
July	12,964	1,660	152	418	2.79	3.22
August	16,688	3,740	219	538	3.59	4.14
September	7,172	482	171	239	1.59	1.77
Water year 1947-48	134,508	3,740	93	368	2.45	33.34

Peak discharge (base, 2,700 sec.-ft.).- Feb. 12 (2 p.m.) 3,730 sec.-ft.; Mar. 7 (2 a.m.) 4,170 sec.-ft.; July 11 (9 p.m.) 4,500 sec.-ft.; Aug. 4 (8 a.m.) 6,350 sec.-ft.

a No gage-height record; discharge computed on basis of records for Chestatee River near Dahlonega.

Chattahoochee River near Gainesville, Ga.

Location.- Water-stage recorder, lat. 34°20', long. 83°52', 1,100 feet upstream from bridge on State Highway 53, half a mile upstream from Eddie Creek, 3½ miles downstream from Little River, 4 miles northwest of Gainesville, Hall County, and 6 miles upstream from Chestatee River. Datum of gage is 974.98 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 559 square miles.

Records available.- January 1939 to September 1948. June 1901 to December 1903 at site 2½ miles upstream. April 1937 to December 1938 at site three-quarters of a mile downstream.

Extremes.- Maximum discharge during year, 22,800 second-feet Aug. 4 (gage height, 16.6 feet); minimum daily, 293 second-feet Oct. 6.

1901-3, 1937-48: Maximum discharge, 45,800 second-feet Jan. 7, 1946 (gage height, 26.2 feet, from floodmark); minimum daily, 242 second-feet Oct. 13, 19, 26, 1941.

Remarks.- Records good except those for period of no gage-height record, which are fair. Some diurnal fluctuation caused by power plant above station.

Revisions (water years).- W 922: Drainage area. W 952: 1940(P).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.1	230	7.0	5,450
1.4	450	8.0	6,700
3.0	1,750	10.0	9,550
5.0	3,420	12.1	13,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	328	514	615	700	990	1,030	3,060	990	a1,300	918	1,310	700
2	314	828	606	1,030	886	1,270	2,150	990	a1,100	802	2,800	666
3	314	1,030	581	862	828	1,470	1,830	1,070	a1,000	717	3,520	649
4	314	742	572	751	785	1,270	1,670	1,030	a900	666	13,200	760
5	300	918	581	717	776	1,150	1,590	1,150	a900	658	7,610	1,150
6	293	828	590	700	870	1,310	1,590	1,030	a850	632	2,310	1,990
7	328	853	564	666	1,230	6,390	1,790	1,070	a850	598	1,830	1,270
8	394	1,150	590	649	3,750	3,160	1,990	990	a1,000	572	1,590	1,270
9	572	810	674	649	3,060	2,150	1,750	942	a850	590	1,430	950
10	547	700	742	632	2,390	1,830	1,510	926	a800	794	1,310	870
11	466	2,580	950	598	1,750	1,630	1,510	926	a800	3,930	1,230	836
12	394	2,200	836	598	4,700	1,510	1,510	910	a750	11,200	1,190	785
13	394	1,110	760	785	5,880	1,390	1,430	934	a750	2,550	1,110	734
14	394	902	700	950	4,200	1,310	1,350	926	810	4,420	1,070	751
15	363	1,510	871	742	2,890	1,270	1,350	886	760	5,270	1,030	751
16	514	1,510	2,230	700	2,150	1,310	1,310	870	990	2,640	1,030	708
17	1,190	1,030	1,350	700	1,870	1,390	1,270	870	794	2,640	990	700
18	990	902	1,030	674	1,670	1,230	1,230	870	942	1,630	950	692
19	624	878	910	666	1,510	1,230	1,190	836	1,470	1,350	910	649
20	506	862	828	658	1,390	1,230	1,190	819	844	1,270	886	649
21	482	768	785	658	1,310	1,190	1,150	819	768	1,110	862	649
22	434	726	768	658	1,390	1,230	1,150	794	1,670	1,070	836	640
23	410	734	726	649	1,310	4,900	1,110	a800	1,070	990	853	649
24	474	902	700	666	1,190	2,470	1,110	a800	844	942	836	658
25	785	926	700	658	1,150	1,830	1,070	a800	768	844	828	640
26	717	785	742	649	1,150	1,590	1,070	a800	717	836	802	615
27	598	734	700	666	1,110	3,060	1,070	a800	666	828	760	598
28	700	683	683	760	1,110	2,310	1,030	a1,500	683	878	742	683
29	776	658	674	836	1,070	1,830	1,030	a2,500	1,270	870	700	794
30	598	615	658	802	-	1,630	1,030	a2,000	1,550	828	708	700
31	538	-	640	990	-	2,740	-	a1,500	-	828	700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,051	1,190	293	518	0.927	1.07
November	29,388	2,580	514	980	1.75	1.95
December	24,356	2,230	564	786	1.41	1.63
Calendar year 1947	355,902	18,500	290	975	1.74	23.68
January	22,419	1,030	598	723	1.29	1.49
February	54,365	5,880	776	1,875	3.35	3.61
March	59,310	6,390	1,030	1,913	3.42	3.94
April	43,090	3,060	1,030	1,436	2.57	2.87
May	32,148	2,500	794	1,037	1.86	2.14
June	28,466	1,670	666	949	1.70	1.90
July	53,871	11,200	572	1,738	3.11	3.58
August	55,933	13,200	700	1,804	3.23	3.72
September	24,156	1,990	598	805	1.44	1.61
Water year 1947-48	443,553	13,200	293	1,212	2.17	29.51

Peak discharge (base, 9,000 sec.-ft.).- Feb. 13 (2 a.m.) 10,000 sec.-ft.; Mar. 7 (4 p.m.) 9,100 sec.-ft.; July 12 (2 p.m.) 15,200 sec.-ft.; July 14 (11 p.m.) 11,000 sec.-ft.; Aug. 4 (10 p.m.) 22,800 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations near Leaf and near Buford.

Chattahooche River near Buford, Ga.

Location.- Water stage recorder, lat. 34°08', long. 84°06', at bridge on State Highway 20, three-quarters of a mile upstream from Dave Creek, 4 miles downstream from Bald Ridge Creek, and 5 miles west of Buford, Gwinnett County. Datum of gage is 905.20 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers). Prior to Jan. 1, 1948, water-stage recorder at site 1,000 feet downstream, at same datum.

Drainage area.- 1,060 square miles.

Records available.- June to December 1901 (gage heights only), January 1942 to September 1948.

Extremes.- Maximum discharge during year, 22,900 second-feet Aug. 5 (gage height, 22.9 feet); minimum, 531 second-feet Oct. 6.

1942-48: Maximum discharge, 55,000 second-feet Jan. 8, 1946 (gage height, 32.6 feet, from floodmark), from rating curve extended above 13,000 second-feet by logarithmic plotting, on basis of peak flows passing upstream and downstream stations; minimum, 531 second-feet Sept. 29, Oct. 6, 1947.

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-16, Nov. 13 to Dec. 31, July 16 to Aug. 2, Aug. 7 to Sept. 30)

Oct. 1 to Dec. 31		Jan. 1 to Sept. 30			
2.8	540	3.8	940	14.0	9,000
3.8	1,060	5.0	1,610	17.0	12,200
5.0	1,810	7.0	2,900	20.0	16,800
7.0	3,250	9.0	4,460	21.2	19,100
9.6	5,330				

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	576	955	1,060	a1,300	2,160	1,970	6,310	1,850	2,620	1,730	1,670	1,120
2	554	2,150	1,040	a2,000	1,910	2,420	4,380	1,850	2,040	1,430	3,490	1,100
3	558	2,010	1,010	a1,700	1,730	2,900	3,560	1,970	1,790	1,260	6,940	1,070
4	554	1,550	982	a1,500	1,610	2,560	3,190	1,970	1,670	1,200	8,910	1,200
5	554	1,620	1,010	1,430	1,610	2,300	3,040	2,160	1,610	1,120	19,000	1,730
6	540	1,810	1,040	1,400	1,730	2,490	3,120	1,970	1,490	1,120	5,830	2,560
7	554	2,010	1,010	1,320	2,900	8,840	3,260	2,040	1,490	1,070	3,340	2,100
8	685	2,430	1,010	1,290	7,660	7,990	3,800	1,910	1,730	1,030	2,760	2,040
9	1,010	1,810	1,150	1,260	8,110	4,200	3,960	1,790	1,550	1,040	2,490	1,610
10	1,150	1,390	1,450	1,260	5,770	3,490	3,040	1,730	1,430	1,430	2,230	1,430
11	928	4,950	1,880	1,230	3,880	3,040	2,900	1,730	1,370	5,870	2,100	1,320
12	818	5,330	1,740	1,200	6,300	2,840	2,900	1,670	1,340	12,000	2,040	1,290
13	735	2,430	1,480	1,430	11,700	2,620	2,760	1,670	1,320	9,730	1,970	1,200
14	710	1,740	1,330	1,970	8,110	2,490	2,620	1,670	1,430	5,710	1,850	1,200
15	685	2,650	1,810	1,550	6,760	2,420	2,620	1,610	1,340	9,810	1,730	1,200
16	1,090	3,330	4,450	1,370	4,380	2,420	2,560	1,550	1,550	4,630	1,730	1,150
17	2,080	2,150	3,410	1,370	3,640	2,760	2,420	1,550	1,610	3,960	1,730	1,120
18	2,080	1,740	2,290	1,340	3,190	2,420	2,360	1,490	1,370	2,900	1,670	1,100
19	1,390	1,680	1,880	1,320	2,900	2,300	2,300	1,460	2,900	2,230	1,550	1,070
20	1,060	1,680	1,680	1,290	2,700	2,360	2,300	1,430	1,790	2,100	1,490	1,070
21	955	1,480	1,550	1,260	2,560	2,300	2,230	1,400	1,430	1,910	1,430	1,070
22	872	1,360	1,520	1,290	2,620	2,230	2,230	1,370	1,910	1,670	1,430	1,020
23	818	1,390	1,420	1,290	2,560	5,700	2,160	1,340	2,360	1,610	1,430	1,020
24	845	1,680	1,360	1,290	2,360	7,480	2,100	1,340	1,550	1,490	1,430	1,020
25	1,210	1,880	1,390	1,290	2,230	3,880	2,100	1,340	1,370	1,370	1,490	1,010
26	1,300	1,480	1,450	1,230	2,230	3,190	2,040	1,400	1,260	1,320	1,370	990
27	1,150	1,330	1,360	1,260	2,160	4,460	2,040	1,490	1,200	1,320	1,320	940
28	1,180	1,240	1,300	1,400	2,100	5,320	1,970	3,190	1,180	1,550	1,260	1,040
29	1,450	1,150	1,270	1,610	2,040	3,640	1,910	4,800	2,300	1,430	1,200	1,290
30	1,180	1,090	1,240	1,670	-	3,120	1,910	3,880	2,620	1,550	1,180	1,200
31	1,010	-	1,180	1,970	-	4,200	-	2,620	-	1,490	1,150	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	30,281	2,080	540	977	0.922	1.06
November	59,495	5,330	955	1,983	1.87	2.09
December	47,752	4,450	982	1,540	1.45	1.67
Calendar year 1947	665,698	25,900	540	1,824	1.72	23.34
January	44,090	2,000	1,200	1,422	1.34	1.54
February	109,610	11,700	1,610	3,780	3.57	3.85
March	110,350	8,840	1,970	3,560	3.36	3.87
April	84,090	6,310	1,910	2,803	2.64	2.94
May	59,240	4,800	1,340	1,911	1.80	2.08
June	50,620	2,900	1,180	1,687	1.59	1.77
July	88,080	12,000	1,030	2,841	2.68	3.09
August	89,210	19,000	1,150	2,878	2.72	3.14
September	38,280	2,560	940	1,276	1.20	1.34
Water year 1947-48	811,098	19,000	540	2,216	2.09	28.44

Peak discharge (base, 10,000 sec.-ft.).- Feb. 13 (1 p.m.) 13,300 sec.-ft.; Mar. 8 (1 a.m.) 12,200 sec.-ft.; July 13 (2 a.m.) 16,600 sec.-ft.; July 15 (10 a.m.) 11,700 sec.-ft.; Aug. 5 (2 p.m.) 22,900 sec.-ft.

a No gage-height record; discharge computed on basis of records for station near Gainesville.

Chattahoochee River near Roswell, Ga.

Location.- Water-stage recorder, lat. 34°00', long. 84°20', 1½ miles upstream from Big Creek and bridge on U. S. Highway 19 and 2 miles southeast of Roswell, Fulton County.

Drainage area.- 1,230 square miles.

Records available.- October 1941 to September 1948.

Extremes.- Maximum discharge during year, 18,800 second-feet Aug. 6 (gage height, 14.4 feet); minimum, 520 second-feet Oct. 7 (gage height, 1.80 feet).
1941-48: Maximum discharge, 56,000 second-feet Jan. 8, 1946 (gage height, 23.4 feet, from floodmark), by computation of flow over Morgan Falls Dam 6 miles below station; minimum, 384 second-feet Oct. 14, 21, 26, 27, 1941 (gage height, 1.26 feet).

Remarks.- Records good except those for period of no gage-height record, which are fair. Slight diurnal fluctuation at low flow.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 19 to Aug. 4, Aug. 7 to Sept. 30)

1.8	520	6.0	4,110
2.4	880	8.0	6,520
3.0	1,300	10.0	9,450
4.5	2,600	13.0	15,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	576	978	1,260	1,380	2,410	2,140	6,940	1,920	2,880	2,180	1,540	1,260
2	570	2,350	1,260	1,620	2,100	2,600	5,370	1,920	2,500	1,460	2,880	1,220
3	565	2,140	1,220	2,100	1,880	3,170	4,110	1,960	2,010	1,260	6,660	1,180
4	555	1,840	1,180	1,710	1,750	2,980	3,570	2,140	1,750	1,150	8,070	1,300
5	560	1,420	1,180	1,540	1,670	2,600	3,270	2,280	1,620	1,080	13,000	1,710
6	550	1,800	1,220	1,460	1,750	2,600	3,270	2,230	1,540	1,040	15,000	2,280
7	530	1,880	1,220	1,420	3,240	6,680	3,370	2,100	1,500	1,010	4,330	3,080
8	690	2,790	1,180	1,380	8,370	11,300	3,470	2,100	1,710	978	3,370	2,280
9	782	2,140	1,260	1,340	11,900	5,490	5,130	1,920	1,670	945	2,880	2,100
10	1,150	1,540	1,920	1,340	8,370	4,000	3,570	1,800	1,460	1,230	2,700	1,710
11	945	4,450	2,230	1,260	5,250	3,470	3,170	1,800	1,380	a5,000	2,410	1,580
12	815	7,640	2,230	1,220	5,460	3,170	3,170	1,750	1,340	a9,000	2,320	1,540
13	732	3,470	1,880	1,500	11,500	2,880	3,080	1,710	1,300	a11,000	2,280	1,420
14	708	2,180	1,670	1,880	11,200	2,700	2,880	1,750	1,340	a8,000	2,140	1,380
15	702	2,500	1,920	1,840	8,520	2,600	2,790	1,710	1,580	a10,000	2,100	1,380
16	738	3,570	4,220	1,500	5,130	2,600	2,700	1,620	1,380	a8,000	2,010	1,340
17	2,330	2,700	4,550	1,420	4,110	3,080	2,600	1,580	1,800	a5,000	2,050	1,260
18	2,230	2,100	2,700	1,420	3,570	2,790	2,500	1,540	1,420	a4,000	1,920	1,260
19	1,670	2,010	2,180	1,380	3,170	2,500	2,410	1,500	2,190	2,600	1,840	1,220
20	1,150	1,880	1,920	1,340	2,980	2,500	2,410	1,460	2,540	2,230	1,750	1,180
21	978	1,750	1,750	1,340	2,790	2,500	2,320	1,420	1,540	2,050	1,710	1,150
22	880	1,580	1,710	1,340	2,880	2,410	2,320	1,380	1,460	1,800	1,670	1,150
23	815	1,540	1,620	1,340	2,790	4,250	2,280	1,340	2,600	1,710	1,620	1,150
24	815	1,750	1,500	1,340	2,600	9,290	2,230	1,340	1,800	1,580	1,670	1,150
25	912	2,100	1,540	1,340	2,410	5,010	2,180	1,340	1,420	1,500	1,670	1,150
26	1,300	1,920	1,580	1,300	2,320	3,570	2,140	1,340	1,260	1,340	1,620	1,120
27	1,180	1,620	1,580	1,260	2,320	3,780	2,100	1,500	1,180	1,340	1,500	1,040
28	1,150	1,500	1,460	1,380	2,230	6,130	2,050	2,720	1,120	1,670	1,420	1,120
29	1,260	1,420	1,420	1,540	2,280	4,110	2,010	5,250	1,810	1,460	1,380	1,260
30	1,300	1,340	1,380	1,800	-	3,470	1,960	5,370	2,700	1,500	1,340	1,380
31	1,040	-	1,340	2,280	-	4,000	-	2,980	-	1,620	1,300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	30,178	2,330	530	973	0.791	0.91
November	67,898	7,640	978	2,263	1.84	2.05
December	55,280	4,550	1,180	1,783	1.45	1.67
Calendar year 1947	734,094	26,000	530	2,011	1.63	22.18
January	46,310	2,280	1,220	1,494	1.21	1.40
February	126,950	11,900	1,670	4,378	3.56	3.84
March	120,370	11,300	2,140	3,883	3.16	3.64
April	91,370	6,940	1,960	3,046	2.48	2.77
May	62,770	5,370	1,340	2,025	1.65	1.90
June	51,800	2,880	1,120	1,727	1.40	1.56
July	94,733	11,000	945	3,056	2.48	2.86
August	98,150	15,000	1,300	3,166	2.57	2.96
September	43,350	3,080	1,040	1,445	1.17	1.30
Water year 1947-48	889,159	15,000	530	2,429	1.97	26.86

Peak discharge (base, 12,000 sec.-ft.).- Feb. 9 (1 p.m.) 12,200 sec.-ft.; Feb. 14 (2 a.m.) 13,600 sec.-ft.; Mar. 8 (3 p.m.) 12,200 sec.-ft.; July 13 (time unknown) about 13,000 sec.-ft.; Aug. 6 (9 a.m.) 18,000 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations near Vinings and near Buford.

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. Datum of gage is 750.10 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,450 square miles.

Records available.- August 1928 to December 1931, November 1936 to September 1948.

Average discharge.- 14 years (1928-31, 1937-48), 2,495 second-feet.

Extremes.- Maximum discharge during year, 18,200 second-feet Aug. 6 (gage height, 14.5 feet); minimum daily, 572 second-feet Oct. 7.

1928-31, 1936-48: Maximum discharge, 59,000 second-feet Jan. 9, 1946 (gage height, 28.0 feet); minimum daily, 422 second-feet Oct. 26, 1941.

Remarks.- Records good except those for periods of backwater, which are fair. Considerable diurnal fluctuation caused by Morgan Falls hydroelectric plant 9½ miles above station.

Revisions (water years).- W 972: 1932.

Rating table, water year 1947-48, except periods of backwater (gage height, in feet, and discharge, in second-feet)

2.0	565	5.0	4,020
2.5	945	10.0	12,200
3.0	1,410	13.6	17,100
3.8	2,310		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	586	1,060	1,480	1,650	2,680	2,450	7,810	2,230	3,120	2,680	1,980	1,420
2	634	2,590	1,420	1,830	2,500	3,160	6,790	2,220	2,830	1,770	3,230	1,360
3	596	2,500	1,420	2,270	2,180	3,640	4,920	2,250	2,320	1,560	7,470	1,320
4	592	2,150	1,380	1,980	2,040	3,540	4,180	2,530	2,040	1,420	9,160	1,570
5	592	1,610	1,360	1,740	1,960	3,020	3,810	2,660	1,930	1,310	12,800	1,860
6	586	1,870	1,380	1,680	2,020	3,310	4,560	2,630	1,840	1,300	17,000	2,300
7	572	2,230	1,390	1,600	c3,900	7,300	4,090	2,460	1,780	1,220	6,450	3,120
8	856	3,210	1,410	1,580	c11,000	12,200	4,080	2,450	1,900	1,180	3,780	2,300
9	950	2,570	1,460	1,540	c15,000	7,980	5,600	2,270	2,000	1,160	3,180	2,250
10	1,170	1,790	2,510	1,520	c12,000	4,870	4,500	2,100	1,730	1,450	2,780	1,810
11	1,070	5,580	2,720	1,460	7,470	4,210	3,810	2,110	1,620	c5,600	2,560	1,730
12	928	8,830	2,660	1,440	5,780	3,710	3,580	2,070	1,590	c11,000	2,450	1,640
13	810	4,880	2,140	1,780	11,100	3,410	3,490	2,060	1,540	c13,000	2,430	1,540
14	772	2,640	1,980	2,050	14,200	3,150	3,280	2,050	1,480	c10,000	2,290	1,440
15	782	2,810	2,490	2,140	10,800	3,010	3,220	2,000	1,920	c12,000	2,230	1,480
16	822	3,930	4,560	1,770	6,790	3,060	3,080	1,960	1,640	c10,000	2,170	1,470
17	2,570	3,260	5,280	1,640	4,870	3,660	2,960	1,880	1,930	c6,200	2,170	1,390
18	2,400	2,490	3,280	1,650	4,120	3,410	2,850	1,850	1,730	4,960	2,100	1,380
19	1,960	2,360	2,510	1,580	3,670	2,990	2,750	1,800	2,080	3,330	1,960	1,350
20	1,330	2,180	2,200	1,610	3,330	2,900	2,680	1,760	3,060	2,800	1,880	1,300
21	1,110	1,960	2,010	1,500	3,130	2,940	2,670	1,710	1,820	2,580	1,860	1,300
22	963	1,820	1,960	1,530	3,270	2,830	2,620	1,680	1,590	2,280	1,800	1,260
23	902	1,770	1,840	1,560	3,210	c4,500	2,590	1,640	2,630	2,130	1,750	1,260
24	910	1,990	1,770	1,600	2,910	9,960	2,550	1,600	2,140	2,030	1,800	1,250
25	990	2,370	1,810	1,590	2,760	6,960	2,500	1,600	1,670	1,920	1,760	1,230
26	1,310	2,170	1,880	1,510	2,700	4,360	2,460	1,620	1,500	1,780	1,720	1,200
27	1,340	1,910	1,830	1,550	2,650	4,150	2,400	1,740	1,420	1,730	1,650	1,180
28	1,270	1,730	1,700	1,590	2,640	6,660	2,360	2,780	1,340	2,030	1,580	1,280
29	1,340	1,570	1,660	1,780	2,490	5,110	2,320	5,500	1,800	1,960	1,520	1,350
30	1,480	1,530	1,620	2,090	-	4,020	2,240	6,030	2,830	1,910	1,510	1,460
31	1,200	-	1,580	2,700	-	4,810	-	3,880	-	2,100	1,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	33,393	2,570	572	1,077	0.743	0.86
November	79,360	8,830	1,060	2,645	1.82	2.03
December	64,690	5,280	1,360	2,087	1.44	1.66
Calendar year 1947	830,230	26,800	572	2,275	1.57	21.27
January	53,510	2,700	1,440	1,726	1.19	1.37
February	153,170	15,000	1,960	5,282	3.64	3.93
March	141,280	12,200	2,450	4,557	3.14	3.62
April	106,750	7,810	2,240	3,558	2.45	2.73
May	73,120	6,030	1,600	2,359	1.63	1.88
June	58,820	3,120	1,340	1,961	1.35	1.51
July	116,390	13,000	1,160	3,755	2.59	2.99
August	108,440	17,000	1,420	3,498	2.41	2.78
September	46,800	3,120	1,180	1,560	1.08	1.20
Water year 1947-48	1,035,723	17,000	572	2,830	1.95	26.56

Peak discharge (base, 13,000 sec.-ft.).- Feb. 9 (5 p.m.) 16,000 sec.-ft.; Feb. 14 (9 a.m.) 15,100 sec.-ft.; Mar. 8 (8 p.m.) 13,200 sec.-ft.; July 13 (11 p.m.) 15,000 sec.-ft.; July 16 (4 a.m.) 14,000 sec.-ft.; Aug. 6 (3 p.m.) 18,200 sec.-ft.

c Backwater from Peachtree Creek; discharge computed on basis of discharge measurements, weather records, and records for station near Roswell.

Chattahoochee River near Whitesburg, Ga.

Location.- Wire-weight gage, lat. 33°29', long. 84°53', at bridge on State Highway 16, half a mile downstream from Cedar Creek, 1 mile downstream from Snake Creek, 1½ miles upstream from Central of Georgia Railroad, and 1¾ miles southeast of Whitesburg, Carroll County. Datum of gage is 684.06 feet above mean sea level, datum of 1929, (levels by Corps of Engineers).

Drainage area.- 2,430 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 3,587 second-feet.

Extremes.- Maximum discharge during year, 25,800 second-feet Feb. 9 (gage height, 17.2 feet, from graph based on gage readings); minimum daily, 670 second-feet Oct. 6, 7.
1938-48: Maximum discharge, 59,000 second-feet Jan. 10, 1946 (gage height, 25.1 feet, from graph based on gage readings), from rating curve extended above 30,000 second-feet on basis of velocity-area and channel capacity studies; minimum daily, 468 second-feet Oct. 26, 1941.

Remarks.- Records good. Gage read twice daily. Moderate diurnal fluctuation caused by Morgan Falls hydroelectric plant.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.3	670	7.0	6,850
2.2	1,510	9.0	9,750
3.0	2,310	12.0	14,800
5.0	4,410	16.2	23,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	715	1,510	2,110	2,710	4,860	4,190	14,300	3,310	4,630	3,210	3,010	1,810
2	715	2,510	2,110	3,860	4,740	6,330	12,900	3,210	4,080	2,710	3,970	1,710
3	715	2,810	2,010	3,010	3,750	7,270	9,600	3,110	3,530	2,010	7,550	1,710
4	715	2,810	2,010	3,010	3,310	6,460	6,990	3,530	2,910	a1,700	11,700	1,710
5	715	2,510	1,910	2,810	3,210	5,580	5,940	4,630	2,710	a1,600	11,900	2,810
6	670	2,210	1,910	2,610	3,110	6,590	12,200	3,970	2,510	a1,500	13,600	3,530
7	670	3,970	1,910	2,510	3,970	11,700	13,800	3,970	2,510	a1,500	14,300	3,530
8	760	5,100	2,010	2,410	14,800	13,000	9,150	3,530	2,510	1,410	4,850	3,750
9	1,310	3,970	2,110	2,310	22,600	14,500	10,100	3,420	2,710	1,510	4,190	3,110
10	1,310	3,530	3,210	2,310	23,500	9,450	9,150	3,110	2,610	3,530	3,750	2,710
11	1,410	10,700	5,340	2,210	19,800	6,720	7,130	2,910	2,410	14,500	3,310	2,310
12	1,220	14,300	4,520	2,110	12,900	5,700	5,820	2,910	2,310	14,100	3,420	2,110
13	1,080	9,750	3,970	3,010	11,500	5,100	5,580	2,910	2,110	14,100	3,110	2,010
14	985	5,580	3,970	3,530	15,200	4,740	5,580	2,810	2,110	18,000	3,210	1,910
15	940	3,750	4,410	3,210	16,000	4,520	5,220	2,810	2,210	22,400	3,210	1,910
16	940	4,630	8,400	3,010	13,800	4,740	4,860	2,710	2,710	17,000	3,110	1,810
17	1,310	4,980	7,270	2,610	9,910	7,970	4,740	2,610	2,510	12,400	2,810	1,810
18	3,210	3,860	6,070	2,610	6,590	6,070	4,300	2,510	2,710	8,400	2,710	1,710
19	2,710	4,520	4,410	2,510	5,700	6,200	3,970	2,510	2,410	5,580	2,610	1,710
20	2,010	3,530	3,750	2,310	4,980	4,630	3,860	2,410	3,010	4,190	2,510	1,610
21	1,510	3,110	3,420	2,410	4,860	4,410	3,860	2,310	3,110	3,750	2,410	1,610
22	1,220	2,710	3,110	2,410	4,980	4,410	3,750	2,310	2,410	3,310	2,410	1,510
23	1,030	2,710	2,910	2,510	5,100	17,200	3,750	2,210	2,110	3,010	2,410	1,510
24	1,120	3,010	2,810	2,510	4,630	16,000	3,750	2,210	2,510	2,810	2,310	1,510
25	1,120	3,420	2,810	2,610	4,300	13,000	3,640	2,210	2,110	2,610	2,210	1,510
26	1,220	3,110	3,110	2,510	4,190	9,000	3,640	2,110	1,810	2,510	2,110	1,510
27	1,510	2,910	3,110	2,510	4,190	6,850	3,530	2,210	1,810	2,310	2,110	1,510
28	1,510	2,610	2,710	2,710	4,080	6,990	3,530	5,340	1,810	2,110	2,110	2,010
29	1,510	2,410	2,510	2,710	4,080	8,250	3,420	8,400	1,810	1,910	2,010	2,110
30	1,610	2,210	2,410	3,110	-	6,330	3,310	10,100	2,210	1,910	1,910	2,010
31	1,610	-	2,410	5,580	-	8,110	-	7,130	-	2,910	1,910	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	39,080	3,210	670	1,261	0.519	0.60
November	124,740	14,300	1,510	4,158	1.71	1.91
December	104,730	8,400	1,910	3,378	1.39	1.60
Calendar year 1947	1,282,890	33,000	670	3,515	1.45	19.63
January	86,250	5,580	2,110	2,782	1.14	1.31
February	244,640	23,500	3,110	8,436	3.47	3.74
March	242,010	17,200	4,190	7,807	3.21	3.70
April	191,370	14,300	3,310	6,379	2.63	2.93
May	109,430	10,100	2,110	3,530	1.45	1.67
June	76,910	4,630	1,810	2,564	1.06	1.18
July	180,500	22,400	1,410	5,823	2.40	2.77
August	132,750	14,300	1,910	4,282	1.76	2.03
September	62,080	3,750	1,510	2,069	.851	.95
Water year 1947-48	1,594,490	23,500	670	4,357	1.79	24.39

Peak discharge (base, 18,000 sec.-ft.).- Feb. 9 (7 p.m.) 25,800 sec.-ft.; Mar. 23 (10 p.m.) 23,700 sec.-ft.; July 15 (3 a.m.) 24,700 sec.-ft.

a No gage-height record; discharge computed on basis of records for station at West Point.

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. Datum of gage is 551.67 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 3,550 square miles.

Records available.- January 1912 to September 1948. July 1896 to December 1910 at site three-quarters of a mile downstream.

Average discharge.- 50 years (1896-1910, 1912-48), 5,712 second-feet.

Extremes.- Maximum discharge during year, 32,800 second-feet July 12 (gage height, 16.2 feet); minimum, 773 second-feet Oct. 3 (gage height, 2.21 feet).

1896-1910, 1912-48: Maximum discharge, 134,000 second-feet Dec. 10, 1919 (gage height, 30.0 feet, from floodmark), by computation of flow over Goat Rock Dam; minimum, 224 second-feet Sept. 12, 1925 (gage height, 1.64 feet).

Remarks.- Records good. Slight diurnal fluctuation caused by power plants above station.

Revisions (water years).- W 682: 1920, drainage area. W 972: 1931-32.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 14 to Dec. 15, May 6-28, June 1 to July 8, July 13 to Sept. 30)

2.2	760	9.0	12,800
2.8	1,610	12.0	20,000
4.0	3,530	14.0	25,500
7.0	8,800	15.8	31,300

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	851	1,960	2,870	3,620	9,750	5,570	21,000	4,720	7,720	3,280	4,210	2,390
2	838	2,550	2,710	5,060	7,540	7,720	22,500	4,550	5,400	3,870	4,890	2,230
3	799	3,360	2,630	4,550	6,280	13,200	16,500	4,550	4,890	3,190	6,460	2,230
4	851	4,120	2,550	4,210	5,400	12,800	11,900	4,720	4,300	2,550	13,000	2,230
5	838	3,360	2,550	4,210	5,060	9,940	9,750	6,280	3,870	2,390	15,500	3,180
6	825	3,030	2,470	3,780	4,550	10,700	11,100	6,280	3,530	2,710	13,800	6,100
7	864	3,620	2,470	3,530	5,060	19,200	22,200	5,740	3,360	2,470	15,000	4,890
8	1,030	8,260	2,470	3,440	13,600	19,500	17,800	5,230	3,440	2,550	13,400	4,300
9	1,020	7,360	2,630	3,280	26,400	18,200	12,800	4,720	3,440	2,940	6,280	4,380
10	1,700	4,890	3,530	3,280	31,300	17,200	13,000	4,550	3,440	12,500	5,060	3,620
11	1,520	10,500	6,460	3,190	28,800	11,300	10,900	4,210	3,280	31,300	4,720	3,280
12	1,600	22,800	7,360	3,110	23,700	9,180	9,370	4,040	3,030	30,700	4,380	3,030
13	1,540	17,500	6,820	3,440	16,000	8,080	8,260	3,960	2,870	21,500	4,300	2,790
14	1,360	10,500	6,640	4,720	16,500	7,360	8,080	3,780	2,790	16,200	4,380	2,710
15	1,230	7,360	6,820	4,550	19,500	7,000	7,900	3,700	2,870	22,000	4,550	2,630
16	1,140	7,000	13,200	4,210	18,000	7,000	7,360	3,620	3,870	22,000	4,550	2,470
17	1,200	6,460	13,600	3,870	13,400	11,700	7,000	3,530	3,870	18,500	4,720	2,470
18	1,680	6,640	10,300	3,620	9,940	12,100	6,640	3,440	3,280	14,300	3,960	2,390
19	3,110	8,080	7,900	3,530	8,620	9,180	6,280	3,280	3,620	9,750	3,700	2,230
20	2,790	7,000	5,920	3,440	7,720	7,720	6,100	3,190	4,550	7,180	3,530	2,230
21	2,230	5,060	5,060	3,530	7,180	7,000	5,920	3,110	5,400	5,570	3,360	2,150
22	1,760	4,300	4,890	3,620	7,360	6,820	5,920	3,030	5,920	4,890	4,300	2,070
23	1,500	3,960	4,550	3,530	7,540	16,600	5,740	2,950	4,040	4,380	3,620	2,050
24	1,380	3,960	4,210	3,700	7,000	31,000	5,570	2,870	3,360	4,040	3,360	2,040
25	1,360	4,550	4,210	4,120	6,460	20,000	5,570	2,870	3,960	3,780	3,110	2,010
26	1,360	4,550	4,550	3,870	6,100	14,500	5,400	2,790	3,110	3,530	3,030	1,960
27	1,440	4,120	4,380	3,620	5,920	11,500	5,230	2,790	2,790	3,280	2,870	1,970
28	1,790	3,620	4,120	3,700	5,920	11,100	5,230	3,030	2,630	3,190	2,790	3,610
29	1,900	3,280	3,870	4,040	5,920	10,500	4,890	8,620	2,470	3,870	2,630	3,960
30	1,820	3,030	3,700	5,280	-	10,100	4,890	12,300	2,550	5,920	2,550	2,950
31	1,800	-	3,530	9,180	-	10,700	-	10,700	-	4,120	2,470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	45,126	3,110	799	1,456	0.410	0.47
November	186,780	22,800	1,960	6,226	1.75	1.95
December	158,970	13,600	2,470	5,128	1.44	1.66
Calendar year 1947	1,913,040	46,300	799	5,241	1.48	20.05
January	124,830	9,180	3,110	4,027	1.13	1.30
February	336,520	31,300	4,550	11,600	3.27	3.53
March	374,470	31,000	5,570	12,080	3.40	3.92
April	290,800	22,500	4,890	9,693	2.73	3.05
May	143,150	12,300	2,790	4,618	1.30	1.50
June	113,650	7,720	2,470	3,788	1.07	1.19
July	278,450	31,300	2,390	8,982	2.53	2.92
August	174,480	15,500	2,470	5,628	1.59	1.83
September	86,550	6,100	1,960	2,885	.813	.91
Water year 1947-48	2,313,776	31,300	799	6,322	1.78	24.23

Peak discharge (base, 25,000 sec.-ft.).- Feb. 10 (2 p.m.) 31,600 sec.-ft.; Mar. 24 (9 a.m.) 32,000 sec.-ft.; Apr. 2 (1 a.m.) 25,200 sec.-ft.; July 12 (8 a.m.) 32,800 sec.-ft.

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 Phenix Dam, 1¼ miles downstream from City Mills Dam, and 17½ miles downstream from Bartlett Ferry Reservoir. Datum of gage is 185.14 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 4,670 square miles.

Records available.- August 1929 to September 1948. December 1912 at site 800 feet upstream.

Average discharge.- 19 years, 6,607 second-feet (unadjusted).

Extremes.- Maximum discharge during year, 81,900 second-feet July 11, by computation of flow at North Highlands Dam; maximum gage height, 36.6 feet July 12; minimum daily discharge, 1,570 second-feet Oct. 25.

1912, 1929-48: Maximum discharge, 102,000 second-feet Mar. 21, 1943, by computation of flow at North Highlands Dam; maximum gage height, 41.0 feet Mar. 22, 1943; minimum discharge, 294 second-feet Oct. 23, Nov. 14, 1931; minimum daily, 480 second-feet Oct. 31, 1931.

Maximum discharge known, 198,000 second-feet Mar. 15, 1929, by computation of flow at North Highlands Dam; maximum stage known, 53.2 feet Mar. 16, 1929.

Remarks.- Records good. Flow regulated by Bartlett Ferry Reservoir and power plants above station. Bartlett Ferry Reservoir, completed in 1926, has a usable capacity of 134,000 acre-feet.

Cooperation.- Records of monthly reservoir contents and hourly readings of forebay, tailrace, and K. W. output at North Highlands Dam furnished by Georgia Power Co.

Revisions (water years).- W 1082: 1943(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	f2,050	1,700	3,690	6,360	8,180	7,290	26,300	6,680	8,210	3,420	4,540	4,720
2	f1,840	1,630	4,750	5,480	7,860	9,950	32,900	6,540	6,990	3,490	4,410	4,420
3	1,740	2,020	4,430	6,280	7,940	18,600	25,300	6,240	6,580	3,580	7,700	4,470
4	1,800	2,590	4,190	5,130	7,800	17,500	16,900	6,110	6,070	3,300	18,600	4,600
5	f1,710	2,720	3,970	4,600	7,500	15,500	10,300	6,240	6,050	2,990	23,700	5,650
6	1,960	2,820	3,740	5,120	7,320	13,800	12,200	6,360	6,000	3,060	18,600	5,990
7	2,210	3,220	2,600	5,300	7,540	k34,500	24,700	6,600	6,020	3,260	15,200	7,140
8	2,110	4,190	3,370	5,330	13,900	k25,800	26,900	6,260	4,560	3,320	15,500	6,550
9	1,800	5,460	4,400	5,150	k35,200	k22,100	16,500	5,960	4,180	3,440	10,400	4,800
10	1,740	5,630	7,140	6,020	k39,200	k23,200	15,200	6,200	4,160	10,800	7,190	4,920
11	1,710	9,420	8,340	4,260	k35,100	k14,100	15,000	6,010	4,120	k72,100	7,060	4,460
12	1,680	26,000	9,630	3,120	k28,600	14,600	9,980	6,000	3,030	k68,500	6,940	3,740
13	1,830	22,300	9,620	5,110	k23,200	10,500	11,600	5,990	2,180	k36,900	6,500	3,990
14	1,790	14,400	8,920	5,680	k20,400	7,840	8,390	5,010	2,600	k18,900	6,280	3,780
15	1,760	10,800	11,700	5,740	k22,300	11,200	10,500	4,380	3,200	k19,900	6,300	2,440
16	1,670	9,320	19,800	5,480	k20,000	7,960	8,480	2,280	4,060	k22,400	6,380	2,670
17	1,720	8,760	21,700	5,650	k17,200	23,000	8,230	2,950	4,070	k21,700	7,980	2,610
18	1,720	8,360	12,500	4,940	k14,300	21,100	7,850	3,740	3,480	k16,100	7,720	2,780
19	1,730	11,400	10,500	4,250	k8,650	15,400	7,760	3,520	3,380	k11,800	6,870	2,680
20	1,810	10,600	8,450	4,300	k9,220	8,730	7,140	4,020	2,660	k11,000	6,320	2,820
21	1,740	8,460	7,790	4,590	8,670	9,100	7,110	3,920	3,270	k6,690	6,200	2,780
22	1,710	7,590	7,620	5,240	10,500	9,330	6,980	3,740	4,360	k6,120	5,280	2,580
23	1,680	7,430	7,540	5,150	9,090	15,800	6,960	2,160	6,100	k6,130	6,900	2,570
24	1,810	7,560	7,370	5,410	8,660	k31,500	6,870	3,030	5,890	7,090	6,030	2,590
25	1,570	7,430	7,540	4,980	8,640	k31,100	6,820	3,160	5,750	5,800	6,020	2,660
26	1,590	7,040	7,470	5,040	7,910	k14,200	6,760	3,400	4,140	5,600	5,590	1,900
27	1,650	6,560	7,360	6,260	7,240	14,200	6,660	4,180	2,470	5,960	5,660	2,120
28	1,610	6,460	6,430	6,740	7,280	15,800	6,630	4,220	3,140	6,150	5,040	3,850
29	1,620	5,220	6,860	6,740	7,500	9,880	6,620	4,500	3,220	6,570	4,680	5,260
30	1,640	4,000	6,570	7,360	-	13,000	6,700	7,310	3,280	6,720	4,740	4,980
31	1,590	-	5,180	8,300	-	11,400	-	12,900	-	6,380	4,740	-

Month	Observed				Change in contents in Bartletts Ferry Reservoir (acre-feet)	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	54,590	2,210	1,570	1,761	+2,000	1,794	0.384	0.44
November	231,090	26,000	1,630	7,703	+29,000	8,190	1.75	1.95
December	241,170	21,700	2,600	7,780	-20,000	7,455	1.60	1.84
Calendar year 1947	2,500,670	53,600	1,570	6,851	+12,000	6,868	1.47	19.98
January	169,110	8,300	3,120	5,455	+17,000	5,731	1.23	1.42
February	416,900	39,200	7,240	14,380	+12,000	14,590	3.12	3.36
March	497,980	34,500	7,290	16,060	-8,000	15,930	3.41	3.93
April	370,240	32,900	6,620	12,340	-3,000	12,290	2.63	2.93
May	159,610	12,900	2,160	5,149	+12,000	5,344	1.14	1.31
June	133,220	8,210	2,180	4,441	-13,000	4,223	.904	1.01
July	409,170	72,100	2,990	13,200	+1,000	13,220	2.83	3.26
August	255,070	23,700	4,410	8,228	-62,000	7,218	1.55	1.79
September	116,520	7,140	1,900	3,884	-21,600	3,521	.754	.84
Water year 1947-48	3,054,670	72,100	1,570	8,346	-54,600	8,271	1.77	24.08

f Computed on basis of partly estimated gage-height record.
k Discharge computed on basis of records for North Highlands Dam.

Chattahoochee River at Columbia, Ala.

Location.- Water-stage recorder, lat. 31°17', long. 85°07', in T. 4 N., R. 29 E., at bridge on State Highway 52, a quarter of a mile downstream from Central of Georgia Railway bridge, half a mile upstream from Omussee Creek, and half a mile east of Columbia. Datum of gage is 72.23 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 8,040 square miles.

Records available.- July 1928 to September 1948. Gage-height records collected at same site since 1936 are contained in reports of U. S. Weather Bureau.

Average discharge.- 20 years, 11,100 second-feet.

Extremes.- Maximum discharge during year, 81,200 second-feet July 14 (gage height, 43.3 feet); minimum, 3,110 second-feet Oct. 1, 5, 31, Nov. 1; minimum gage height, 4.86 feet Oct. 1.

1928-48: 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. Flow regulated by Bartlett Ferry Reservoir (see preceding page).

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 9				Mar. 10 to Sept. 30					
4.9	3,110	22.0	28,600	6.4	4,300	14.0	14,200	39.0	66,000
7.0	5,110	30.0	45,000	8.0	6,000	24.0	31,400	43.3	81,200
9.0	7,540	34.3	55,800	11.0	9,800	32.0	47,000		
14.0	14,900								

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,200	3,560	8,060	10,800	19,800	14,000	32,200	9,800	12,600	6,360	11,600	7,680
2	3,380	4,500	6,760	11,700	17,900	13,700	44,400	9,800	12,900	6,000	11,600	7,920
3	3,380	4,600	6,890	13,400	15,400	21,000	47,500	9,520	10,100	5,780	12,200	7,680
4	3,290	4,200	7,410	11,700	13,800	35,200	43,400	9,520	8,820	5,560	23,500	7,560
5	3,200	4,100	7,020	10,800	13,200	34,200	33,100	9,660	8,160	5,340	31,900	20,300
6	3,200	4,500	6,760	9,040	12,900	33,000	23,000	9,660	7,920	5,010	39,800	21,100
7	3,200	4,700	6,630	8,620	12,600	43,500	20,600	10,100	7,680	4,700	33,100	13,900
8	3,560	5,440	6,260	8,900	12,500	53,300	30,700	10,100	7,800	4,800	24,200	11,600
9	4,010	6,020	5,440	8,900	18,900	55,500	37,600	9,800	7,440	5,780	21,000	10,900
10	4,010	6,890	7,670	8,760	44,400	51,000	32,900	9,240	6,240	32,400	18,600	9,100
11	3,650	10,200	20,000	8,760	55,800	46,800	25,800	8,820	5,890	44,400	14,700	8,160
12	3,470	15,900	29,700	9,320	55,500	43,400	22,800	8,820	5,780	55,000	13,600	8,160
13	3,470	23,700	31,300	7,670	52,300	32,200	19,400	8,540	5,670	71,100	12,600	7,320
14	3,380	29,000	31,400	9,910	47,300	25,300	17,700	8,400	4,700	80,000	11,500	7,080
15	3,380	22,700	28,200	12,300	38,700	18,600	15,800	8,040	4,300	70,800	10,600	7,200
16	3,470	18,400	32,000	11,100	33,800	19,800	15,500	7,080	4,700	56,000	10,900	6,480
17	3,560	15,500	38,500	9,910	31,800	22,200	15,600	6,240	5,560	45,800	13,200	5,670
18	3,560	13,800	36,600	9,610	28,400	30,500	13,600	4,900	6,600	37,800	13,100	5,450
19	3,560	14,400	27,500	9,460	23,200	35,200	12,900	5,230	6,840	30,100	12,500	5,450
20	3,560	17,100	20,800	8,620	18,400	31,400	12,500	5,890	5,890	23,000	10,900	5,450
21	3,470	17,000	16,200	8,620	17,500	22,500	11,800	6,120	6,360	19,300	10,200	5,340
22	3,470	14,700	14,400	10,400	18,600	17,900	11,300	6,000	6,360	16,000	10,800	5,450
23	3,380	13,400	13,700	11,300	21,500	19,800	11,200	6,000	6,480	13,200	9,520	5,340
24	3,290	13,800	13,100	12,800	19,100	30,100	11,100	5,560	7,320	11,900	9,240	5,120
25	3,290	16,000	13,400	16,500	17,000	36,000	10,900	4,600	7,800	13,100	9,520	5,010
26	3,380	14,900	13,800	15,500	15,200	40,200	10,800	4,900	7,560	12,000	8,960	5,120
27	3,290	13,100	13,700	12,600	14,700	32,200	10,500	5,560	7,080	10,500	8,680	5,340
28	3,200	11,400	13,100	11,300	13,800	23,200	10,400	6,240	5,670	10,200	8,280	8,960
29	3,200	10,200	11,900	12,200	14,100	23,400	10,100	6,960	4,600	13,100	8,040	11,600
30	3,200	9,460	11,400	12,900	-	19,800	9,940	7,560	5,450	13,200	7,560	11,200
31	3,110	-	11,300	15,400	-	20,000	-	8,040	-	13,100	7,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	105,770	4,010	3,110	3,412	0.424	0.49
November	363,170	29,000	3,560	12,110	1.51	1.68
December	510,900	38,500	5,440	16,480	2.05	2.36
Calendar year 1947	4,570,580	58,700	3,110	12,520	1.56	21.14
January	338,800	16,500	7,670	10,930	1.36	1.57
February	717,900	55,800	12,500	24,760	3.08	3.32
March	944,900	55,500	13,700	30,480	3.79	4.37
April	625,040	47,500	9,940	20,830	2.59	2.89
May	236,700	10,100	4,600	7,635	0.950	1.10
June	210,270	12,900	4,300	7,009	0.872	.97
July	741,330	80,000	4,700	23,910	2.97	3.42
August	449,100	39,800	7,200	14,490	1.80	2.08
September	252,640	21,100	5,010	8,421	1.05	1.17
Water year 1947-48	5,496,520	80,000	3,110	15,020	1.87	25.42

Peak discharge (base, 47,000 sec.-ft.).- Feb. 11 (10 p.m.) 57,200 sec.-ft.; Mar. 9 (7 p.m.) 56,700 sec.-ft.; Apr. 3 (12 m.) 48,000 sec.-ft.; July 14 (1 p.m.) 81,200 sec.-ft.

Note.- Discharge for periods Feb. 27 to Mar. 1, May 3 to June 10 computed from graph based on daily wire-weight gage readings by U. S. Weather Bureau.

Apalachicola River at Chattahoochee, Fla.

Location.- Water-stage recorder, lat. 30°43', long. 84°51', in sec. 32, T. 4 N., R. 6 W., at bridge on U. S. Highway 90, four-fifths of a mile downstream from confluence of Flint and Chattahoochee Rivers and 1 mile west of Chattahoochee. Datum of gage is 45.58 feet above mean sea level, datum of 1929 (U. S. Weather Bureau bench mark).

Drainage area.- 17,100 square miles.

Records available.- December 1928 to September 1948. Gage-height records collected at former site seven-eighths of a mile downstream October 1919 to September 1925 and at present site since October 1925 are contained in reports of U. S. Weather Bureau.

Average discharge.- 20 years, 22,530 second-feet.

Extremes.- Maximum discharge during year, 121,000 second-feet Apr. 5 (gage height, 24.14 feet); minimum, 9,400 second-feet Oct. 7 (gage height, 0.86 foot).
1928-48: Maximum discharge, 293,000 second-feet Mar. 20, 1929 (gage height, 34.70 feet, site and datum then in use), 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, site and datum then in use.

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,000	10,400	31,700	33,800	37,700	34,100	64,400	26,900	19,500	15,000	28,700	16,400
2	10,000	11,200	29,000	32,900	39,200	33,200	85,200	26,300	23,700	15,700	27,200	17,100
3	10,200	12,000	26,600	32,600	38,900	33,800	100,000	24,900	23,400	15,500	27,500	17,400
4	10,000	11,800	25,400	32,600	38,000	42,000	115,000	23,400	22,400	15,000	30,800	16,900
5	9,800	11,600	24,700	31,100	36,200	50,900	121,000	22,900	21,400	14,600	38,600	19,300
6	9,600	12,400	23,900	29,900	34,100	55,800	113,000	23,200	21,000	13,700	45,200	29,000
7	9,400	13,500	22,900	28,100	33,200	60,800	97,900	23,900	20,500	13,300	50,400	28,700
8	9,600	13,900	21,900	26,900	33,500	68,400	84,200	24,400	20,000	13,700	49,000	24,700
9	10,000	14,100	21,200	26,600	33,800	79,500	81,300	24,400	19,300	14,100	43,600	22,900
10	10,800	14,800	21,400	26,300	41,000	89,300	81,300	23,700	18,100	21,700	40,100	21,400
11	11,200	16,400	25,700	25,700	53,800	94,600	76,900	22,900	16,900	40,100	37,100	19,800
12	11,000	21,000	37,400	25,200	61,300	95,700	69,800	22,900	16,400	46,600	33,800	18,600
13	10,800	26,300	45,600	25,200	66,000	92,500	64,900	22,900	16,200	54,300	31,100	18,100
14	10,200	34,400	51,300	24,400	68,400	85,200	60,800	22,400	15,500	63,300	29,300	17,100
15	10,000	37,700	55,300	26,900	68,400	76,900	58,800	21,700	13,900	72,800	27,200	16,400
16	10,200	35,900	57,300	28,100	65,400	71,200	54,800	20,700	13,500	79,500	25,700	15,900
17	10,400	32,900	62,300	27,800	62,800	71,200	52,300	19,500	14,100	78,600	25,700	15,000
18	10,800	30,500	66,000	27,200	61,300	70,500	48,500	17,900	15,500	73,600	27,200	14,400
19	11,000	29,900	67,100	26,900	58,800	71,200	43,600	16,200	16,400	66,500	27,500	13,900
20	11,200	31,700	63,300	26,300	54,300	70,500	40,100	16,400	16,600	59,300	26,600	13,500
21	10,800	34,700	58,800	25,700	49,900	66,500	38,000	16,900	16,200	50,900	25,400	12,600
22	10,800	37,100	54,300	26,000	46,600	60,300	35,900	16,900	15,500	45,600	24,700	12,600
23	11,000	37,400	50,400	27,500	46,100	56,800	34,400	17,100	15,900	41,000	24,200	12,900
24	11,000	37,100	47,500	29,300	46,100	58,300	33,200	16,600	16,400	37,100	22,400	12,900
25	11,000	37,400	44,800	32,000	44,000	61,800	32,300	15,500	17,400	34,100	22,700	12,900
26	10,800	38,900	42,400	35,000	41,300	65,400	31,400	14,600	17,900	32,300	21,000	12,600
27	10,800	38,900	41,000	35,300	39,500	68,400	30,200	15,500	17,600	30,200	20,300	12,400
28	9,800	38,300	39,200	34,700	37,400	63,800	29,000	15,900	16,600	28,100	19,500	12,900
29	9,600	36,800	47,700	34,700	35,600	57,800	28,100	16,900	14,600	27,800	19,000	16,400
30	9,800	34,400	35,900	35,300	-	54,800	27,800	18,300	13,700	29,900	18,300	18,300
31	10,000	-	34,100	35,900	-	51,800	-	18,100	-	29,600	17,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	321,600	11,200	9,400	10,370	0.606	0.70
November	793,400	38,900	10,400	26,450	1.55	1.73
December	1,266,100	67,100	21,200	40,840	2.39	2.75
Calendar year 1947	9,926,900	71,200	9,400	27,200	1.59	21.58
January	915,900	35,900	24,400	29,550	1.73	1.99
February	1,372,600	68,400	33,200	47,330	2.77	2.99
March	2,013,000	95,700	33,200	64,940	3.80	4.38
April	1,834,100	121,000	27,800	61,140	3.58	3.99
May	629,800	26,900	14,600	20,320	1.19	1.37
June	526,100	23,700	13,500	17,540	1.02	1.14
July	1,173,500	79,500	13,300	37,850	2.21	2.55
August	906,900	50,400	17,100	29,250	1.71	1.97
September	513,000	29,000	12,400	17,100	1.00	1.12
Water year 1947-48	12,266,000	121,000	9,400	33,510	1.96	26.68

Peak discharge (base, 47,000 sec.-ft.).- Dec. 19 (6 a.m.) 67,700 sec.-ft.; Feb. 15 (1 a.m.) 69,100 sec.-ft.; Mar. 12 (5 a.m.) 95,700 sec.-ft.; Apr. 5 (8 a.m.) 121,000 sec.-ft.; July 16 (7:30 p.m.) 80,400 sec.-ft.; Aug. 7 (6:30 p.m.) 50,900 sec.-ft.

Soque River near Demorest, Ga.

Location.- Water-stage recorder, lat. 83°35', long. 34°34', at Cannon Bridge, 2½ miles west of Demorest, Habersham County, 3 miles downstream from Habersham Mill Dam, and 3 miles upstream from mouth. Datum of gage is 1,152.16 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 156 square miles.

Records available.- July 1904 to June 1909, May 1929 to December 1931, March 1940 to September 1948.

Average discharge.- 14 years (1904-8, 1929-31, 1940-48), 341 second-feet.

Extremes.- Maximum discharge during year, 5,190 second-feet July 12 (gage height, 11.2 feet); minimum daily, 60 second-feet Oct. 4.

1904-9, 1929-31, 1940-48: Maximum discharge, 13,500 second-feet Jan. 7, 1946 (gage height, 21.8 feet); minimum daily, 18 second-feet Oct. 18, 1931.

Flood of July 21 or 22, 1938, reached a stage of 22.8 feet, from floodmark (discharge, 14,400 second-feet).

Remarks.- Records good. Low flow regulated by Habersham Mill power plant.

Revisions (water years).- W 892: 1904-9, 1929, drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.1	46	2.1	290
1.3	80	3.5	844
1.5	120	5.0	1,530
1.8	197	7.2	2,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	119	187	252	269	298	698	294	324	299	550	197
2	80	420	164	312	253	451	566	298	298	223	809	180
3	84	299	166	224	224	404	494	312	265	202	706	194
4	60	206	163	219	220	363	463	344	270	201	2,660	294
5	83	244	163	220	215	328	455	325	229	215	742	846
6	101	198	158	198	288	568	462	309	234	188	467	717
7	82	266	159	189	341	1,690	459	319	266	184	386	672
8	113	272	200	186	978	680	495	278	246	175	340	386
9	159	208	184	181	608	530	456	279	235	201	326	326
10	150	197	241	165	521	468	414	284	220	404	297	276
11	90	898	254	173	430	428	442	270	218	2,230	294	262
12	106	438	238	187	1,510	408	443	268	197	2,660	284	219
13	120	278	204	300	992	380	410	280	214	600	274	258
14	96	232	202	232	970	376	404	274	230	1,510	257	264
15	94	529	401	197	613	374	397	246	250	936	280	222
16	285	352	594	195	523	389	384	256	266	734	294	241
17	477	274	350	180	454	404	363	258	214	729	268	239
18	225	245	288	193	413	355	357	244	216	436	258	208
19	164	262	260	195	385	372	360	240	201	407	249	212
20	155	288	226	180	369	357	354	232	202	377	252	231
21	130	212	232	182	348	358	350	230	213	331	232	222
22	120	192	231	180	386	363	348	215	794	330	224	214
23	119	218	218	175	362	1,210	342	222	286	276	248	216
24	267	262	196	176	336	650	327	241	250	228	244	212
25	216	231	221	176	332	505	334	289	226	238	233	206
26	182	207	218	191	325	453	333	273	193	252	224	202
27	176	200	214	192	322	835	321	240	202	220	224	213
28	258	185	210	248	313	580	314	553	210	230	187	234
29	178	168	216	231	302	493	315	595	671	240	205	217
30	156	175	196	240	-	452	306	403	352	236	223	201
31	147	-	192	315	-	1,010	-	381	-	227	213	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,755	477	60	153	0.981	1.13
November	8,215	898	119	274	1.76	1.96
December	7,146	594	158	231	1.48	1.71
Calendar year 1947	98,210	5,040	58	269	1.72	23.40
January	6,484	315	165	209	1.34	1.54
February	13,602	1,510	215	469	3.01	3.25
March	16,532	1,690	298	533	3.42	3.94
April	12,166	698	306	406	2.60	2.90
May	9,252	595	215	298	1.91	2.20
June	8,192	794	193	273	1.75	1.95
July	15,719	2,660	175	507	3.25	3.75
August	12,450	2,660	187	402	2.58	2.97
September	8,581	846	180	286	1.83	2.04
Water year 1947-48	123,094	2,660	60	336	2.15	29.34

Peak discharge (base, 2,800 sec.-ft.).- July 12 (1 a.m.) 5,190 sec.-ft.; Aug. 4 (6 a.m.) 3,750 sec.-ft.

King Branch near Alto, Ga.

Location.- Water-stage recorder and V-notch weir, lat. 34°27', long. 83°37', 1¼ miles west of Georgia State Tuberculosis Sanatorium and 2 miles southwest of Alto, Habersham County.

Drainage area.- 0.42 square mile.

Records available.- May 1944 to September 1948 (discontinued).

Extremes.- Maximum and minimum discharges for water years 1944-48 are contained in the following table. The figures of maximum discharges have not been previously published.

Water year	Maximum			Minimum daily	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1944*	May 19	†51	4.49	Sept. 8,9	0.32
1945	Aug. 24	†38	4.12	Sept. 4, 12	.35
1946	Jan. 6	†38	4.12	Sept.1,2,5,6, 14,15	.42
1947	June 20	†55	4.60	Sept. 6	.33
1948	July 11	†37	4.08	Oct. 14	.31

* May to September.
† From rating curve extended above 18 second-feet by logarithmic plotting.

Remarks.- Records poor.

Revisions.- Revised figures of discharge for high-water periods in the water years 1946 and 1947 are given herewith. They supersede those published in Water-Supply Papers 1052 and 1082.

Day (water year)	Discharge (second-feet)	Day (water year)	Discharge (second-feet)
1945-46		1946-47	
Jan. 6......	17.2	Jan. 19.....	9.1
Feb. 9......	7.2	20.....	9.5
10......	7.1		
Mar. 28......	8.2		

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
January 1946.........	69.93	17.2	0.97	2.26	5.38	6.20
February.............	51.13	7.2	.97	1.83	4.36	4.54
March................	58.95	8.2	1.05	1.90	4.52	5.21
Water year 1945-46.	434.36	17.2	.42	1.19	2.83	38.48
Calendar year 1946.	391.39	17.2	.39	1.07	2.55	34.67
January 1947.........	48.15	9.5	.58	1.55	3.69	4.25
Water year 1946-47.	268.31	9.5	.33	.735	1.75	23.72

Discharge, in second-feet, of King Branch near Alto, Ga., water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.39	0.42	0.55	1.1	0.85	0.85	1.6	0.89	1.5	0.78	0.72	0.44
2	.39	1.72	.52	.85	.78	1.5	1.4	1.1	.97	.61	1.2	.44
3	.39	.58	.52	.71	.74	1.2	1.3	.89	d.8	.52	1.9	.46
4	.42	.52	.52	.64	.74	1.0	1.2	1.1	d.8	.52	4.0	1.2
5	.39	1.7	.58	.61	.74	1.0	1.2	.85	d.7	.49	d1	1.4
6	.39	.58	.55	.58	1.1	3.0	1.2	.96	d.7	.46	.85	.89
7	.46	1.7	.55	.58	2.4	4.6	1.2	.85	1.0	.44	1.0	.71
8	.38	.74	.64	.58	5.2	1.6	2.0	.74	.78	.49	1.1	.64
9	.57	.58	.58	.58	3.5	1.2	1.2	.71	.68	.80	.71	.71
10	.39	.55	1.1	.58	1.9	1.1	1.1	.71	.61	7.9	.71	d.6
11	.35	5.6	.82	.58	1.4	1.0	1.2	.71	.61	9.6	.74	.55
12	.33	1.0	.74	.58	9.5	.93	1.2	.86	.58	2.4	.68	.52
13	.33	.74	.68	.99	5.0	.93	1.1	.74	1.5	d1	.64	.55
14	.31	1.1	.64	.64	4.6	.97	1.2	.71	d.6	9.0	.64	.55
15	.53	2.8	2.3	.61	d2	.97	1.1	.64	.83	2.5	.68	.52
16	2.3	.97	1.2	.61	1.2	1.4	1.1	.64	.68	1.5	.68	.52
17	.98	.78	.85	.64	1.1	1.1	1.0	.61	.61	d2	.61	.49
18	.55	.82	.74	.61	1.0	1.0	1.0	.61	1.6	d1	.58	.49
19	d.4	.74	.64	.61	.93	1.0	1.0	.58	.97	.89	.90	.46
20	.42	.68	.64	.61	.89	.93	1.0	.58	.78	.85	.64	.46
21	.39	.61	.68	.64	.97	.89	.97	.55	.71	.82	.64	.46
22	.37	.61	.64	.61	1.1	.93	.97	.55	1.1	.74	.64	.46
23	.39	.68	.61	.64	.97	4.5	.97	.55	.85	.71	.61	.46
24	.44	1.3	.58	.64	.89	1.3	.97	.55	.74	.68	.58	.46
25	.49	.78	.78	.61	.89	1.1	.97	.82	.71	.64	.58	.44
26	.39	.68	.68	.64	.89	1.0	.97	.68	.68	.61	.52	.44
27	.80	.61	.68	.74	.85	1.7	.97	.64	.64	.61	.46	.44
28	.55	.58	.64	.82	.85	1.0	.93	3.3	.68	.64	.46	1.0
29	.42	.55	.61	.74	.85	.97	.93	4.5	2.7	.61	.46	.49
30	.39	.55	.61	1.0	-	.97	.93	1.4	1.0	.58	.46	.49
31	.37	-	.58	.97	-	3.5	-	2.8	-	.58	.46	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15.67	2.3	0.31	0.505	1.20	1.38
November	31.25	5.6	.42	1.04	2.48	2.77
December	22.45	2.3	.52	.724	1.72	1.98
Calendar year 1947	285.78	9.5	.31	.783	1.86	25.26
January	21.34	1.1	.58	.688	1.64	1.89
February	53.83	9.5	.74	1.86	4.43	4.78
March	45.14	4.6	.85	1.46	3.48	4.01
April	33.88	2.0	.93	1.13	2.69	3.00
May	31.82	4.5	.55	1.03	2.45	2.82
June	27.11	2.7	.58	.904	2.15	2.40
July	50.97	9.6	.44	1.64	3.90	4.50
August	25.85	4.0	.46	.834	1.99	2.29
September	17.74	1.4	.44	.591	1.41	1.57
Water year 1947-48	377.05	9.6	.31	1.03	2.45	33.39

d Doubtful gage-height record; discharge computed from graphs based on recession curves and weather records.

Chestatee River near Dahlonega, Ga.

Location.- Water-stage recorder, lat. 34°32', long. 83°56', at Bearden Bridge on State Highway 43, 2 miles downstream from Ballplay Creek, 2½ miles east of Dahlonega, Lumpkin County, and 3½ miles upstream from Yahoola Creek. Datum of gage is 1,128.6 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 153 square miles.

Records available.- July 1929 to December 1931, April 1940 to September 1948.

Extremes.- Maximum discharge during year, 8,150 second-feet Aug. 4 (gage height, 15.6 feet); minimum daily, 76 second-feet Oct. 6.

1929-31, 1940-48: Maximum discharge, 15,300 second-feet Jan. 7, 1946 (gage height, 22.1 feet); minimum daily, 49 second-feet Oct. 4, 1931, Oct. 26, 1941.

Flood of Aug. 12, 1907, reached a stage of about 25 feet, from information by local resident. Flow increased by failure of dam above station.

Remarks.- Records good. Moderate diurnal fluctuation at times caused by mill dam above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	130	172	272	298	333	840	322	280	203	633	210
2	77	280	168	306	269	436	683	322	259	184	1,080	208
3	79	222	165	244	249	421	586	324	242	174	1,200	208
4	77	177	163	222	239	393	539	352	236	168	4,180	249
5	77	242	168	212	244	365	524	324	232	165	1,160	322
6	76	200	170	203	327	644	539	311	220	161	700	352
7	79	245	159	196	393	1,720	524	324	269	154	554	269
8	196	272	198	193	1,010	805	586	298	236	150	479	259
9	182	205	198	191	683	617	539	288	220	186	421	234
10	130	179	272	184	586	554	494	282	210	262	393	222
11	110	731	288	177	479	509	509	277	208	1,290	379	217
12	108	393	246	179	1,570	464	479	272	203	2,550	365	208
13	98	264	222	327	1,280	436	464	293	205	650	338	200
14	93	227	208	252	1,680	421	450	272	198	650	324	205
15	95	498	407	217	940	407	450	259	229	617	330	200
16	222	352	673	224	700	436	421	256	335	436	324	191
17	330	272	393	208	601	436	421	249	220	365	308	186
18	208	246	311	200	524	393	393	242	428	316	293	179
19	152	272	275	193	479	407	393	236	428	290	285	179
20	130	234	249	188	450	407	393	232	249	275	275	174
21	120	217	234	193	421	393	379	229	222	254	267	172
22	110	205	222	188	436	393	379	224	352	242	267	170
23	110	222	212	184	407	1,580	365	220	262	234	260	172
24	190	246	203	198	379	822	365	217	222	224	268	174
25	186	242	212	179	379	617	352	239	205	210	272	163
26	163	215	210	188	379	554	352	249	193	210	252	161
27	145	200	203	198	385	1,070	338	246	188	203	242	156
28	267	191	198	254	385	752	338	561	191	256	234	196
29	186	181	188	234	338	601	330	554	242	275	229	188
30	152	177	184	249	-	554	327	379	246	269	224	172
31	137	-	179	338	-	1,170	-	319	-	272	222	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,362	300	76	141	0.922	1.06
November	7,737	731	130	258	1.69	1.89
December	7,348	673	159	237	1.55	1.79
Calendar year 1947	104,399	4,500	76	286	1.87	25.40
January	6,789	388	177	219	1.43	1.65
February	16,470	1,680	239	568	3.71	4.00
March	19,110	1,720	333	616	4.03	4.65
April	13,752	840	327	458	2.99	3.34
May	9,172	561	217	296	1.93	2.22
June	7,430	428	188	248	1.62	1.81
July	11,895	2,550	150	384	2.51	2.89
August	16,798	4,180	222	542	3.54	4.08
September	6,196	352	156	207	1.35	1.51
Water year 1947-48	127,059	4,180	76	347	2.27	30.89

Peak discharge (base, 2,600 sec.-ft.).- Feb. 12 (3 p.m.) 2,650 sec.-ft.; July 12 (5 a.m.) 5,140 sec.-ft.; Aug. 4 (11 a.m.) 8,150 sec.-ft.

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 5½ miles upstream from mouth. Datum of gage is 857.01 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 246 square miles.

Records available.- March 1937 to September 1948. May 1904 to December 1905 and November to December 1913 at site 2½ miles upstream.

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

Extremes.- Maximum discharge during year, 3,440 second-feet Feb. 10 (gage height, 10.3 feet); minimum, 22 second-feet Oct. 3-6, 8.

1904-5, 1913, 1937-48: Maximum discharge, 6,640 second-feet Apr. 9, 1938 (gage height, 16.18 feet); minimum, 21 second-feet Oct. 11, 12, 16-19, 1938.

Flood of July 8, 1916, reached a stage of about 20.0 feet, from information by local resident.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 3-29, Feb. 13 to Mar. 6, Mar. 9-31, Apr. 4, 5, Apr. 10 to May 27)

0.0	21	0.9	106	4.0	1,050
.1	26	1.3	178	6.5	1,910
.3	40	1.7	272	9.0	2,880
.6	68	2.3	450	10.6	3,580

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	52	147	306	982	272	2,020	191	282	82	172	78
2	24	122	142	415	501	598	2,060	191	215	73	224	74
3	22	158	136	295	365	750	1,410	185	187	66	1,590	73
4	22	119	136	239	318	678	624	235	166	62	2,020	107
5	22	a85	136	207	306	501	501	467	154	57	786	218
6	22	81	138	196	315	681	1,780	309	142	54	518	215
7	24	a150	135	185	694	1,690	2,060	298	138	52	306	382
8	26	a250	144	176	2,440	1,520	2,250	249	144	49	224	474
9	42	a150	172	174	3,180	1,050	1,840	211	135	55	191	162
10	41	a120	518	170	3,350	642	732	191	122	224	170	129
11	39	983	714	162	2,760	518	570	178	116	1,550	224	126
12	39	1,320	588	160	1,690	434	501	172	111	1,660	211	117
13	36	1,280	412	327	1,050	380	434	166	106	1,190	176	102
14	34	422	304	371	1,250	353	450	156	103	1,120	153	96
15	32	374	510	280	982	338	450	149	146	1,520	151	96
16	34	350	1,250	220	768	434	380	147	256	1,410	154	92
17	80	267	982	207	570	714	344	142	204	2,060	151	85
18	85	267	660	200	484	624	312	127	144	1,620	136	80
19	63	359	362	182	418	467	293	126	204	434	124	79
20	52	315	290	180	380	386	282	120	220	275	114	78
21	46	244	264	193	356	350	275	116	178	234	106	76
22	42	202	246	207	484	326	269	112	136	209	122	78
23	40	211	232	193	434	1,240	256	106	153	172	189	75
24	41	269	215	229	359	1,220	254	105	120	154	160	73
25	44	304	251	236	326	1,050	246	108	102	144	117	72
26	50	256	293	222	315	380	236	103	93	129	105	67
27	52	209	256	239	306	535	224	115	88	119	100	63
28	55	182	224	288	304	535	218	1,220	84	172	93	128
29	56	164	207	298	290	434	202	1,280	80	288	88	196
30	54	154	198	384	-	359	198	1,120	80	272	86	136
31	50	-	189	732	-	984	-	484	-	218	84	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,293	85	22	41.7	0.170	0.20
November	9,419	1,320	52	314	1.28	1.43
December	10,451	1,250	135	337	1.37	1.58
Calendar year 1947	114,131	5,820	22	313	1.27	17.26
January	7,873	732	160	254	1.03	1.19
February	25,977	3,350	290	896	3.64	3.93
March	20,443	1,690	272	659	2.68	3.09
April	21,671	2,250	198	722	2.93	3.27
May	8,879	1,280	103	286	1.16	1.34
June	4,409	282	80	147	.598	.67
July	15,724	2,060	49	507	2.06	2.38
August	9,045	2,020	84	292	1.19	1.37
September	3,827	474	63	128	.520	.58
Water year 1947-48	139,011	3,350	22	380	1.54	21.06

Peak discharge (base, 1,800 sec.-ft.).- Feb. 10 (9 a.m.) 3,440 sec.-ft.; Mar. 7 (5 p.m.) 1,840 sec.-ft.; Apr. 1 (10 p.m.) 2,100 sec.-ft.; Apr. 8 (3 p.m.) 2,290 sec.-ft.; July 17 (11 p.m.) 2,250 sec.-ft.; Aug. 4 (4 a.m.) 2,330 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

Mountain Creek near Hamilton, Ga.

Location.- Wire-weight gage, lat. 32°44', long. 85°04', at bridge on State Highway 103, 5 miles upstream from mouth and 11 miles west of Hamilton, Harris County.

Drainage area.- 61.7 square miles.

Records available.- December 1943 to September 1948.

Extremes.- Maximum discharge during year, 11,800 second-feet July 11 (gage height, 16.6 feet, from floodmark), from rating curve extended above 7,000 second-feet on basis of slope-conveyance studies; minimum daily, 18 second-feet Oct. 1-6.
1943-48: Maximum discharge, that of July 11, 1948; minimum daily, 16 second-feet Sept. 12, 1945.

Remarks.- Records fair. Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 13 to Jan. 31, June 13 to July 9)

Oct. 1 to July 9

1.6	18	2.1	90	3.2	480
1.7	26	2.2	114	3.8	780
1.8	37	2.5	201	4.5	1,240
1.9	52	2.8	307		

July 10 to Sept. 30

1.7	21	2.2	102	4.0	920
1.8	31	2.3	129	10.0	5,700
1.9	44	2.5	195	13.7	8,930
2.0	60	3.0	390		
2.1	79	3.7	720		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a18	21	55	86	125	95	720	a75	a100	49	70	41
2	a18	52	52	95	109	288	960	a70	a80	37	79	41
3	a18	36	49	74	95	299	900	a70	a70	37	160	40
4	a18	28	49	62	90	195	840	a70	a60	30	164	50
5	18	29	50	70	88	170	840	a80	a55	28	435	110
6	18	32	46	58	82	508	840	a100	a50	27	223	57
7	20	32	38	58	90	1,240	780	a80	a50	26	124	50
8	27	60	49	78	390	485	234	a75	a45	26	102	47
9	26	40	54	88	412	234	170	70	a45	43	93	44
10	35	35	117	68	368	234	150	68	a40	746	84	44
11	40	282	128	55	327	208	182	66	a35	8,860	113	50
12	26	141	186	54	307	104	147	64	a35	1,400	90	44
13	21	62	201	95	288	90	130	62	32	195	75	41
14	20	55	176	82	252	90	128	58	28	135	68	41
15	19	147	252	58	227	90	125	55	43	135	107	44
16	22	102	435	62	201	412	119	55	50	113	97	41
17	26	70	156	58	164	595	114	a50	40	88	81	39
18	23	104	119	62	136	502	107	a50	40	84	70	36
19	22	195	100	56	125	114	104	a50	34	154	64	36
20	21	104	86	58	114	95	100	46	60	93	62	36
21	20	72	82	70	114	119	97	a45	37	77	60	35
22	20	68	78	68	128	90	95	a45	40	70	60	34
23	20	66	72	62	114	80	92	a40	37	64	68	34
24	20	153	74	104	104	56	92	a40	34	93	57	34
25	20	150	70	86	102	100	88	a40	30	93	54	34
26	20	92	68	76	100	158	a85	a40	30	64	50	31
27	20	74	64	70	100	458	a85	a50	38	57	47	44
28	21	66	62	74	114	109	a80	a70	30	79	47	192
29	20	58	60	74	100	66	a80	a120	29	230	44	71
30	20	56	58	109	-	80	a75	a300	74	90	43	52
31	19	-	58	198	-	141	-	a150	-	79	41	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	676	40	18	21.8	0.353	0.41
November	2,482	282	21	82.7	1.34	1.50
December	3,144	435	38	101	1.64	1.89
Calendar year 1947	31,744	1,550	18	87	1.41	19.14
January	2,358	198	54	76.1	1.23	1.42
February	4,966	412	82	171	2.77	2.99
March	7,505	1,240	56	242	3.92	4.52
April	8,559	960	75	285	4.62	5.16
May	2,254	300	40	72.7	1.18	1.36
June	1,371	100	28	45.7	.741	.83
July	13,302	8,860	26	429	6.95	8.01
August	2,932	435	41	94.6	1.53	1.76
September	1,493	192	31	49.8	.807	.90
Water year 1947-48	51,042	8,860	18	139	2.25	30.75

Peak discharge (base, 1,000 sec.-ft.).- Mar. 7 (6 p.m.) 1,310 sec.-ft.; Apr. 1 (11 p.m.) 1,030 sec.-ft.; July 11 (10 p.m.) 11,800 sec.-ft.

a No gage-height record; discharge computed on basis of records for Potato Creek near Thomaston.

Flint River near Griffin, Ga.

Location.- Water-stage recorder, lat. 33°14', long. 84°26', at bridge on State Highway 16, 1¼ miles downstream from Shoal Creek, 5½ miles upstream from Line Creek, and 10 miles west of Griffin, Spalding County.

Drainage area.- 272 square miles.

Records available.- March 1937 to September 1948.

Average discharge.- 11 years, 339 second-feet.

Extremes.- Maximum discharge during year, 4,170 second-feet May 31 (gage height, 12.4 feet); minimum, 43 second-feet Oct. 7.

1937-48: Maximum discharge, 13,000 second-feet Mar. 22, 1942 (gage height, 17.0 feet, from floodmark); minimum, 14.3 second-feet Sept. 24, 1941 (gage height, 1.92 feet).

Flood of Mar. 14 or 15, 1929, reached a stage of 17.9 feet, from floodmark located by local resident (discharge, 15,300 second-feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair. Some diurnal fluctuation at low flow.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 15 to Mar. 5, June 17 to July 10)

2.7	43	6.0	335	10.0	1,550
3.0	57	7.0	489	11.0	2,470
3.8	103	8.0	695	12.2	3,910
4.2	131	8.8	920		
5.0	209	9.4	1,170		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	91	233	321	1,100	356	a1,100	f215	2,520	97	221	85
2	45	164	215	423	990	438	a1,300	209	1,120	94	227	79
3	46	221	209	384	875	658	a1,600	f204	610	91	263	78
4	45	209	204	349	670	815	a1,100	f215	384	85	449	106
5	47	233	199	314	498	890	a800	a300	269	82	615	174
6	46	233	199	275	431	1,010	a900	f384	215	82	498	221
7	43	209	199	257	447	2,170	a1,200	a450	194	82	363	227
8	60	314	204	245	898	2,220	a1,400	f407	184	88	239	215
9	120	370	233	239	1,880	2,020	a1,600	a300	169	91	194	149
10	159	455	363	233	3,270	1,710	a1,900	f251	164	195	164	123
11	154	888	575	227	3,150	1,170	a1,500	a220	149	2,890	154	120
12	131	1,480	635	221	2,520	890	f990	a210	140	2,270	159	112
13	106	2,020	720	263	1,890	732	785	a200	131	2,370	169	106
14	88	2,370	860	342	1,480	f605	635	a190	120	2,320	164	100
15	82	1,520	800	356	1,280	f525	555	a180	f154	2,320	149	97
16	85	1,120	1,100	363	1,050	f547	498	a170	f516	3,390	174	94
17	109	860	1,050	314	890	1,560	463	a160	f293	3,150	204	91
18	116	695	1,010	275	732	1,760	431	144	f251	1,650	184	85
19	116	815	935	257	595	1,280	384	136	f257	801	159	85
20	109	732	696	257	525	990	349	131	f239	463	154	82
21	88	645	507	275	480	732	335	123	f184	335	179	78
22	82	605	507	275	507	f595	321	120	f189	472	154	78
23	77	525	463	269	507	f770	307	120	174	645	144	76
24	78	415	431	335	471	1,930	300	116	149	338	127	76
25	85	407	471	384	455	3,390	300	127	131	215	123	74
26	97	399	525	349	423	2,150	287	123	120	184	112	72
27	103	377	498	328	391	f1,050	269	120	112	159	103	74
28	97	356	480	328	384	f785	251	198	106	149	100	116
29	97	293	431	342	377	f890	f239	438	106	209	100	174
30	97	257	349	449	-	f845	f221	1,660	100	194	94	154
31	94	-	314	1,030	-	a800	-	3,910	-	209	88	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,747	159	43	88.6	0.326	0.38
November	19,278	2,370	91	643	2.36	2.63
December	15,614	1,100	199	504	1.85	2.13
Calendar year 1947	165,361	4,880	43	453	1.67	22.59
January	10,279	1,030	221	332	1.22	1.41
February	29,166	3,270	377	1,006	3.70	3.99
March	36,283	3,390	356	1,170	4.30	4.96
April	22,320	1,900	221	744	2.74	3.06
May	11,731	3,910	116	378	1.39	1.60
June	9,450	2,520	100	315	1.16	1.29
July	25,720	3,390	82	830	3.05	3.52
August	6,227	615	88	201	.739	.85
September	3,401	227	72	113	.415	.46
Water year 1947-48	192,216	3,910	43	525	1.93	28.28

Peak discharge (base, 2,000 sec.-ft.).- Nov. 14 (2 a.m.) 2,800 sec.-ft.; Feb. 10 (6 p.m.) 3,780 sec.-ft.; Mar. 8 (6 p.m.) 2,580 sec.-ft.; Mar. 25 (12 m.) 3,650 sec.-ft.; May 31 (11 a.m.) 4,170 sec.-ft.; July 11 (4 p.m.) 3,650 sec.-ft.; July 16 (6 p.m.) 3,910 sec.-ft.

a No gage-height record; discharge computed on basis of records for station near Culloden.

f Computed on basis of partly estimated gage-height record.

Flint River near Molena, Ga.

Location.- Water-stage recorder, lat. 32°59', long. 84°32', at bridge on State Highway 18, 500 feet downstream from Southern Railway bridge, half a mile downstream from Pappys Creek, 1¾ miles upstream from Elkins Creek, and 2 miles southwest of Molena, Pike County. Datum of gage is 646.78 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 990 square miles.

Records available.- June 1897 to May 1898 (gage heights only June to December 1897), November 1945 to September 1948. March 1900 to September 1923 (gage heights only October 1920 to September 1923) at site 2¼ miles downstream, published as Flint River near Woodbury.

Extremes.- Maximum discharge during year, 28,400 second-feet July 11 (gage height, 24.7 feet); minimum, 130 second-feet Oct. 1.
1898, 1945-48: Maximum discharge, that of July 11, 1948; minimum, 120 second-feet Sept. 30, 1947.

Remarks.- Records fair except those for periods of no gage-height record, which are poor.

Cooperation.- Base data collected by Corps of Engineers; records of discharge computed by Geological Survey.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	135	357	948	1,260	4,740	1,350	4,020	812	5,220	428	828	318
2	162	610	905	1,600	4,500	1,700	5,000	803	3,500	422	862	305
3	152	896	880	1,450	3,340	2,900	6,000	778	2,000	416	948	298
4	162	880	854	1,300	2,350	3,780	4,000	769	1,300	396	1,450	435
5	157	794	837	1,170	1,900	3,670	3,000	837	900	364	2,620	703
6	162	735	896	1,110	1,700	3,900	3,500	1,170	700	383	1,800	846
7	152	752	880	1,060	1,800	8,850	4,500	1,300	650	390	1,260	837
8	218	1,090	888	999	4,020	9,890	5,000	1,220	600	402	973	695
9	370	1,260	990	990	7,160	8,200	6,000	1,030	550	402	812	550
10	520	1,700	1,170	982	9,890	6,900	7,000	871	550	632	719	470
11	558	3,120	1,650	956	10,700	5,460	6,060	794	500	17,000	719	456
12	449	4,620	2,050	930	10,300	4,020	4,500	744	450	13,000	727	422
13	409	6,060	2,350	999	8,980	3,010	3,000	719	450	8,000	769	402
14	370	6,300	2,680	1,260	7,030	2,460	2,500	671	400	5,000	711	370
15	312	5,580	2,790	1,300	5,820	2,100	1,900	655	550	4,000	648	376
16	305	4,740	3,670	1,260	4,620	2,150	1,800	632	1,600	3,700	679	390
17	338	3,560	4,500	1,170	3,450	4,980	1,650	602	1,100	3,500	812	376
18	409	2,900	4,500	1,100	2,740	6,660	1,550	580	900	3,500	778	350
19	422	3,230	3,340	1,030	2,250	6,060	1,350	565	900	3,000	679	338
20	383	3,010	2,460	999	1,950	4,500	1,300	520	800	1,700	625	331
21	357	2,620	2,000	1,110	1,800	2,900	1,260	505	700	1,200	695	305
22	312	2,050	2,100	1,150	1,950	2,250	1,170	491	700	1,000	711	287
23	299	1,700	1,750	1,090	1,950	3,010	1,120	477	650	900	663	287
24	305	1,800	1,600	1,260	1,800	5,340	1,080	470	600	1,000	595	287
25	318	1,800	1,600	1,450	1,650	8,070	1,040	456	550	900	542	275
26	344	1,550	1,900	1,350	1,550	8,330	1,020	456	500	800	498	240
27	376	1,400	1,800	1,260	1,450	5,940	964	463	470	700	470	240
28	383	1,260	1,650	1,260	1,500	3,340	922	463	450	600	442	535
29	402	1,120	1,500	1,350	1,450	3,450	871	854	450	1,000	416	752
30	383	1,020	1,350	1,700	-	3,120	828	1,650	440	1,120	402	580
31	370	-	1,260	3,560	-	2,900	-	3,120	-	846	376	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,994	558	135	322	0.325	0.37
November	68,514	6,300	357	2,284	2.31	2.58
December	57,748	4,500	837	1,863	1.88	2.17
Calendar year 1947	605,474	16,000	135	1,659	1.68	22.74
January	39,465	3,560	930	1,273	1.29	1.49
February	114,340	10,700	1,450	3,943	3.98	4.29
March	141,190	9,890	1,350	4,555	4.60	5.30
April	83,905	7,000	828	2,797	2.83	3.16
May	25,477	3,120	456	822	.830	.96
June	29,130	5,220	400	971	.981	1.09
July	76,701	17,000	364	2,474	2.50	2.88
August	25,229	2,620	376	814	.822	.95
September	13,056	846	240	435	.439	.49
Water year 1947-48	684,749	17,000	135	1,871	1.89	25.73

Peak discharge (base, 7,500 sec.-ft.).- Feb. 11 (5 p.m.) 10,800 sec.-ft.; Mar. 8 (2 a.m.) 10,400 sec.-ft.; Mar. 26 (1 a.m.) 8,850 sec.-ft.; July 11 (7 p.m.) 28,400 sec.-ft.

Note.- No gage-height record Apr. 2-10, 13, 14, June 2-30, July 12-29; discharge computed on basis of records for stations near Griffin and near Culloden.

Flint River near Culloden, Ga.

Location.- Water-stage recorder, 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. Datum of gage is 334.54 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,890 square miles.

Records available.- July 1928 to December 1931, March 1937 to September 1948. July 1911 to May 1923 at site 2½ miles downstream.

Average discharge.- 25 years (1911-22, 1928-31, 1937-48), 2,494 second-feet.

Extremes.- Maximum discharge during year, 27,800 second-feet July 12 (gage height, 23.8 feet); minimum, 435 second-feet Oct. 2.
1911-23, 1928-31, 1937-48: 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.

Remarks.- Records good except those for periods of fragmentary or no gage-height record, which are fair.

Revisions (water years).- W 822: Drainage area. W 1002: 1943.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	475	596	2,010	2,440	7,090	2,960	8,830	1,600	5,120	790	1,540	689
2	440	1,330	1,870	3,190	6,690	3,270	11,200	1,600	5,400	a740	1,540	662
3	460	1,600	1,800	2,960	5,400	4,840	f9,930	1,540	3,600	a710	2,080	640
4	445	1,540	1,730	2,580	4,300	5,690	a7,200	1,540	2,150	a670	3,040	689
5	455	1,420	1,660	2,290	3,680	5,690	a5,400	1,940	1,600	a640	5,500	1,180
6	455	1,420	1,660	2,150	3,270	6,930	a9,300	2,220	1,330	h606	3,600	1,450
7	460	1,270	1,600	2,010	3,190	15,900	f12,400	2,510	1,180	a590	2,510	1,360
8	623	1,730	1,600	1,940	7,190	15,900	f10,500	2,360	1,120	a570	1,940	1,240
9	820	1,870	1,800	1,870	12,400	12,100	a9,000	2,080	1,090	a640	1,600	1,030
10	754	1,940	2,960	1,870	16,800	10,600	a7,500	1,800	1,030	a2,000	1,420	880
11	880	6,730	4,660	1,800	14,400	8,610	a6,500	1,660	1,000	a10,000	1,360	820
12	820	10,000	6,390	1,730	14,000	6,790	a5,500	1,600	970	f25,000	1,390	790
13	730	7,950	6,490	2,220	14,000	5,310	f4,560	1,540	910	16,500	1,360	760
14	656	7,290	6,990	2,660	11,500	4,560	3,940	1,480	850	9,270	1,300	730
15	601	7,290	6,790	2,510	9,270	4,120	3,510	1,420	970	7,730	1,180	700
16	596	7,090	9,930	2,360	7,290	4,300	3,190	1,330	1,000	6,990	1,240	694
17	650	5,600	8,390	2,150	6,090	12,000	2,960	1,300	1,940	6,590	1,360	667
18	672	5,120	6,790	f2,080	5,120	11,100	2,740	1,240	1,540	6,390	1,360	634
19	700	7,840	5,500	f2,010	4,480	8,720	2,510	1,180	1,210	5,220	1,240	590
20	689	5,890	4,300	1,940	4,020	7,190	2,440	1,120	1,150	3,350	1,120	579
21	618	4,740	3,850	2,150	3,760	5,500	2,360	1,090	1,420	2,360	1,060	574
22	568	3,940	3,850	2,360	4,380	4,560	2,290	1,060	1,800	1,940	1,120	546
23	530	3,430	3,510	2,220	4,200	f5,890	2,150	1,030	1,540	1,730	1,120	535
24	530	3,510	3,190	4,740	3,850	a9,000	2,150	1,000	1,180	1,940	1,060	546
25	540	4,560	3,430	4,200	3,600	f8,940	2,080	1,030	970	1,800	940	535
26	568	3,940	3,760	3,430	3,350	f9,380	2,010	1,060	910	1,450	910	525
27	579	3,350	3,510	2,880	3,190	a8,000	1,940	1,210	850	1,300	850	520
28	612	f2,810	3,110	2,740	3,190	f5,890	1,870	1,180	820	1,240	820	1,150
29	623	f2,360	2,810	2,880	3,190	4,740	1,800	1,940	760	2,220	760	1,540
30	612	f2,150	2,660	3,270	-	4,840	1,660	3,510	790	2,360	742	1,300
31	579	-	2,440	6,490	-	5,220	-	3,600	-	1,800	730	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	18,740	880	440	605	0.320	0.37
November	120,306	10,000	596	4,010	2.12	2.36
December	121,040	9,930	1,600	3,905	2.07	2.39
Calendar year 1947	1,076,272	26,600	440	2,949	1.56	21.20
January	82,120	6,490	1,730	2,649	1.40	1.61
February	192,890	16,800	3,190	6,651	3.52	3.80
March	228,540	15,900	2,960	7,372	3.90	4.50
April	149,420	12,400	1,660	4,981	2.64	2.94
May	50,770	3,600	1,000	1,638	.867	1.00
June	46,200	5,400	760	1,540	.815	.91
July	125,136	25,000	570	4,037	2.14	2.47
August	47,792	5,500	730	1,542	.82	.94
September	24,555	1,540	520	818	.43	.48
Water year 1947-48	1,207,509	25,000	440	3,299	1.75	23.77

Peak discharge (base, 11,000 sec.-ft.).- Nov. 11 (11 p.m.) 12,600 sec.-ft.; Feb. 10 (3 a.m.) 17,600 sec.-ft.; Mar. 7-8, 17,000 sec.-ft.; Mar. 17 (8 a.m.) 13,100 sec.-ft.; Apr. 2 (8 p.m.) 12,100 sec.-ft.; Apr. 7 (7 a.m.) 14,100 sec.-ft.; July 12 (3 p.m.) 27,800 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for station near Molena.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

h Computed from wire-weight gage reading.

Flint River at Montezuma, Ga.

Location.- Water-stage recorder, lat. 32°18', long. 84°03', at bridge on State Highways 26 and 49, half a mile downstream from Buck Creek and 1 mile west of Montezuma, Macon County. Datum of gage is 255.83 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 2,900 square miles.

Records available.- July 1930 to June 1933, October 1934 to September 1948. January 1905 to December 1909, January 1911 to December 1912 at site 1½ miles upstream. Gage-height records collected at same site since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 16 years (1930-32, 1934-48), 3,657 second-feet.

Extremes.- Maximum discharge during year, 20,900 second-feet Feb. 13 (gage height, 17.3 feet); minimum daily, 1,090 second-feet Oct. 3-5.

1905-9, 1911-12, 1930-33, 1934-48: Maximum discharge observed, 54,600 second-feet Apr. 12, 1936 (gage height, 22.85 feet); minimum daily, 585 second-feet Oct. 26, 1941. Maximum stage known, 27.4 feet Mar. 17, 1929.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair. Moderate diurnal fluctuation at low flow caused by power plant above station.

Revisions (water years).- W 822: Drainage area. W 852: 1936(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.9	1,060	7.0	4,280	14.0	12,700
3.0	1,600	10.0	6,910	16.0	17,300
5.0	2,810	12.0	9,250	17.3	20,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,130	g1,500	3,660	4,760	6,340	5,270	8,830	3,360	4,600	2,000	3,510	d1,700
2	1,110	g1,820	3,360	4,600	7,110	5,270	9,840	3,220	4,930	2,180	3,080	d1,700
3	1,090	g2,240	3,220	5,020	7,840	5,180	10,800	3,160	5,270	2,180	3,020	d1,700
4	1,090	g2,810	3,080	5,270	8,440	5,700	13,500	3,080	5,440	1,940	3,360	d1,700
5	1,090	g2,880	3,020	5,100	8,570	6,240	14,600	3,080	4,520	1,660	4,280	d1,700
6	1,110	g2,620	2,940	4,520	7,730	6,910	13,100	3,360	3,080	1,550	5,360	d1,900
7	1,130	g2,480	2,880	4,120	6,530	8,310	11,600	3,660	2,550	1,500	6,060	d2,400
8	1,280	g2,550	2,880	3,880	5,800	9,250	10,700	3,960	2,300	1,450	5,800	2,420
9	1,350	g2,740	2,800	3,660	6,620	12,900	12,700	3,960	2,180	1,500	4,120	2,300
10	1,500	g2,940	3,660	3,580	8,970	19,200	15,000	3,660	2,120	1,770	3,060	2,240
11	1,550	g3,300	5,270	3,510	12,100	18,900	14,100	3,300	2,000	2,940	g2,810	2,120
12	1,550	g4,200	6,820	3,440	18,600	16,700	12,300	3,080	1,940	5,100	g2,620	d1,800
13	1,550	5,620	7,950	3,740	20,600	14,400	11,000	2,940	1,880	6,530	g2,550	d1,700
14	1,500	6,810	9,250	4,600	19,400	11,900	9,840	2,810	1,940	9,840	2,550	d1,700
15	1,450	8,440	10,700	5,270	18,900	10,000	8,830	2,740	1,880	18,000	2,420	d1,600
16	1,550	9,690	11,700	5,270	17,500	8,440	7,730	2,620	1,940	16,700	2,480	d1,600
17	1,940	9,840	11,900	4,760	15,300	7,730	6,620	2,480	2,000	13,300	2,620	d1,600
18	g2,000	9,690	12,100	4,280	12,700	7,510	5,880	2,420	2,550	11,000	2,620	d1,500
19	g1,820	9,690	12,900	3,980	10,700	9,250	5,360	2,360	2,740	9,840	2,620	d1,400
20	g1,720	9,110	12,100	3,810	9,110	13,300	5,020	2,300	2,420	9,110	2,420	d1,400
21	g1,720	8,700	10,700	3,960	7,950	13,500	4,760	2,180	2,240	8,190	2,240	1,450
22	g1,600	8,970	9,110	4,200	7,210	11,600	4,600	2,120	2,240	6,440	2,120	1,350
23	g1,500	8,970	7,840	4,440	6,910	10,000	4,280	2,120	2,420	4,600	2,060	1,350
24	g1,400	7,950	7,110	4,930	6,910	8,970	4,200	2,060	2,480	4,600	d1,900	1,300
25	g1,400	6,720	6,720	5,880	6,820	8,830	4,120	2,000	2,240	4,760	d1,900	1,280
26	g1,450	8,060	6,440	6,820	6,440	9,390	4,040	2,120	1,940	3,880	d1,800	1,280
27	g1,450	6,160	6,240	7,310	5,980	10,300	3,960	2,120	1,820	3,160	d1,800	1,250
28	g1,450	5,800	6,340	6,910	5,620	11,000	3,810	2,300	1,770	2,740	d1,700	1,400
29	g1,450	4,930	6,060	5,800	5,360	11,400	3,660	2,550	1,720	2,740	d1,700	1,820
30	g1,450	4,200	5,520	5,270	-	10,500	3,960	3,020	1,820	3,080	d1,600	2,480
31	g1,400	-	5,020	5,620	-	9,110	-	4,040	-	3,810	d1,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	44,780	2,000	1,090	1,445	0.498	0.57
November	169,430	9,840	1,500	5,648	1.95	2.18
December	209,370	12,900	2,880	6,754	2.33	2.69
Calendar year 1947	1,691,880	28,500	1,090	4,635	1.60	21.89
January	148,290	7,310	3,440	4,784	1.65	1.90
February	288,060	20,600	5,360	9,933	3.43	3.70
March	316,960	19,200	5,180	10,220	3.52	4.06
April	248,740	15,000	3,660	8,291	2.86	3.19
May	88,180	4,040	2,000	2,845	.981	1.13
June	78,970	5,440	1,720	2,632	.908	1.01
July	168,090	18,000	1,450	5,422	1.87	2.16
August	87,880	6,060	1,600	2,835	.978	1.13
September	51,140	2,480	1,250	1,705	.588	.66
Water year 1947-48	1,899,890	20,600	1,090	5,191	1.79	24.38

Peak discharge (base, 13,000 sec.-ft.).- Dec. 19 (10 a.m.) 13,100 sec.-ft.; Feb. 13 (4 a.m.) 20,900 sec.-ft.; Mar. 10 (7 p.m.) 20,000 sec.-ft.; Mar. 20 (10 p.m.) 14,100 sec.-ft. Apr. 5 (7 a.m.) 14,800 sec.-ft.; Apr. 10 (11 a.m.) 15,300 sec.-ft.; July 15 (6 p.m.) 19,200 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of records for station near Culloden.

g Computed from graph based on once-daily wire-weight gage readings by U. S. Weather Bureau.

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, and 8 miles downstream from Crisp County Dam. Datum of gage is 193.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 3,860 square miles.

Records available.- January 1930 to June 1933, October 1934 to September 1948.

Average discharge.- 16 years (1930-32, 1934-48), 4,621 second-feet.

Extremes.- Maximum discharge during year, 27,600 second-feet Apr. 2 (gage height, 20.5 feet); minimum daily, 360 second-feet Sept. 26.
1930-33, 1934-48: Maximum discharge, 48,800 second-feet Mar. 25, 1944 (gage height, 27.7 feet); minimum daily, 152 second-feet June 8, 1941.
Maximum stage known, 35.1 feet Jan. 20, 1925, from floodmark.

Remarks.- Records good except those for periods of fragmentary or no gage-height record, which are poor. Flow regulated by Crisp County power plant and reservoir (capacity, 35,000 acre-feet). Normal operation of power plant does not materially affect figures of monthly runoff.

Revisions (water year).- W 822: Drainage area. W 852: 1936(M).

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,690	2,080	6,240	6,370	13,600	6,630	19,300	1,480	5,660	2,440	5,300	2,280
2	1,650	1,380	6,110	7,580	9,440	6,630	24,500	1,100	5,670	2,500	5,660	2,080
3	1,700	2,980	5,980	6,370	8,900	9,960	22,400	4,230	5,600	1,810	5,640	2,060
4	1,480	4,410	5,980	6,370	6,110	9,120	16,700	4,070	5,640	560	5,660	1,200
5	415	5,510	5,980	6,370	6,750	8,840	13,700	4,020	5,680	1,700	5,670	3,160
6	1,430	3,760	3,640	6,370	11,500	10,700	16,700	4,330	4,920	2,430	5,710	3,670
7	1,940	3,040	5,850	6,240	9,690	14,600	19,100	4,360	3,110	2,520	5,930	2,710
8	2,810	4,330	5,850	5,850	11,000	12,800	17,800	2,390	3,000	3,060	6,000	2,430
9	2,820	3,710	5,590	5,850	10,400	16,700	15,100	4,100	2,980	2,460	5,980	3,260
10	2,640	4,670	6,110	5,850	14,600	17,700	14,400	4,880	2,940	1,840	5,750	2,460
11	2,630	4,800	6,370	5,460	14,200	20,600	17,400	4,980	2,860	2,490	5,580	1,780
12	639	6,030	6,890	5,720	14,900	25,800	17,400	4,940	1,640	4,060	5,540	3,160
13	1,950	6,160	8,280	5,850	17,400	25,100	14,500	3,300	a540	5,640	5,480	2,080
14	2,270	6,030	12,800	5,980	20,400	25,600	13,800	3,180	f2,140	6,980	4,700	2,220
15	2,720	6,030	14,400	5,980	22,200	18,300	13,400	1,500	2,940	10,600	3,820	2,380
16	2,960	6,160	15,400	5,980	21,800	12,200	11,500	1,600	2,890	17,400	4,600	2,400
17	3,020	6,290	16,100	5,980	21,000	10,200	7,440	3,580	2,870	17,700	4,780	2,400
18	3,680	10,300	15,400	5,980	17,200	9,820	6,500	3,250	2,890	14,000	4,760	1,090
19	923	12,400	16,500	5,850	15,300	11,600	6,370	3,200	1,670	8,420	4,530	430
20	3,200	11,400	13,600	5,980	14,400	11,500	6,110	3,100	f960	10,900	3,460	1,440
21	3,530	12,500	15,600	6,110	12,700	18,000	5,980	2,760	3,000	8,420	2,800	2,180
22	3,280	11,500	14,200	6,110	15,000	13,600	5,850	1,700	3,880	8,720	1,680	2,200
23	2,890	11,600	12,200	6,370	8,280	15,600	5,720	f810	3,200	7,020	3,280	2,280
24	2,660	12,200	9,820	8,840	10,700	15,000	5,720	2,780	2,650	7,300	2,980	2,220
25	2,180	12,400	11,800	11,100	9,680	14,100	3,880	3,040	2,950	7,050	2,900	1,420
26	451	11,800	7,860	9,400	6,760	11,900	4,120	2,980	1,920	6,460	2,900	360
27	2,140	10,100	8,420	10,700	8,000	10,500	5,590	3,180	a480	6,020	2,990	1,360
28	2,400	7,020	8,560	9,540	5,270	11,400	5,590	3,140	f2,340	4,970	1,920	1,640
29	2,590	7,020	7,860	9,400	6,630	12,700	4,940	1,960	2,650	3,360	422	2,230
30	2,780	7,020	8,420	7,020	-	12,900	3,360	2,700	2,520	3,380	2,460	2,410
31	2,570	-	7,720	8,830	-	13,600	-	5,000	-	2,950	2,760	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	70,038	3,680	415	2,259	0.585	0.67
November	214,630	12,500	1,380	7,154	1.85	2.06
December	295,530	16,500	3,640	9,533	2.47	2.85
Calendar year 1947	2,168,219	26,300	415	5,940	1.54	20.89
January	215,400	11,100	5,460	6,948	1.80	2.08
February	364,260	22,200	5,720	12,560	3.25	3.50
March	433,700	25,800	6,630	13,990	3.62	4.17
April	344,870	24,500	3,360	11,500	2.98	3.32
May	97,640	4,980	810	3,150	.816	.94
June	92,190	5,680	480	3,073	.796	.89
July	185,160	17,700	560	5,973	1.55	1.79
August	131,642	6,000	422	4,247	1.10	1.27
September	62,990	3,670	360	2,100	.544	.61
Water year 1947-48	2,508,050	25,800	360	6,853	1.78	24.15

a No gage-height record; discharge computed on basis of records for station at Albany.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Flint River at Albany, Ga.

Location.- Water-stage recorder, lat. 31°36', long. 84°09', at Georgia Northern Railway bridge in Albany, Dougherty County. Datum of gage is 150.03 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 5,230 square miles.

Records available.- September 1929 to September 1948. February 1897 to December 1901 (gage heights only), January 1902 to June 1921, at site 1 mile downstream. Gage-height records collected at former site since 1893 are contained in reports of U. S. Weather Bureau.

Average discharge.- 37 years (1902-20, 1929-48), 6,459 second-feet.

Extremes.- Maximum discharge during year, 45,800 second-feet Apr. 2 (gage height, 27.5 feet); minimum daily, 860 second-feet Oct. 5, Sept. 19.

1902-21, 1929-48: Maximum discharge, 64,800 second-feet Jan. 22, 1943 (gage height, 31.6 feet); minimum daily, 426 second-feet Aug. 24, 1930.

Maximum stage known, 37.84 feet Jan. 21, 1925, from floodmark, present site and datum (discharge, 92,000 second-feet, from rating curve extended above 60,000 second-feet).

Remarks.- Records good except those for fragmentary or no gage-height record, which are fair. Flow regulated by power plants above station. Capacity of reservoirs insufficient to materially affect figures of monthly runoff.

Revisions (water years).- W 822: Drainage area. W 1052: 1930, 1934(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.3	860	6.6	6,300	23.0	32,200
3.0	1,350	9.5	11,400	26.0	40,400
4.0	2,290	15.5	20,000	27.5	45,800
5.0	3,610	20.0	26,500		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,320	a3,100	8,840	10,600	15,800	9,580	27,600	4,890	6,670	3,320	5,580	3,610
2	2,200	a2,500	8,800	11,100	15,600	9,750	41,800	2,910	7,240	3,040	7,050	3,180
3	2,140	a3,500	8,170	8,440	13,000	12,800	38,600	2,910	7,050	3,110	7,240	2,290
4	1,860	a5,500	8,170	9,600	9,750	16,900	30,700	3,680	6,860	2,070	7,430	2,290
5	860	a6,800	7,990	10,100	10,100	15,500	24,900	4,550	6,860	2,020	7,430	2,920
6	2,270	a5,500	7,050	7,950	14,600	15,600	22,800	5,400	6,480	3,460	7,620	4,070
7	2,120	4,550	6,670	8,890	14,200	18,800	23,800	5,760	4,550	3,460	7,990	4,230
8	2,820	5,230	7,620	8,530	13,100	21,000	24,800	5,060	4,070	3,540	8,170	3,680
9	3,760	5,580	7,620	8,170	13,400	22,800	24,900	4,890	3,910	f3,610	7,990	3,840
10	3,680	5,060	9,480	8,170	16,600	27,500	22,400	5,580	3,910	a3,100	7,810	3,760
11	3,540	6,480	10,600	7,810	18,000	28,600	22,700	6,120	3,840	a4,500	7,240	3,680
12	2,390	8,350	16,300	7,430	18,900	33,800	24,900	6,120	3,760	a6,500	6,670	3,540
13	2,510	9,410	15,900	8,170	21,600	35,500	22,300	5,230	2,070	7,430	6,670	3,250
14	2,760	10,400	17,800	8,530	24,400	33,200	19,200	4,390	2,590	10,400	6,120	2,650
15	2,650	8,410	20,900	9,070	27,500	30,300	17,700	4,070	2,550	14,500	5,580	2,600
16	3,390	8,710	23,000	9,070	25,900	22,100	16,500	3,320	3,540	19,600	5,230	3,180
17	3,610	8,890	23,800	9,070	25,700	18,600	11,100	3,390	3,610	f20,300	6,120	3,040
16	4,070	12,500	22,800	9,070	24,000	17,000	9,750	3,610	3,610	20,600	6,120	2,320
19	3,400	15,900	22,900	8,890	20,600	17,700	9,240	3,910	3,610	10,600	5,940	860
20	3,180	15,600	21,200	8,890	19,300	17,400	8,890	3,990	1,510	15,600	5,060	2,140
21	3,910	16,700	19,800	9,070	18,000	19,700	8,530	3,910	3,110	13,600	4,390	2,160
22	4,230	16,200	20,600	9,580	17,200	22,300	8,170	3,610	3,760	11,400	3,910	2,470
23	3,990	15,800	17,400	9,820	16,900	19,200	7,990	2,590	3,910	8,350	3,390	2,650
24	3,760	16,500	14,800	12,800	15,600	20,900	7,810	2,650	3,610	9,580	3,540	2,840
25	3,910	18,100	15,000	15,200	14,300	19,600	7,050	3,610	3,680	8,170	3,610	2,290
26	1,930	18,300	12,100	14,900	11,600	18,000	6,120	3,760	3,760	8,170	3,610	1,070
27	2,140	15,900	13,100	15,200	10,900	15,300	6,480	3,760	2,600	7,620	3,610	1,870
28	2,750	11,300	13,100	14,000	9,580	15,800	6,860	3,990	2,340	7,050	3,540	1,980
29	3,180	10,900	8,990	14,500	9,580	17,400	6,860	4,230	3,320	5,400	2,290	2,260
30	a3,500	9,960	12,300	11,200	-	17,000	6,300	3,910	3,390	4,890	1,970	2,840
31	a3,600	-	11,200	12,800		17,400	-	4,550	-	4,550	2,470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	92,430	4,230	860	2,982	0.570	0.66
November	301,630	18,300	2,500	10,050	1.92	2.14
December	434,000	23,800	6,670	14,000	2.68	3.09
Calendar year 1947	2,925,360	31,000	860	8,015	1.53	20.79
January	316,620	15,200	7,430	10,210	1.95	2.25
February	485,710	27,500	9,580	16,750	3.20	3.45
March	627,030	35,500	9,580	20,230	3.87	4.46
April	516,750	41,800	6,120	17,220	3.29	3.67
May	130,350	6,120	2,590	4,205	.804	.93
June	121,770	7,240	1,510	4,059	.776	.87
July	249,540	20,600	2,020	8,050	1.54	1.78
August	171,390	8,170	1,970	5,529	1.06	1.22
September	83,560	4,230	860	2,785	.532	.59
Water year 1947-48	3,530,780	41,800	860	9,647	1.84	25.11

a No gage-height record; discharge computed on basis of records for stations at Oakfield and at Bainbridge.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

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. Datum of gage is 58.06 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 7,350 square miles.

Records available.- January 1908 to December 1913, December 1928 to September 1948. Gage-height records collected at same site since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 24 years (1908-13, 1929-48), 8,692 second-feet.

Extremes.- Maximum discharge during year, 61,500 second-feet Apr. 5 (gage height, 33.2 feet); minimum daily, 3,930 second-feet Oct. 6, 7.

1908-13, 1928-48: Maximum discharge, 83,200 second-feet Mar. 21, 1929 (gage height, 37.73 feet); minimum daily, 2,300 second-feet Dec. 7, 1931.

Maximum stage known, 40.9 feet, present datum, Jan. 24, 1925 (discharge, 101,000 second-feet, from rating curve developed in 1929 and extended above 70,000 second-feet).

Remarks.- Records good. Some regulation by power plants above station. Capacity of reservoirs insufficient to materially affect figures of monthly runoff.

Revisions (water years).- W 697: 1908-13. W 822: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 6 to Sept. 30)

5.7	3,660	20.0	22,200
6.4	4,290	23.0	27,800
8.0	5,860	26.0	35,000
10.0	8,030	30.0	48,100
15.0	14,500	33.0	60,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,760	5,460	15,500	16,800	17,400	15,500	27,800	12,000	8,030	6,160	9,950	6,060
2	4,660	5,460	14,500	15,300	18,600	15,300	38,800	11,000	9,230	6,160	10,200	6,600
3	4,560	5,560	13,700	15,600	19,700	15,500	50,900	9,470	9,710	6,060	11,000	6,490
4	4,470	5,160	13,000	14,600	18,300	17,700	59,200	8,870	9,830	6,160	11,200	5,960
5	4,380	6,060	12,700	14,600	16,500	21,700	60,600	9,350	9,710	5,760	11,500	6,160
6	3,930	7,370	12,400	14,900	15,600	23,300	54,900	9,830	9,590	5,160	11,600	6,270
7	3,930	7,590	11,600	14,500	17,200	24,500	46,600	10,600	9,350	5,860	11,800	7,260
8	4,380	7,040	11,000	13,700	17,800	27,200	39,800	10,800	8,270	6,060	12,000	7,810
9	4,660	7,040	11,400	13,400	17,400	30,500	36,400	10,500	7,590	6,060	12,000	7,700
10	5,460	7,370	11,600	13,100	17,400	32,700	35,300	9,950	7,370	6,380	11,800	7,480
11	5,560	7,370	13,000	12,800	18,600	35,600	33,400	10,300	7,150	6,600	11,400	7,260
12	5,560	8,390	15,300	12,500	20,200	38,200	31,900	10,700	7,040	7,260	11,000	7,040
13	5,260	9,950	19,500	12,300	21,500	40,400	31,700	10,600	6,930	9,950	10,700	6,820
14	4,380	11,400	21,500	12,700	23,500	43,400	31,200	10,100	6,060	13,100	10,600	6,600
15	4,760	12,500	22,900	13,100	25,100	44,400	29,100	9,350	5,860	14,900	10,200	6,160
16	4,860	12,300	25,100	13,500	26,600	43,400	26,600	8,870	5,860	17,000	9,830	5,960
17	5,260	11,800	27,200	13,800	27,800	39,800	24,700	8,150	6,490	19,100	9,470	6,270
18	5,560	11,900	28,900	13,800	28,200	34,200	21,400	8,030	6,600	20,700	9,950	6,060
19	5,860	13,700	29,600	13,500	28,000	30,200	18,800	7,920	6,710	21,200	10,200	5,760
20	5,760	15,800	29,300	13,400	26,600	28,500	17,700	8,030	6,710	17,600	10,600	4,860
21	5,260	16,800	28,500	13,500	24,700	27,400	16,800	8,030	5,760	17,200	10,100	4,860
22	5,760	17,800	27,000	13,800	23,500	27,200	16,000	8,030	5,860	16,600	9,350	5,160
23	5,960	18,300	26,200	14,200	22,600	28,700	15,500	7,810	6,600	15,300	8,750	5,460
24	5,960	18,400	24,500	14,600	22,400	27,800	15,100	7,150	6,820	13,500	8,030	5,460
25	5,860	19,100	22,200	16,000	21,400	27,600	14,600	6,710	6,820	13,200	7,700	5,660
26	5,760	20,000	20,800	17,800	20,500	27,000	13,800	7,370	6,820	12,500	7,590	5,360
27	4,960	20,800	19,400	18,800	18,600	26,000	13,000	7,480	6,710	12,400	7,370	4,660
28	4,380	20,300	18,600	19,100	17,400	24,200	12,800	7,480	6,060	11,800	7,260	4,470
29	4,660	18,200	18,400	18,900	16,200	23,100	12,800	7,700	5,360	11,400	7,150	4,860
30	5,160	16,500	16,500	18,600	-	23,500	12,500	7,810	6,060	10,500	6,490	5,060
31	5,360	-	17,000	17,200	-	24,000	-	7,700	-	10,200	5,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	157,090	5,960	3,930	5,067	0.689	0.79
November	365,420	20,800	5,160	12,180	1.66	1.85
December	598,800	29,600	11,000	19,320	2.63	3.03
Calendar year 1947	4,153,020	31,900	3,930	11,380	1.55	21.04
January	460,400	19,100	12,300	14,850	2.02	2.33
February	609,300	28,200	15,600	21,010	2.86	3.08
March	888,500	44,400	15,300	28,660	3.90	4.50
April	859,700	60,600	12,500	28,660	3.90	4.35
May	277,690	12,000	6,710	8,958	1.22	1.41
June	216,960	9,830	5,360	7,232	.984	1.10
July	351,830	21,200	5,160	11,350	1.54	1.78
August	302,650	12,000	5,860	9,763	1.33	1.53
September	181,590	7,810	4,470	6,053	.824	.92
Water year 1947-48	5,269,930	60,600	3,930	14,400	1.96	26.67

Peak discharge (base, 15,000 sec.-ft.).- Nov. 27, 20,800 sec.-ft.; Dec. 19, 29,600 sec.-ft.; Feb. 3 (7 a.m.) 20,000 sec.-ft.; Feb. 18, 28,200 sec.-ft.; Mar. 15 (10 a.m.) 44,800 sec.-ft.; Apr. 5 (5 a.m.) 61,500 sec.-ft.; July 19 (11 a.m.) 21,400 sec.-ft.

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 feet downstream from Central of Georgia Railway bridge, 1 mile downstream from Ten Mile Creek, and 2½ miles northwest of Thomaston, Upson County.

Drainage area.- 186 square miles.

Records available.- July 1938 to September 1948.

Average discharge.- 10 years, 227 second-feet.

Extremes.- Maximum discharge during year, 2,400 second-feet Feb. 9 (gage height, 5.62 feet); minimum daily, 29 second-feet Oct. 7, Sept. 2.
1938-48: Maximum discharge, 6,380 second-feet Mar. 20, 1944 (gage height, 7.63 feet); minimum daily, 5.4 second-feet Sept. 24, 1941.

Remarks.- Records good. Some regulation at low flow caused by diversion for municipal and industrial supplies at Thomaston.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	58	218	347	910	374	1,240	190	198	63	107	40
2	37	158	218	416	630	454	1,680	186	172	63	107	29
3	35	190	210	404	440	582	1,230	183	149	68	140	40
4	30	155	206	315	380	662	760	194	140	59	203	47
5	31	121	198	280	352	542	534	218	124	48	300	124
6	41	110	198	266	342	938	590	257	118	61	222	107
7	29	124	198	252	364	1,960	1,150	234	113	54	135	94
8	63	162	202	244	840	2,180	1,550	210	107	53	113	67
9	56	162	218	239	1,780	1,200	940	183	107	72	107	56
10	56	124	369	239	2,250	930	566	166	96	204	89	50
11	61	1,500	461	234	1,650	840	706	158	86	336	89	53
12	96	1,200	614	226	1,090	630	566	152	82	369	84	43
13	65	930	688	325	1,200	510	461	158	82	342	73	43
14	51	374	760	380	1,410	461	398	140	82	380	72	47
15	48	594	910	342	950	428	380	130	94	369	72	46
16	51	606	1,090	266	688	750	352	124	84	330	73	43
17	77	614	1,090	252	566	1,240	330	121	110	218	84	43
18	79	584	646	252	503	1,200	300	116	118	172	83	37
19	65	850	447	248	454	751	275	110	91	158	65	40
20	65	850	392	239	428	558	266	104	84	152	61	43
21	50	489	440	270	422	489	262	102	170	118	63	37
22	47	364	496	295	503	489	252	94	195	96	61	32
23	47	347	503	270	503	742	248	94	113	91	63	43
24	50	475	404	542	447	840	248	96	91	82	45	35
25	54	542	454	574	392	697	244	94	74	82	50	30
26	59	582	482	475	374	489	230	96	74	82	49	33
27	63	380	454	358	364	646	222	136	68	67	47	43
28	65	305	369	342	422	518	210	186	77	72	38	158
29	59	270	336	352	398	422	202	315	65	94	43	162
30	51	252	315	440	-	386	194	386	67	257	43	143
31	51	-	300	706	-	776	-	290	-	152	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,666	96	29	53.7	0.289	0.33
November	13,472	1,500	58	449	2.41	2.69
December	13,886	1,090	198	448	2.41	2.78
Calendar year 1947	112,435	3,950	27	308	1.66	22.49
January	10,390	706	226	335	1.80	2.08
February	21,052	2,250	342	726	3.90	4.21
March	23,684	2,180	374	764	4.11	4.74
April	16,586	1,680	194	553	2.97	3.31
May	5,223	386	94	168	.903	1.04
June	3,231	198	65	108	.581	.65
July	4,764	380	48	154	.828	.95
August	2,830	300	38	91.3	.491	.57
September	1,808	162	29	60.3	.324	.36
Water year 1947-48	118,592	2,250	29	324	1.74	23.71

Peak discharge (base, 1,700 sec.-ft.).- Nov. 11 (4 p.m.) 1,960 sec.-ft.; Feb. 9 (8 p.m.) 2,400 sec.-ft.; Mar. 8 (10 a.m.) 2,320 sec.-ft.; Apr. 2 (7 a.m.) 2,030 sec.-ft.; Apr. 2 (7 a.m.) 2,030 sec.-ft. Apr. 8 (4 p.m.) 1,740 sec.-ft.

Whitewater Creek near Butler, Ga.

Location.- Staff gage, lat. 32°28', long. 84°16', at bridge on U. S. Highway 19, 500 feet upstream from Rambulette Creek, 6½ miles south of Butler, Taylor County, and 8 miles upstream from Cedar Creek.

Drainage area.- 75 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 520 second-feet July 10 (gage height, 4.6 feet, from graph based on gage readings); minimum daily, 111 second-feet on many days in October.

1943-48: Maximum discharge, 1,340 second-feet Mar. 23, 1944 (gage height, 6.5 feet); minimum daily, 98 second-feet June 13, 1945.

Remarks.- Records fair. Variable backwater from Rambulette Creek which is regulated by Upson Mill. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.7	111
2.5	184
3.1	248
3.7	328
4.3	440

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	129	129	165	204	165	313	156	156	214	165	147
2	111	156	129	194	174	174	299	156	147	138	174	138
3	111	156	129	174	165	194	224	147	138	138	260	138
4	111	129	129	156	156	184	194	156	138	129	313	138
5	111	138	129	156	165	174	184	156	129	129	285	174
6	120	129	129	147	165	236	260	174	129	129	236	184
7	120	138	129	147	165	313	285	184	129	120	184	156
8	138	129	138	147	214	260	248	165	129	129	165	129
9	147	156	156	156	299	204	214	147	138	309	174	138
10	129	138	317	156	328	184	194	147	129	426	165	147
11	120	174	380	147	260	214	194	147	129	380	174	138
12	120	224	313	147	248	194	184	147	129	260	174	129
13	111	174	285	165	272	184	184	147	129	204	156	129
14	111	147	260	184	236	174	184	138	129	184	147	120
15	111	174	236	184	194	174	165	138	120	299	147	120
16	138	174	260	156	184	204	174	129	129	285	156	129
17	165	147	214	156	184	194	174	129	138	214	165	120
18	156	165	184	156	184	214	165	129	129	174	156	120
19	120	194	184	156	174	204	165	138	129	156	138	129
20	120	194	174	156	184	194	165	129	138	194	147	120
21	111	156	174	174	184	174	165	129	138	174	138	120
22	111	156	184	184	214	174	165	129	129	156	194	120
23	111	165	165	165	204	224	165	129	138	138	156	120
24	129	174	174	248	184	236	165	129	129	165	138	129
25	120	184	184	248	174	214	165	138	120	194	156	120
26	111	156	204	194	174	194	165	138	120	165	138	120
27	120	138	174	165	174	194	156	156	165	147	138	138
28	111	138	165	174	174	194	165	174	248	156	129	174
29	111	138	165	174	174	184	156	194	184	174	138	204
30	111	138	165	174	-	174	156	194	285	194	138	165
31	111	-	156	236	-	194	-	174	-	184	138	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,738	165	111	121	1.61	1.86
November	4,708	224	129	167	2.09	2.33
December	5,914	380	129	191	2.55	2.94
Calendar year 1947	54,582	380	102	150	2.00	27.06
January	5,341	248	147	172	2.29	2.64
February	5,811	328	156	200	2.67	2.88
March	6,194	313	165	200	2.67	3.08
April	5,792	313	156	193	2.57	2.87
May	4,643	194	129	150	2.00	2.31
June	4,317	285	120	144	1.92	2.14
July	6,058	426	120	195	2.60	3.00
August	5,282	313	129	170	2.27	2.62
September	4,153	204	120	138	1.84	2.05
Water year 1947-48	61,951	426	111	169	2.25	30.72

Peak discharge (base, 350 sec.-ft.).- Dec. 10 (11 p.m.) 465 sec.-ft.; Feb. 10 (2 a.m.) 380 sec.-ft.; July 10 (3 p.m.) 520 sec.-ft.

Ichawaynochaway Creek at Milford, Ga.

Location.- Water-stage recorder, lat. 31°22', long. 84°32', at bridge on county road at Milford, Baker County, 2¼ miles upstream from Alligator Creek and 5½ miles upstream from Chickasawhatchee Creek.

Drainage area.- 620 square miles.

Records available.- August 1905 to December 1907, October 1939 to September 1948.

Extremes.- Maximum discharge during year, 8,230 second-feet July 12; minimum, 351 second-feet Oct. 23.

1905-7, 1939-48: Maximum discharge, 10,100 second-feet Jan. 21, 1943 (gage height, 13.9 feet); minimum observed, 166 second-feet June 15, 1941 (gage height, 1.00 foot).

Remarks.- Records good. Moderate diurnal fluctuation at low flow.

Cooperation.- Gage-height record furnished by Emory University Field Station to June 30.

Revisions.- W 922: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.4	320	8.0	4,120
1.7	518	9.0	4,860
2.3	1,010	11.5	7,350
3.0	1,420		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	402	476	1,280	1,230	1,720	1,280	3,220	759	768	533	1,570	518
2	389	654	1,140	1,230	1,880	1,360	5,310	724	733	715	1,360	541
3	376	863	1,080	1,230	1,880	1,570	6,700	672	654	838	1,360	638
4	376	1,010	1,010	1,280	1,720	2,580	5,600	698	587	750	1,420	698
5	382	1,040	1,010	1,360	1,520	3,720	3,660	742	533	595	1,470	759
6	376	935	972	1,310	1,360	3,880	2,740	812	497	490	1,520	887
7	395	768	935	1,180	1,310	4,390	2,260	855	476	435	1,880	1,200
8	422	689	935	1,110	1,260	5,700	2,090	863	455	408	1,570	1,420
9	462	724	919	1,040	1,230	5,700	1,930	829	435	435	1,180	1,140
10	533	750	1,080	1,010	1,260	5.310	1,930	794	428	698	1,010	863
11	556	895	1,520	972	1,360	5,500	1,980	750	415	1,460	1,010	698
12	526	1,720	2,090	972	1,720	5,400	2,040	698	402	6,530	1,080	629
13	476	2,140	2,850	1,040	2,200	4,860	1,930	646	395	7,350	1,230	595
14	441	2,310	3,500	1,260	2,040	3,720	1,620	629	382	4,860	1,280	587
15	441	2,200	3,280	1,470	1,770	2,900	1,470	595	408	3,600	a1,100	580
18	435	1,720	3,330	1,620	1,670	2,480	1,420	572	476	2,690	a1,000	572
17	556	1,420	3,440	1,570	1,520	2,690	1,260	549	469	2,360	a1,100	549
18	612	1,280	3,440	1,360	1,470	3,600	1,260	549	490	2,310	a1,200	511
19	612	1,310	3,110	1,260	1,470	3,220	1,200	526	587	1,930	a1,400	483
20	638	1,570	2,580	1,200	1,470	2,690	1,140	504	672	1,520	a1,600	469
21	612	1,620	2,090	1,280	1,360	2,420	1,080	497	595	1,200	a1,800	462
22	483	1,720	1,770	1,420	1,470	2,200	1,010	483	580	1,110	a2,000	448
23	441	1,820	1,620	1,570	1,620	1,980	1,040	469	629	1,180	a1,800	462
24	476	1,880	1,470	1,770	1,880	1,980	935	462	742	1,280	a1,500	448
25	408	1,980	1,470	1,980	1,980	1,980	927	462	794	1,420	a1,300	428
26	455	2,260	1,470	2,260	1,770	1,980	919	462	612	1,360	a1,100	408
27	518	2,480	1,520	2,310	1,520	1,880	879	490	462	1,140	a900	408
26	462	2,310	1,520	2,090	1,360	1,820	855	556	428	1,040	a800	476
29	497	1,820	1,470	1,770	1,280	1,980	829	620	435	1,140	a700	580
30	504	1,470	1,420	1,620	-	1,930	785	680	428	1,670	a600	672
31	462	-	1,310	1,620	-	1,880	-	750	-	1,720	541	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,724	638	376	475	0.766	0.88
November	43,834	2,480	476	1,461	2.36	2.63
December	56,631	3,500	919	1,827	2.95	3.40
Calendar year 1947	422,908	7,400	376	1,159	1.87	25.36
January	44,394	2,310	972	1,432	2.31	2.66
February	46,070	2,200	1,230	1,589	2.56	2.76
March	94,580	5,700	1,280	3,051	4.92	5.67
April	60,019	6,700	785	2,001	3.23	3.60
May	19,697	863	462	635	1.02	1.18
June	15,967	794	382	532	.858	.96
July	54,767	7,350	408	1,767	2.85	3.29
August	39,381	2,000	541	1,270	2.05	2.36
September	19,129	1,420	408	638	1.03	1.15
Water year 1947-48	509,193	7,350	376	1,391	2.24	30.54

Peak discharge (base, 3,000 sec.-ft.).- Dec. 14 (2 p.m.) 3,550 sec.-ft.; Mar. 8 (10 p.m.) 6,100 sec.-ft.; Mar. 18 (2 p.m.) 3,660 sec.-ft.; Apr. 3 (3 p.m.) 6,910 sec.-ft.; July 12 (10 p.m.) 8,230 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for Chickasawhatchee Creek at Elmodel.

Alligator Creek near Milford, Ga.

Location.- Water-stage recorder and concrete control, lat. 31°21', long. 84°34', 100 feet downstream from bridge on county road, 2 miles upstream from mouth, and 2 miles southwest of Milford, Baker County. Datum of gage is 167.16 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Emory University Field Station).

Records available.- January 1942 to September 1948.

Extremes.- Maximum gage height, 4.14 feet Apr. 1 (discharge not determined); minimum daily discharge, 0.32 second-foot July 6, 7.

1942-48: Maximum gage height, 4.44 feet Mar. 7, 1944 (discharge not determined); no flow for periods in most years.

Remarks.- Records good except those above 150 second-feet, which are fair. Diurnal fluctuation at low flow caused by water losses.

Cooperation.- Gage-height record furnished by Emory University Field Station Oct. 1 to June 30.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	6.5	23	26	a38	22	600	9.6	4.9	4.0	17	6.5
2	2.9	9.2	21	28	28	23	218	9.6	4.6	1.8	16	6.5
3	2.5	4.6	20	25	26	87	86	9.2	4.4	1.4	16	6.5
4	2.3	3.8	21	23	24	178	53	10	4.1	.90	15	7.6
5	2.3	3.8	21	22	24	84	40	11	3.8	.60	12	12
6	2.3	3.8	22	20	23	137	36	13	3.8	.32	12	8.4
7	3.3	5.2	21	19	23	294	34	14	4.4	.32	10	7.2
6	6.5	8.0	21	18	22	120	31	10	4.1	1.5	10	6.5
9	4.1	5.5	22	17	23	121	33	9.2	3.6	4.0	10	6.1
10	2.9	5.2	50	16	23	162	31	8.8	3.6	15	14	5.8
11	2.5	18	144	16	24	96	30	8.4	3.1	6.1	13	5.5
12	2.3	25	172	16	43	86	27	8.0	3.1	6.8	10	5.8
13	2.3	19	94	32	36	56	24	7.6	3.1	8.4	10	5.8
14	2.0	16	77	35	35	42	24	7.6	2.7	11	9.6	5.8
15	2.1	20	79	26	30	37	24	7.2	2.5	9.6	10	5.8
16	3.6	20	134	23	26	37	23	7.2	2.7	7.6	14	4.9
17	2.9	16	82	22	29	50	21	6.8	3.1	7.2	14	4.6
18	2.5	26	53	24	29	44	19	6.5	3.1	6.8	12	4.6
19	2.3	48	41	23	26	39	17	6.1	2.5	6.5	9.6	4.1
20	2.3	34	36	26	24	35	16	6.1	2.3	5.8	8.8	4.1
21	2.1	32	34	30	25	32	15	6.1	2.3	5.8	8.8	3.8
22	1.8	45	33	30	47	30	14	5.8	2.1	5.8	18	3.8
23	1.8	54	30	26	42	34	14	5.5	1.8	5.8	11	3.8
24	2.1	54	29	40	32	32	13	5.5	1.5	9.2	9.6	3.6
25	2.0	45	35	39	28	28	12	5.2	1.4	8.4	8.8	3.6
26	1.8	36	34	31	26	25	12	5.2	2.1	5.8	8.8	3.1
27	1.8	31	30	a28	24	26	12	5.2	2.0	4.9	8.0	5.2
28	1.8	27	27	a26	23	24	10	5.8	1.5	8.0	7.2	8.8
29	1.7	25	25	a28	22	23	10	7.2	1.4	22	7.2	5.2
30	1.4	24	24	a33	-	22	10	6.8	2.2	17	6.5	4.1
31	1.4	-	23	a41	-	42	-	5.5	-	14	6.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	76.5	6.5	1.4	2.47		
November	670.6	54	3.8	22.4		
December	1,478	172	20	47.7		
Calendar year 1947	6,242.3	232	.6	17.1		
January	809	41	16	26.1		
February	825	47	22	28.4		
March	2,068	294	22	66.7		
April	1,509	600	10	50.3		
May	239.7	14	5.2	7.73		
June	87.8	4.9	1.4	2.93		
July	213.34	22	.32	6.88		
August	343.4	18	6.5	11.1		
September	169.1	12	3.1	5.64		
Water year 1947-48	8,489.44	600	.32	23.2		

Peak discharge (base, 150 sec.-ft.).- Dec. 12 (4 a.m.) 218 sec.-ft.; Mar. 4 (1 a.m.) 250 sec.-ft.; Mar. 7 (9 a.m.) 379 sec.-ft.; Mar. 10 (3 a.m.) 210 sec.-ft.; Apr. 1 (10 a.m.) discharge not determined.

a No gage-height record; discharge computed on basis of recorded range in stage and records for nearby stations.

Chickasawhatchee Creek at Elmodel, Ga.

Location.- Water-stage recorder, lat. 31°22', long. 84°28', at bridge on State Highway 37 at Elmodel, Baker County, and 2 miles upstream from mouth.

Drainage area.- 320 square miles.

Records available.- October 1939 to September 1948.

Extremes.- Maximum discharge during year, 3,630 second-feet Mar. 10, Apr. 4 (gage height, 11.9 feet); minimum, 29 second-feet June 29, 30, July 9.

1939-48: Maximum discharge, that of Mar. 10, Apr. 4, 1948; minimum, 5.2 second-feet Oct. 29, 30, Nov. 3-6, 1943 (gage height, 0.77 foot).

Remarks.- Records good.

Cooperation.- Gage-height record furnished by Emory University Field Station Oct. 1 to June 30.

Revision.- W 922: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 14 to July 11)

1.2	25	2.0	123	7.0	1,170
1.3	31	2.4	211	8.5	1,670
1.5	48	3.0	332	10.0	2,340
1.6	59	4.0	512	11.8	3,550
1.8	87	5.5	802		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	63	1,260	846	1,120	802	2,350	229	99	36	548	138
2	52	169	1,140	846	1,060	740	3,470	211	97	34	566	121
3	43	157	1,020	824	1,040	915	3,470	197	97	37	548	110
4	37	165	890	780	990	1,350	3,550	187	92	40	548	115
5	36	174	780	740	965	1,510	3,470	213	81	41	512	201
6	34	183	700	720	915	1,950	3,110	264	67	42	440	231
7	34	206	640	680	868	2,760	2,520	304	57	37	386	239
8	37	250	584	660	802	2,900	2,040	264	51	33	350	239
9	40	246	530	620	780	3,110	1,750	248	46	37	323	237
10	39	233	680	602	740	3,550	1,510	239	41	140	341	231
11	39	332	915	566	740	3,550	1,410	237	37	176	359	220
12	37	602	1,440	530	824	3,470	1,230	224	33	274	359	199
13	37	740	1,630	584	846	3,320	1,120	204	33	548	323	176
14	37	824	1,790	640	890	3,040	1,020	174	30	476	304	152
15	36	890	1,990	640	940	2,700	990	150	31	530	284	138
16	40	965	2,340	640	940	2,340	868	134	37	620	284	123
17	55	940	2,340	660	940	2,140	780	119	34	584	332	110
18	55	915	2,240	720	890	2,090	700	108	34	530	359	101
19	54	1,040	2,140	760	846	2,040	640	97	35	458	422	94
20	57	940	2,090	780	802	2,040	584	89	33	422	530	84
21	63	890	1,950	802	780	1,950	530	78	39	377	584	78
22	67	915	1,790	824	915	1,750	476	71	43	350	640	69
23	72	1,020	1,590	802	940	1,630	440	64	45	341	584	67
24	72	1,120	1,410	915	940	1,470	404	60	39	332	458	62
25	72	1,140	1,320	990	915	1,350	377	57	34	386	377	56
26	66	1,140	1,230	1,060	915	1,230	341	55	33	386	323	51
27	57	1,170	1,120	1,090	940	1,200	323	52	32	386	294	48
28	52	1,290	1,040	1,120	915	1,170	294	55	31	368	264	66
29	58	1,350	990	1,170	868	1,120	274	78	30	440	224	69
30	54	1,350	915	1,170	-	1,040	248	90	30	530	192	68
31	50	-	868	1,170	-	1,120	-	101	-	512	174	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,544	72	34	49.8	0.156	0.18
November	21,419	1,350	63	714	2.23	2.49
December	41,362	2,340	530	1,334	4.17	4.81
Calendar year 1947	171,492	2,450	33	470	1.47	19.94
January	24,951	1,170	530	805	2.52	2.90
February	26,066	1,120	740	899	2.81	3.03
March	61,347	3,550	740	1,979	6.18	7.12
April	40,289	3,550	248	1,343	4.20	4.69
May	4,653	304	52	150	.469	.54
June	1,421	99	30	47.4	.148	.17
July	9,503	620	33	307	.959	1.11
August	12,232	640	174	395	1.23	1.42
September	3,893	239	48	130	.406	.45
Water year 1947-48	248,680	3,550	30	679	2.12	28.91

Peak discharge (base, 1,000 sec.-ft.).- Nov. 29 (9 p.m.) 1,380 sec.-ft.; Dec. 17 (3 a.m.) 2,400 sec.-ft.; Jan. 31 (6 a.m.) 1,200 sec.-ft.; Mar. 10 (5 p.m.) 3,630 sec.-ft.; Apr. 4 (9 p.m.) 3,630 sec.-ft.

Big Cypress Creek near Milford, Ga.

Location.- Water-stage recorder and concrete control with V-notch weir, lat. 31°19', long. 84°39', at county road 7 miles upstream from Little Cypress Creek and 8 miles southwest of Milford, Baker County. Datum of gage is 210.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Emory University Field Station).

Records available.- January 1942 to September 1948.

Extremes.- Maximum discharge during year, 105 second-feet Apr. 1 (gage height, 2.82 feet); no flow at times.
1942-48: Maximum discharge, that of Apr. 1, 1948; no flow at times.

Remarks.- Records fair.

Cooperation.- Gage-height record furnished by Emory University Field Station Oct. 1 to June 30.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.8	0.05	1.3	1.0	2.0	9.4	2.5	45
.9	.1	1.4	1.4	2.1	13	2.6	60
1.0	.2	1.5	1.9	2.2	18	2.7	78
1.1	.4	1.7	3.4	2.4	24	2.8	100
1.2	.65	1.8	4.8	2.4	33		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.2	6.1	9.4	11	8.0	84	1.7	0.4	0	4.4	1.9
2	0	.45	5.9	9.4	10	8.0	67	1.6	.55	0	4.1	1.9
3	0	.35	5.8	8.9	9.4	23	57	1.5	.95	0	3.7	1.8
4	0	.25	5.6	8.0	9.1	38	45	1.5	.3	0	3.4	1.9
5	0	.25	5.2	7.8	8.3	33	38	1.9	.15	0	3.1	3.2
6	0	.25	5.2	7.2	8.0	52	31	2.2	.05	0	3.4	2.9
7	0	.45	4.8	6.7	7.8	71	28	2.2	0	0	2.9	2.5
8	.05	.6	4.7	6.3	7.2	54	23	1.8	0	0	2.6	2.2
9	.1	.5	4.5	5.9	7.5	58	21	1.5	0	0	2.4	1.9
10	0	.45	10	5.8	7.8	57	18	1.4	0	.05	2.5	1.8
11	0	2.4	20	5.6	8.0	48	16	1.3	0	.05	2.9	1.7
12	0	3.4	28	5.2	13	43	14	1.1	0	.1	2.6	1.6
13	0	2.3	28	7.8	12	37	12	1.1	0	.3	2.2	1.5
14	0	1.8	28	7.8	12	29	10	.95	0	a.2	2.1	1.4
15	0	2.3	32	6.7	11	26	9.4	1.0	0	a.3	2.1	1.3
16	0	2.3	38	6.1	10	23	8.3	1.2	0	a.7	4.2	1.2
17	0	1.9	31	6.1	10	24	7.5	1.1	0	a.5	5.4	1.1
18	0	3.3	28	6.7	10	22	6.3	.85	0	a.4	4.2	.95
19	0	6.3	23	6.3	9.4	20	5.6	.5	0	.2	3.5	.85
20	0	4.8	20	6.7	8.9	18	5.2	.45	0	.1	3.3	.75
21	0	4.5	18	7.5	8.6	16	4.5	.35	0	.2	3.3	.65
22	0	7.0	18	7.2	13	14	4.1	.35	0	.1	4.8	.55
23	0	8.3	16	7.0	13	13	3.8	.25	0	.2	3.8	.5
24	0	8.6	14	10	12	12	3.4	.2	0	.3	3.4	.45
25	0	8.0	16	10	11	11	3.2	.15	0	.45	3.1	.4
26	0	7.5	a14	9.1	10	9.4	2.9	.1	0	.25	2.9	.3
27	0	7.2	a13	8.6	9.4	9.1	2.7	.05	0	.15	2.6	.6
28	0	7.0	a12	8.6	9.1	8.6	2.4	.15	0	.3	2.5	1.3
29	0	6.5	a11	8.6	8.6	7.8	2.1	.55	0	1.8	2.2	1.0
30	0	6.3	10	9.4	-	7.0	1.9	.8	0	3.0	2.2	.9
31	0	-	9.8	12	-	12	-	.5	-	2.9	2.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	0.15	0.10	0	0.005		
November	105.45	8.6	0.20	3.52		
December	485.6	38	4.5	15.7		
Calendar year 1947	1,439.65	38	0	3.94		
January	238.4	12	5.2	7.69		
February	285.1	13	7.2	9.83		
March	811.9	71	7.0	26.2		
April	537.3	84	1.9	17.9		
May	30.3	2.2	.05	.977		
June	2.4	.95	0	.080		
July	12.55	3.0	0	.405		
August	98.0	5.4	2.1	3.16		
September	41.0	3.2	.30	1.37		
Water year 1947-48	2,648.15	84	0	7.24		

Peak discharge (base, 25 sec.-ft.).- Dec. 15 (11 p.m.) 43 sec.-ft.; Mar. 7 (4 a.m.) 80 sec.-ft.; Apr. 1 (1 p.m.) 105 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

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.

Records available.- October 1920 to June 1921, June 1937 to September 1948.

Average discharge.- 11 years (1937-48), 576 second-feet.

Extremes.- Maximum discharge during year, 12,600 second-feet Apr. 2 (gage height, 19.9 feet, from floodmark, from rating curve extended above 8,000 second-feet by logarithmic plotting); minimum observed, 92 second-feet Oct. 31.

1920-21, 1937-48: Maximum discharge, that of Apr. 2, 1948; minimum observed, 21 second-feet Nov. 5, 1938.

Remarks.- Records fair. Gage read twice daily.

Revisions (water years).- W 852: Drainage area. W 1052: 1939(M), 1940(M), 1942(M), 1944(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 30 to July 14)

2.6	92	7.5	692	15.0	4,060
3.2	136	9.0	1,010	17.0	6,900
4.0	207	11.0	1,590	18.5	9,600
5.0	312	12.0	1,990	19.2	11,000
6.0	440	13.5	2,790		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	99	1,440	1,140	1,500	1,010	3,130	500	237	128	654	324
2	144	120	1,290	1,110	1,530	965	9,600	454	227	136	895	312
3	136	152	1,140	1,080	1,530	1,080	11,000	440	207	128	1,260	301
4	120	179	1,040	1,040	1,560	1,530	8,080	426	197	128	1,060	301
5	120	188	965	965	1,470	2,970	5,680	412	188	120	965	336
6	120	197	940	920	1,350	4,710	3,590	426	179	120	1,040	454
7	120	197	920	875	1,230	6,580	2,850	454	170	120	1,110	566
8	128	207	940	850	1,140	8,260	2,290	469	170	120	1,060	730
9	136	207	985	850	1,080	8,260	2,040	469	161	152	985	1,060
10	144	207	1,040	830	1,060	7,900	1,870	440	161	227	875	965
11	136	247	1,140	790	1,060	7,380	1,710	412	152	257	790	730
12	128	301	1,500	770	1,080	6,900	1,530	386	152	290	730	549
13	120	373	2,040	830	1,200	5,980	1,440	348	144	336	692	469
14	128	484	2,670	895	1,440	4,710	1,380	324	144	730	654	412
15	128	711	3,240	965	1,440	3,590	1,320	312	144	1,040	636	373
16	113	1,200	3,700	1,040	1,350	3,100	1,260	290	152	1,230	636	336
17	120	1,200	3,700	1,080	1,260	2,730	1,170	268	144	1,200	654	324
18	128	1,080	3,240	1,170	1,170	2,440	1,110	257	144	1,080	600	312
19	120	1,080	2,730	1,140	1,060	2,550	1,040	247	136	965	618	312
20	120	1,170	2,340	1,110	1,060	2,730	965	247	144	830	730	301
21	113	1,320	2,140	1,060	1,110	2,490	895	237	144	730	850	279
22	113	1,530	2,140	1,080	1,170	2,140	830	227	144	636	965	268
23	113	1,910	1,990	1,140	1,230	1,870	790	217	152	566	920	247
24	106	3,100	1,870	1,230	1,350	1,710	750	217	152	532	770	237
25	106	3,400	1,670	1,410	1,440	1,530	692	207	152	500	618	227
26	99	2,730	1,530	1,590	1,410	1,410	673	207	152	532	516	217
27	99	2,290	1,440	1,750	1,350	1,350	636	197	152	673	469	227
28	99	1,990	1,380	1,790	1,260	1,290	618	197	144	654	440	247
29	99	1,790	1,320	1,710	1,110	1,230	600	207	136	636	412	247
30	99	1,590	1,260	1,630	-	1,170	549	217	136	618	360	279
31	92	-	1,200	1,500	-	1,200	-	227	-	600	336	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,699	152	92	119	0.229	0.26
November	31,249	3,400	99	1,042	2.00	2.23
December	54,940	3,700	920	1,772	3.41	3.93
Calendar year 1947	330,008	7,720	92	904	1.74	23.58
January	35,340	1,790	770	1,140	2.19	2.52
February	37,000	1,560	1,060	1,276	2.45	2.64
March	102,765	8,260	965	3,315	6.38	7.36
April	70,088	11,000	549	2,336	4.49	5.01
May	9,938	500	197	321	.617	.71
June	4,817	237	136	161	.310	.35
July	16,014	1,230	120	517	.994	1.15
August	23,300	1,260	336	752	1.45	1.67
September	11,942	1,060	217	398	.765	.85
Water year 1947-48	401,092	11,000	92	1,096	2.11	28.68

Peak discharge (base, 2,000 sec.-ft.).- Nov. 25 (3 a.m.) 3,700 sec.-ft.; Dec. 16 (9 p.m.) 3,820 sec.-ft.; Mar. 8 (7 p.m.) 8,440 sec.-ft.; Apr. 2 (10 p.m.) 12,600 sec.-ft.

Long Branch near Damascus, Ga.

Location.- Water-stage recorder and concrete control with V-notch weir, lat. 31°18', long. 84°42', at county road bridge 1 mile east of Damascus, Early County.

Records available.- January 1945 to September 1948.

Extremes.- Maximum discharge during year, 787 second-feet Apr. 1 (gage height, 4.58 feet); no flow on many days.
1945-48: Maximum discharge, that of Apr. 1, 1948; no flow on many days.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	28	25	74	22	608	2	0.26	0	6.6	1.0
2	0	.05	22	25	66	22	579	2	.20	0	6.6	.92
3	0	0	19	24	57	131	450	1	.16	0	10	.88
4	0	0	17	22	48	278	350	1	.13	0	12	1.2
5	0	0	15	19	39	243	300	1	.09	0	11	3.9
6	0	0	14	17	33	316	250	2	.06	0	16	2.6
7	0	0	12	16	28	575	200	2	.05	0	10	3.0
8	0	0	12	15	25	395	160	1	.04	0	6.3	2.8
9	0	0	10	13	24	316	140	.9	0	0	4.3	2.2
10	0	0	53	12	24	338	110	.8	0	.01	4.2	1.8
11	0	.87	151	11	31	264	90	.7	0	0	4.4	1.5
12	0	1.3	251	9.9	68	214	80	.7	0	.03	3.8	1.2
13	0	.99	251	19	66	155	70	.6	0	.76	3.4	1.0
14	0	.99	214	24	58	112	50	.7	0	.95	3.0	.95
15	0	1.9	205	25	49	86	40	.8	0	.70	3.0	.85
16	0	1.3	259	26	40	71	35	.9	0	.65	14	.68
17	0	1.5	214	27	38	82	30	1.0	0	.68	28	.62
18	0	17	164	29	36	81	25	1.1	0	.57	31	.62
19	0	33	128	26	32	84	20	.9	0	.85	22	.60
20	0	50	98	29	28	75	15	.8	0	.70	17	.54
21	0	62	80	36	26	62	13	.7	0	.65	14	.52
22	0	88	66	42	64	51	11	.6	0	2.2	17	.50
23	0	116	55	42	84	53	9	.5	0	1.4	13	.45
24	0	126	46	80	70	51	8	.4	0	2.2	9.5	.43
25	0	126	51	87	56	44	6	.3	0	1.8	6.3	.41
26	0	108	49	82	45	35	5	.2	0	1.1	4.3	.37
27	0	86	44	72	36	32	4	.29	0	.99	3.4	1.0
28	0	64	39	62	30	26	4	.53	0	1.5	2.5	1.0
29	0	48	34	53	25	24	3	.52	0	8.3	2	.62
30	0	37	29	54	-	20	2	.37	.02	4.4	1.6	.60
31	0	-	25	74	-	49	-	.29	-	5.3	1.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	0	0	0	0		
November	969.90	126	0	32.3		
December	2,655	259	10	85.6		
Calendar year 1947	6,676.35	259	0	18.3		
January	1,097.9	87	9.9	35.4		
February	1,300	84	24	44.8		
March	4,307	575	20	139		
April	3,667	608	2.0	122		
May	26.60	2	.2	.858		
June	1.01	.26	0	.034		
July	35.74	8.3	0	1.15		
August	291.4	31	1.2	9.40		
September	34.76	3.9	.37	1.16		
Water year 1947-48	14,386.31	608	0	39.3		

Peak discharge (base, 150 sec.-ft.).- Dec. 16 (9 a.m.) 264 sec.-ft.; Mar. 7 (6 a.m.) 611 sec.-ft.; Apr. 1 (3 p.m.) 787 sec.-ft.

Note.- No gage-height record Apr. 3 to May 26, Aug. 28, 29; discharge computed on basis of recorded range in stage and records for Big Cypress Creek near Milford.

Chipola River near Altha, Fla.

Location.- Wire-weight gage, lat. 30°32'10", long. 85°09'55", in NW¼ sec. 32, T. 2 N., R. 9 W., at Willis Highway bridge, 3½ miles southwest of Altha, 3¾ miles upstream from Ten Mile Creek, and 17 miles southeast of Marianna. Datum of gage is 19.95 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 844 square miles.

Records available.- November 1912 to December 1913, September 1921 to September 1927, August 1929 to September 1931, March 1943 to September 1948.

Average discharge.- 13 years (1921-27, 1929-31, 1943-48), 1,665 second-feet.

Extremes.- Maximum discharge during year, 19,100 second-feet Apr. 4, 5 (gage height, 32.2 feet, from graph based on gage readings), from rating curve extended above 10,000 second-feet on basis of slope-area determination at gage-height 33.55 feet; minimum observed, 728 second-feet Oct. 31 (gage height, 9.14 feet).

1912-13, 1921-27, 1929-31, 1943-48: Maximum discharge, 25,000 second-feet Sept. 20, 1926 (gage height, 33.55 feet, from floodmarks), by slope-area method; minimum observed, 430 second-feet Oct. 20, 1925; minimum gage height observed, 8.50 feet Oct. 20, 1925, Oct. 25, Dec. 13, 1943.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Gage read once daily except Sundays and holidays when no readings are obtained. Some fluctuation during low flow by small power plant on Dry Creek.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Revisions.- W 1002: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

9.1	728	18.8	4,570	29.6	12,700
10.2	1,330	24.2	7,300	31.2	15,900
12.3	2,060	27.6	10,200	32.2	19,100

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	839	895	3,740	a2,950	a3,360	2,130	7,950	2,240	1,620	950	a2,760	1,620
2	839	a895	3,360	2,910	3,210	2,090	13,000	a2,160	1,560	1,010	3,140	1,590
3	839	895	3,060	2,760	3,140	2,310	16,800	2,090	1,460	1,010	3,810	1,560
4	839	950	2,840	a2,630	3,060	2,760	18,800	2,020	1,330	a1,010	4,160	1,690
5	a839	950	2,580	2,500	2,990	3,030	19,100	2,090	1,280	1,010	3,780	a2,080
6	839	895	2,430	2,350	2,880	3,400	18,100	1,990	a1,260	950	3,440	2,460
7	895	1,010	a2,320	2,240	2,800	4,250	15,900	2,060	1,230	950	3,290	3,100
8	895	950	2,200	2,240	a2,670	5,550	13,300	2,060	1,230	1,010	a3,160	3,210
9	895	a1,000	2,130	2,170	2,540	6,200	11,000	a2,060	1,170	1,330	3,030	3,400
10	895	1,060	2,090	2,170	2,460	7,950	8,900	2,060	1,170	2,130	2,950	3,360
11	839	1,720	2,880	a2,080	2,390	9,710	7,120	2,040	1,170	a2,880	2,840	3,060
12	a839	2,610	3,480	1,990	2,460	10,100	5,750	2,060	1,170	3,630	2,800	a2,630
13	839	2,610	4,000	2,310	2,540	9,620	5,040	1,990	a1,140	5,950	2,350	2,220
14	839	2,500	a4,310	2,390	2,610	a8,860	4,520	1,890	1,120	8,270	2,500	1,990
15	839	2,310	4,620	2,460	a2,630	8,110	4,380	1,820	1,120	9,620	a2,480	1,920
16	839	a2,350	5,600	2,500	2,650	7,300	4,120	a1,760	1,120	9,620	2,460	1,820
17	784	2,390	5,850	2,460	2,650	6,780	3,890	1,690	1,120	8,540	2,310	1,760
18	784	2,240	5,510	a2,420	2,580	6,250	a3,740	1,620	1,060	a7,120	2,240	1,690
19	a784	2,950	5,130	2,390	2,460	5,950	3,590	1,590	1,060	5,700	2,060	a1,620
20	784	3,140	4,900	2,390	2,310	5,600	3,440	1,560	a1,060	4,900	2,280	1,560
21	784	3,210	a4,690	2,390	2,240	a5,160	3,290	1,520	1,060	4,250	2,540	1,520
22	784	4,850	4,480	2,350	a2,220	4,710	3,060	1,490	1,060	3,740	a2,440	1,490
23	784	a5,350	4,080	2,350	2,200	4,290	2,910	a1,480	1,060	3,400	2,350	1,280
24	839	5,850	3,480	2,840	2,130	4,040	2,910	1,460	1,010	3,030	2,170	1,230
25	895	5,600	3,480	a2,880	2,130	3,740	a2,820	1,420	1,010	a2,900	1,990	1,230
26	a840	5,220	3,400	2,910	2,240	3,510	2,730	1,380	1,010	2,760	1,960	a1,200
27	784	5,040	3,250	2,840	2,390	3,400	2,610	1,380	a1,010	2,610	1,920	1,170
28	784	4,800	a3,160	3,100	2,350	a3,290	2,540	1,420	1,010	2,540	1,790	1,280
29	784	4,520	3,060	3,440	a2,240	3,180	2,390	1,790	950	2,610	a1,680	1,280
30	784	a4,130	3,030	3,360	-	3,100	2,310	a1,740	950	2,580	1,560	1,330
31	728	-	2,990	3,510	-	4,160	-	1,690	-	2,390	1,490	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	25,574	895	728	825	0.977	1.13
November	82,890	5,850	895	2,763	3.27	3.65
December	112,130	5,850	2,090	3,617	4.29	4.94
Calendar year 1947	856,928	9,080	700	2,348	2.78	37.76
January	80,280	3,510	1,990	2,590	3.07	3.54
February	74,530	3,360	2,130	2,570	3.05	3.28
March	160,530	10,100	2,090	5,178	6.14	7.07
April	216,010	19,100	2,310	7,200	8.53	9.52
May	55,620	2,240	1,380	1,794	2.13	2.45
June	34,580	1,620	950	1,153	1.37	1.52
July	110,400	9,620	950	3,561	4.22	4.86
August	79,730	4,160	1,490	2,572	3.05	3.51
September	57,330	3,400	1,170	1,911	2.26	2.53
Water year 1947-48	1,089,604	19,100	728	2,977	3.53	48.00

a No gage-height record; discharge interpolated.

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, three-quarters of a mile southwest of Bennett.

Drainage area.- 150 square miles.

Records available.- November 1935 to September 1948.

Average discharge.- 13 years, 544 second-feet.

Extremes.- Maximum discharge observed during year, 4,860 second-feet Apr. 2 (gage height, 12.46 feet), from rating curve extended above 2,200 second-feet; minimum observed, 453 second-feet July 8 (gage height, 5.20 feet).

1935-48: Maximum discharge observed, that of Apr. 2, 1948; minimum observed, 368 second-feet on many days during period January to April 1939; minimum gage height observed, 4.54 feet July 4, 1945.

Maximum stage known, 15.0 feet, from floodmarks, either in September 1926 or in April 1928 (based on a study of rainfall records).

Remarks.- Records good. Gage read once daily. Flow includes large ground-water inflow.

Revisions (water years).- W 872: 1937.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

5.3	466	9.8	1,730
6.2	599	10.6	2,280
7.0	779	11.3	3,020
9.0	1,370	11.9	3,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	505	505	704	681	832	564	2,900	659	881	564	805	581
2	505	519	681	704	779	581	3,900	681	599	564	832	581
3	492	638	681	681	728	704	1,980	881	599	564	1,060	818
4	492	599	659	659	681	753	1,210	659	581	564	1,030	914
5	492	581	659	638	659	832	859	659	581	548	942	1,210
6	479	564	681	638	659	942	1,690	886	581	519	832	1,120
7	548	581	681	638	638	999	2,050	1,030	564	479	779	970
8	564	618	659	638	638	1,030	1,680	970	564	466	704	832
9	533	599	659	638	638	1,090	1,300	779	581	779	681	728
10	505	942	779	618	618	1,180	1,120	728	581	1,150	681	681
11	492	1,150	970	618	704	1,530	999	728	581	1,630	681	681
12	492	1,060	1,030	618	704	1,400	886	681	564	1,530	681	681
13	479	970	1,030	599	704	1,060	832	659	564	1,240	881	659
14	479	914	999	704	681	970	779	659	548	1,090	638	659
15	492	942	1,120	681	618	914	859	638	548	942	681	704
16	492	805	1,210	659	618	886	914	638	581	886	753	659
17	492	704	1,180	659	599	886	914	638	618	779	681	638
18	479	805	999	638	599	1,060	859	599	599	728	638	599
19	492	1,150	832	618	599	1,180	832	599	564	681	618	599
20	492	1,270	779	659	599	1,180	805	599	548	753	599	581
21	519	1,440	753	659	599	999	805	599	638	832	618	581
22	548	1,530	753	659	599	832	779	599	581	832	599	581
23	519	1,440	728	753	599	805	914	599	564	779	599	581
24	519	1,300	728	832	581	779	970	599	564	779	618	564
25	505	1,150	779	832	581	753	914	581	564	728	599	564
26	492	970	805	832	581	728	753	581	548	704	599	564
27	492	779	942	859	581	753	728	564	548	681	581	564
28	492	728	779	859	564	779	704	638	548	779	564	564
29	492	728	704	859	564	753	681	832	533	779	548	564
30	492	728	704	859	-	638	659	914	533	779	564	564
31	492	-	681	859	-	1,090	-	859	-	753	581	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15,558	564	479	502		
November	26,709	1,530	505	890		
December	25,348	1,210	659	818		
Calendar year 1947	231,132	1,530	466	633		
January	21,848	859	599	705		
February	18,544	832	564	639		
March	28,650	1,530	564	924		
April	35,275	3,900	659	1,176		
May	21,535	1,030	564	695		
June	17,248	881	533	575		
July	24,881	1,630	466	803		
August	21,467	1,060	548	692		
September	20,386	1,210	564	680		
Water year 1947-48	277,449	3,900	466	758		

Choctawhatchee River near Newton, Ala.

Location.- Water-stage recorder, lat. 31°21', long. 85°37', in SE¼ sec. 2, T. 4 N., R. 24 E., at bridge on U. S. Highway 231, 200 feet downstream from mill dam, 1,500 feet upstream from Hurricane Creek, 0.8 mile north of Newton, and 1 mile downstream from Atlantic Coast Line Railroad bridge. Datum of gage is 138.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 693 square miles.

Records available.- June 1906 to August 1908, October 1911 to August 1912 (gage heights only), November 1921 to September 1927, May 1935 to September 1948. Gage-height records since 1931 are contained in reports of U. S. Weather Bureau.

Average discharge.- 17 years (1922-24, 1925-27, 1935-48), 1,049 second-feet.

Extremes.- Maximum discharge during year, 10,700 second-feet Mar. 8 (gage height, 21.8 feet); minimum daily, 277 second-feet July 8.

1906-8, 1911-12, 1921-27, 1935-48: Maximum discharge, 25,800 second-feet Jan. 20, 1936 (gage height, 29.5 feet, from graph based on gage readings); minimum observed, 52 second-feet June 4, 1937, from rating curve extended below 250 second-feet; minimum daily, 74 second-feet Sept. 11, 1925.

Maximum stage known, 45 feet Mar. 15, 1929, from information by local residents.

Remarks.- Records good. Moderate diurnal fluctuation at low flow caused by gristmills above station.

Revisions.- W 782: Drainage area.

Rating table, water year 1947-48, except periods of backwater
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 1 to Mar. 5)

2.6	252	9.0	3,200
3.0	376	15.0	6,600
4.0	757	21.0	10,200
6.0	1,660		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	304	c470	1,160	1,340	2,250	1,430	5,150	717	581	505	1,290	562
2	292	820	1,070	1,570	2,050	c1,600	7,050	698	620	543	1,290	543
3	289	865	1,000	1,570	1,850	4,090	6,030	678	524	524	2,800	562
4	280	757	955	1,430	1,660	5,290	4,150	757	452	475	4,150	737
5	280	639	930	1,340	1,520	4,550	3,040	1,110	415	369	5,120	c1,800
6	289	562	910	1,250	1,430	c6,900	2,550	840	386	310	3,480	2,450
7	310	620	890	1,160	1,340	9,800	2,400	890	366	286	2,200	2,450
8	332	840	865	1,090	1,290	9,830	2,100	865	362	277	1,570	1,710
9	373	800	980	1,040	1,710	7,630	2,450	757	359	c930	1,250	1,140
10	380	698	1,610	1,020	2,300	7,400	2,600	698	339	3,480	1,200	865
11	362	2,830	3,350	980	2,350	6,370	2,500	757	329	3,930	1,380	717
12	345	4,780	6,310	955	2,760	5,230	2,200	639	307	3,700	1,290	678
13	332	3,420	5,800	1,140	2,550	3,930	1,750	600	316	3,370	1,220	639
14	320	2,350	5,800	1,250	2,200	3,260	1,800	562	320	5,230	1,070	620
15	313	2,600	5,510	1,180	1,900	2,870	1,750	524	323	4,440	840	678
16	323	2,450	6,080	1,110	1,710	c3,300	1,570	505	404	2,500	c1,000	658
17	336	2,000	5,170	1,070	1,660	4,150	1,430	486	581	2,650	c2,000	581
18	349	1,900	3,930	1,160	1,610	3,370	1,340	471	581	1,660	1,900	524
19	356	2,350	3,040	1,090	1,470	3,420	1,250	448	505	1,380	1,340	486
20	390	1,850	2,350	1,140	1,380	2,980	1,160	433	486	1,290	955	456
21	362	1,570	2,000	1,470	1,570	2,930	1,090	422	467	1,340	800	437
22	345	g1,800	1,800	1,570	2,550	2,710	1,020	408	452	1,290	778	419
23	339	a2,200	1,660	1,430	2,200	c3,400	1,000	400	430	1,090	679	400
24	359	2,600	1,570	2,450	1,900	3,590	980	394	383	930	658	380
25	359	3,090	1,610	2,250	1,750	3,310	955	373	332	840	581	373
26	362	2,760	1,570	1,950	1,570	2,650	910	505	313	800	562	362
27	366	2,300	1,470	1,750	1,430	2,400	910	562	326	737	505	448
28	352	1,850	1,380	1,750	1,430	2,200	865	658	316	904	475	1,220
29	345	1,470	1,340	1,660	1,470	1,950	800	865	307	1,570	448	1,380
30	349	1,290	1,290	2,000	-	1,750	757	757	336	1,200	430	1,290
31	356	-	1,250	2,400	-	2,400	-	639	-	1,340	418	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,449	390	280	337	0.486	0.56
November	54,531	4,780	470	1,818	2.62	2.93
December	74,650	6,310	865	2,408	3.47	4.01
Calendar year 1947	547,466	11,600	280	1,500	2.16	29.39
January	44,565	2,450	955	1,438	2.08	2.39
February	52,860	2,760	1,290	1,823	2.63	2.84
March	126,690	9,830	1,430	4,087	5.90	6.80
April	63,557	7,050	757	2,119	3.06	3.41
May	19,418	1,110	373	626	.903	1.04
June	12,218	620	307	407	.587	.66
July	49,980	5,230	277	1,612	2.33	2.68
August	43,678	5,120	418	1,409	2.03	2.34
September	25,564	2,450	362	852	1.23	1.37
Water year 1947-48	578,160	9,830	277	1,580	2.28	31.03

Peak discharge (base, 5,000 sec.-ft.).- Nov. 12 (5 p.m.) 5,060 sec.-ft.; Dec. 12 (6 p.m.) 6,420 sec.-ft.; Dec. 16 (2 a.m.) 6,370 sec.-ft.; Mar. 3 (10 p.m.) 5,570 sec.-ft.; Mar. 8 (2 a.m.) 10,700 sec.-ft.; Apr. 2 (10 a.m.) 7,170 sec.-ft.; July 14 (9 p.m.) 5,970 sec.-ft.; Aug. 3 (8 p.m.) 6,370 sec.-ft.

a No gage-height record; discharge computed on basis of adjacent record.

c Backwater from tributary inflow; discharge computed from recorder graph adjusted for backwater effect.

g Computed from graph based on gage readings.

Choctawhatchee River at Caryville, Fla.

Location.- Water-stage recorder, lat. 30°46', 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, three-quarters of a mile west of Caryville, and 2 miles downstream from Hurricane Creek. Datum of gage is 39.00 feet above mean sea level, datum of 1929.

Drainage area.- 3,490 square miles.

Records available.- August 1929 to September 1948. Gage-height records collected at same site since 1928 are contained in reports of U. S. Weather Bureau.

Average discharge.- 19 years, 5,647 second-feet.

Extremes.- Maximum discharge during year, 44,800 second-feet Mar. 10 (gage height, 14.47 feet); minimum, 1,620 second-feet Oct. 6 (gage height, 2.72 feet).

1929-48: 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 good except those for period of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 24-30)

2.8	1,680	9.9	10,400
4.5	2,680	10.7	13,200
6.7	4,490	11.3	16,400
8.0	6,070	12.7	27,400
8.9	7,710	14.4	43,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,840	1,840	8,670	6,380	10,100	6,710	17,800	4,390	4,590	2,230	6,710	2,610
2	1,790	2,470	7,280	6,220	10,700	6,710	33,800	4,210	3,780	2,350	6,540	2,910
3	1,730	3,620	6,380	6,380	10,700	7,080	31,900	4,040	3,380	2,540	7,280	3,140
4	1,680	4,120	5,780	6,710	10,100	8,930	31,000	3,950	3,140	2,540	8,930	3,300
5	1,680	4,210	5,510	6,540	8,930	14,100	29,200	3,950	2,910	2,540	10,100	3,950
6	1,680	3,780	5,260	6,220	8,180	23,200	25,600	4,210	2,680	2,350	11,300	5,510
7	1,730	3,300	5,030	5,920	7,490	31,900	21,600	4,800	2,470	2,010	12,000	7,080
8	1,790	3,620	5,030	5,640	7,080	36,800	18,500	4,800	2,290	1,840	12,000	7,710
9	1,900	4,390	5,030	5,510	6,710	41,800	16,400	4,690	2,290	2,410	10,100	7,940
10	1,900	4,590	5,380	5,260	6,540	43,800	14,100	4,390	2,290	5,920	8,180	7,490
11	1,840	4,390	6,540	5,260	6,890	43,800	12,800	4,120	2,290	10,700	6,890	6,220
12	1,840	5,140	8,930	5,030	7,940	41,800	12,400	3,950	2,230	11,300	6,540	5,030
13	1,790	7,080	12,000	4,910	9,200	39,800	12,000	3,860	2,120	11,300	6,540	4,390
14	1,730	10,100	17,800	5,140	10,100	35,800	11,300	3,700	2,060	11,300	6,220	3,950
15	1,730	13,200	24,000	5,780	10,700	30,100	11,000	3,460	1,950	11,700	5,510	3,780
16	1,680	13,200	26,500	6,070	10,700	24,800	10,400	3,220	1,950	12,400	5,140	3,860
17	1,680	12,000	27,400	5,920	10,700	21,600	9,770	3,060	2,410	13,200	5,140	3,860
18	1,730	12,400	27,400	5,780	9,480	22,400	8,930	2,910	3,060	12,400	6,070	3,540
19	1,730	13,200	24,800	5,780	8,670	23,200	7,710	2,830	3,140	11,000	7,080	3,140
20	1,790	12,800	22,400	5,920	7,940	23,200	7,080	2,680	3,060	9,770	7,080	2,830
21	1,840	12,000	18,500	5,920	7,490	20,800	6,540	2,610	3,060	8,180	6,070	2,610
22	1,950	12,800	15,200	6,380	7,280	18,500	6,070	2,470	3,300	6,890	5,030	2,470
23	2,010	13,700	12,400	6,890	7,710	15,800	5,780	2,410	3,060	6,380	4,300	2,350
24	1,900	13,700	10,700	7,490	8,670	14,600	5,510	2,350	2,680	a5,850	4,040	2,230
25	1,840	13,700	9,200	8,420	9,480	15,200	5,260	2,230	2,540	a6,240	3,700	2,120
26	1,900	13,200	8,420	9,200	9,200	16,400	5,140	2,230	2,350	a5,820	3,380	2,060
27	1,840	13,200	7,940	10,100	8,420	16,400	5,030	2,290	2,290	a5,580	3,220	2,060
28	1,840	12,800	7,490	9,770	7,490	15,200	4,910	3,460	2,170	a5,280	2,910	2,610
29	1,840	11,700	7,280	9,480	6,890	13,700	4,800	4,300	2,060	a6,560	2,760	3,700
30	1,900	10,400	6,710	9,200	-	12,000	4,590	5,380	2,290	a6,340	2,540	4,390
31	1,900	-	6,540	9,480	-	11,300	-	5,510	-	6,220	2,470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	56,020	2,010	1,680	1,807	0.518	0.60
November	266,650	13,700	1,840	8,888	2.55	2.84
December	367,500	27,400	5,030	11,850	3.40	3.92
Calendar year 1947	3,103,920	43,800	1,680	8,504	2.44	33.08
January	208,700	10,100	4,910	6,732	1.93	2.22
February	251,480	10,700	6,540	8,672	2.48	2.68
March	697,430	43,800	6,710	22,500	6.45	7.43
April	396,920	33,800	4,590	13,230	3.79	4.23
May	112,460	5,510	2,230	3,628	1.04	1.20
June	79,890	4,590	1,950	2,663	.763	.85
July	211,140	13,200	1,840	6,811	1.95	2.25
August	195,770	12,000	2,470	6,315	1.81	2.09
September	118,840	7,940	2,060	3,961	1.13	1.27
Water year 1947-48	2,962,800	43,800	1,680	8,095	2.32	31.58

Peak discharge (base, 13,100 sec.-ft.).- Nov. 15 (9 p.m.) 14,100 sec.-ft.; Dec. 17 (7 a.m) 27,400 sec.-ft ; Mar. 10 (1 p.m.) 44,800 sec.-ft.: Apr. 2 (2 p.m.) 35,800 sec.-ft.; July 17 (10 a.m.) 13,200 sec.-ft.

a No gage-height record; discharge computed on basis of records for Choctawhatchee near Bruce, Fla., and Pea River near Samson, Ala.

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 20, about 5 miles southeast of Bruce. Datum of gage is 3.94 feet above mean sea level, datum of 1929.

Drainage area.- 4,580 square miles.

Records available.- October 1930 to September 1948.

Average discharge.- 18 years, 7,538 second-feet.

Extremes.- Maximum discharge during year, 57,600 second-feet Apr. 4 (gage height, 15.22 feet); minimum, 2,810 second-feet Oct. 18, 19 (gage height, 2.53 feet).

1930-48: Maximum discharge, 69,600 second-feet Aug. 19, 20, 1939; maximum gage height, 16.68 feet Aug. 19, 1939; 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 66,000 second-feet on basis of records for station at Caryville.

Remarks.- Records good.

Revisions (water years).- W 872: 1937.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Aug. 10				Aug. 11 to Sept. 30			
2.5	2,810	8.2	12,500	3.4	3,070	6.8	8,530
3.6	3,750	9.5	17,500	4.0	3,650	7.8	11,200
4.3	4,510	10.8	24,400	5.0	5,030	8.9	15,000
5.8	6,630	12.6	36,800				
7.0	9,000	15.2	57,600				

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,380	3,560	16,600	10,000	13,900	10,300	20,900	6,790	5,430	3,560	7,900	4,150
2	3,200	3,750	15,000	9,500	13,900	9,750	42,400	6,470	5,870	3,650	8,100	4,290
3	3,040	3,850	13,500	9,250	13,900	9,750	54,400	6,320	6,170	3,950	9,250	4,430
4	2,960	4,060	11,800	9,000	13,900	9,750	57,600	6,020	6,020	3,950	10,900	5,030
5	2,880	4,400	10,600	8,530	13,900	10,300	53,600	5,870	5,570	3,850	12,500	5,710
6	2,880	4,630	9,500	8,530	13,500	12,100	49,600	5,720	5,020	3,750	14,200	6,100
7	2,960	4,890	8,530	8,530	12,800	18,900	45,600	5,570	4,510	3,560	15.400	6,500
8	3,040	5,020	8,100	8,530	11,800	31,600	40,000	5,720	4,170	3,290	15.400	7,100
9	3,040	4,890	7,700	8,310	10,900	44,000	33,000	5,870	3,850	4,060	15,800	7,900
10	3,120	4,890	7,700	8,100	10,000	51,200	31,600	6,020	3,750	6,320	15,800	8,760
11	3,040	6,020	8,100	7,700	9,750	55,200	23,800	6,170	3,650	g7,900	15,000	9,500
12	3,040	6,790	8,760	7,500	9,500	56,000	20,900	6,170	3,650	g12,500	13,200	9,500
13	2,960	6,960	10,300	7,500	9,500	53,600	18,400	6,020	3,650	g21,400	11,500	9,500
14	2,960	7,310	13,200	7,310	10,000	50,400	17,100	5,720	3,560	g23,800	10.000	8,760
15	2,880	8,100	18,000	7,130	10,900	46,400	17,100	5,430	3,380	g21,400	9,250	8,100
16	2,880	9,500	25,000	7,130	12,100	41,600	16,200	5,290	3,200	g19,900	9,000	7,300
17	2,880	12,500	30,900	7,130	12,800	36,800	15,400	5,020	3,200	g18,400	8,760	6,900
18	2,810	15,400	33,700	7,500	13,200	32,300	14,600	4,760	3,290	g18,000	8,530	6,300
19	2,810	17,100	33,700	7,700	13,200	30,200	13,900	4,510	3,560	g17,500	8,530	5,900
20	2,880	18,000	33,000	7,900	12,800	30,900	12,500	4,280	3,850	16,600	8,530	5,360
21	2,880	19,400	30,200	8,100	11,800	30,900	11,800	4,170	4,060	15,400	8,760	4,870
22	3,040	21,400	26,800	8,100	11,200	29,500	10,600	3,950	4,060	14,200	9,000	4,430
23	3,200	22,000	23,800	8,100	10,600	26,200	9,750	3,850	4,060	12,800	9,000	4,020
24	3,290	23,800	20,400	8,310	10,000	23,200	9,000	3,750	4,060	11,500	8,530	3,650
25	3,290	24,400	17,500	8,760	9,750	20,900	8,530	3,650	3,950	10,600	7,700	3,420
26	3,200	23,800	15,400	9,250	10,000	18,900	8,100	3,560	3,750	10,000	6,900	3,230
27	3,120	22,600	13,900	10,000	10,600	18,400	7,700	3,470	3,650	10,000	6,300	3,070
26	3,040	20,900	12,500	11,500	11,200	18,900	7,500	3,560	3,560	9,500	5,710	3,150
29	3,040	18,900	11,500	13,200	10,900	18,900	7,130	3,950	3,750	9,000	5,190	3,320
30	2,960	17,500	10,900	13,900	-	18,000	6,960	4,510	3,560	8,310	4,720	3,650
31	2,960	-	10,600	14,200	-	17,100	-	4,890	-	7,900	4,290	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	93,660	3,380	2,810	3,021	0.660	0.76
November	366,320	24,400	3,560	12,210	2.67	2.97
December	517,190	33,700	7,700	16,680	3.64	4.20
Calendar year 1947	4,087,450	53,600	2,810	11,200	2.45	33.18
January	276,200	14,200	7,130	8,910	1.95	2.24
February	338,300	13,900	9,500	11,670	2.55	2.75
March	881,950	56,000	9,750	28,450	6.21	7.16
April	685,670	57,600	6,960	22,860	4.99	5.57
May	157,050	6,790	3,470	5,066	1.11	1.28
June	123,810	6,170	3,200	4,127	.901	1.01
July	336,550	23,800	3,290	10,860	2.37	2.73
August	303,650	15,800	4,290	9,795	2.14	2.47
September	173,900	9,500	3,070	5,797	1.27	1.41
Water year 1947-48	4,254,250	57,600	2,810	11,620	2.54	34.55

Peak discharge (base, 14,000 sec.-ft.).- Nov. 25 (11 a.m.) 24,400 sec.-ft.; Dec. 19 (1 a.m.) 33,700 sec.-ft.; Jan. 31 (6 a.m.) 14,200 sec -ft.; Feb. 18 (11 p.m.) 13,500 sec.-ft.; Mar. 12 (4 a.m.) 56,000 sec.-ft.; Apr. 4 (7 a.m.) 57,600 sec.-ft.; July 14 (10:30 a.m.) 23,800 sec.-ft.; Aug. 10 (2:30 p.m.) 15,800 sec.-ft.

g Computed from graph based on gage readings.

West Fork Choctawhatchee River at Blue Springs, Ala.

Location.- Water-stage recorder, lat. 31°40', long. 85°30', in SE¼ sec. 14, T. 8 N., R. 25 E., at bridge on State Highway 10 at Blue Springs, 4 miles downstream from Lindsey Creek. Datum of gage is 289.24 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 85 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 1,660 second-feet Mar. 7 (gage height, 6.33 feet); minimum daily, 40 second-feet July 7.

1943-48: Maximum discharge observed, 4,820 second-feet Mar. 29, 1944 (gage height, 9.10 feet); minimum daily, 21 second-feet June 2, 11, 13, 1945.

Remarks.- Records good. Diurnal fluctuation with some regulation at low flow caused by mill dam above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 14 to Sept. 30)

2.0	37	3.5	152	5.0	675
2.3	51	3.8	200	5.5	970
2.6	69	4.1	270	6.0	1,350
2.9	90	4.4	377		
3.2	117	4.7	525		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	101	128	204	285	159	1,150	112	74	86	85	67
2	48	227	128	364	206	250	875	108	69	69	82	67
3	48	185	126	236	186	630	490	102	64	63	116	60
4	48	98	126	171	172	785	343	105	59	50	294	110
5	50	79	126	156	172	425	318	115	56	42	448	516
6	48	75	127	153	169	1,180	300	132	50	43	225	354
7	63	94	122	148	172	1,350	300	155	48	40	110	126
8	81	206	120	140	179	620	285	116	53	43	88	90
9	87	174	174	139	333	785	579	99	50	126	77	79
10	77	83	389	140	580	730	450	94	47	778	117	74
11	61	426	714	140	348	510	276	93	42	445	387	76
12	59	702	758	128	262	460	248	86	45	406	209	76
13	55	291	724	193	262	339	229	83	46	585	103	70
14	60	148	730	256	243	300	232	78	58	285	84	82
15	56	302	575	171	241	285	241	73	101	243	91	89
16	62	540	905	142	191	321	210	71	98	187	166	76
17	77	243	475	142	196	610	189	65	137	180	244	62
18	70	182	300	155	200	470	176	67	103	182	120	56
19	65	279	270	151	176	902	168	63	72	140	86	52
20	55	236	243	147	174	520	166	61	79	139	75	52
21	63	158	227	202	189	343	160	60	80	99	68	54
22	57	189	214	254	270	343	151	58	69	92	110	51
23	52	216	202	193	254	790	147	56	58	95	84	48
24	57	294	195	288	186	812	149	55	52	85	67	47
25	63	535	214	324	169	377	147	55	48	152	64	46
26	62	324	234	196	156	321	139	70	46	114	58	46
27	53	187	191	177	160	307	140	77	59	76	57	95
28	62	156	176	220	169	273	132	81	48	76	54	463
29	92	194	169	234	196	248	119	109	61	119	51	367
30	72	137	166	229	-	246	112	107	110	117	48	122
31	61	-	165	369	-	425	-	84	-	92	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,915	92	48	61.8	0.727	0.84
November	7,016	702	75	234	2.75	3.07
December	9,413	905	120	304	3.58	4.12
Calendar year 1947	74,868	1,270	46	205	2.41	32.75
January	6,162	369	128	199	2.34	2.70
February	6,496	580	156	224	2.64	2.84
March	16,116	1,350	159	520	6.12	7.05
April	8,621	1,150	112	287	3.38	3.77
May	2,690	155	55	86.8	1.02	1.18
June	1,982	137	42	66.1	.778	.87
July	5,249	778	40	169	1.99	2.30
August	3,916	448	48	126	1.48	1.71
September	3,573	516	46	119	1.40	1.56
Water year 1947-48	73,149	1,350	40	200	2.35	32.01

Peak discharge (base, 1,000 sec.-ft.).- Dec. 16 (9:30 a.m.) 1,040 sec.-ft.; Mar. 7 (5 a.m.) 1,660 sec.-ft.; Mar. 19 (10 a.m.) 1,310 sec.-ft.; Mar. 23 (10 p.m.) 1,430 sec.-ft.; Apr. 1 (10:30 a.m.) 1,270 sec.-ft.; July 10 (1 p.m.) 1,040 sec.-ft.

Pea River near Ariton, Ala.

Location.- Water-stage recorder, lat. 31°35', long. 85°47', in SW¼ sec. 7, T. 7 N., R. 23 E., at bridge on U. S. Highway 231, 2¼ miles downstream from Bryors Mill Creek, 2¼ miles downstream from Atlantic Coast Line Railroad bridge, and 3½ miles west of Ariton. Datum of gage is 246.72 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 500 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 729 second-feet.

Extremes.- Maximum discharge during year, 7,170 second-feet Mar. 7 (gage height, 16.1 feet); minimum, 56 second-feet June 15 (gage height, 2.09 feet).

1938-48: Maximum discharge, 19,100 second-feet Mar. 22, 1943 (gage height, 19.98 feet); minimum, 15 second-feet June 6, 1941 (gage height, 1.70 feet); minimum daily, 24 second-feet June 6, 7, 1941.

Maximum stage known, about 25 feet in March 1929, from information by local residents.

Remarks.- Records good. Prior to Dec. 24, 1941, occasional regulation at low flow by gristmill above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 10)

2.1	59	9.0	2,280
2.5	170	12.0	3,530
3.0	335	14.0	4,840
4.0	641	15.0	5,800
6.0	1,240	16.0	7,040

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	158	641	730	1,340	850	2,820	290	176	173	1,030	130
2	85	272	523	685	1,310	1,030	2,980	276	216	265	940	248
3	77	381	448	641	1,380	1,870	3,020	265	203	248	820	191
4	75	400	416	670	1,380	3,100	2,820	255	164	194	850	276
5	72	355	400	656	1,210	3,530	2,280	252	141	141	790	1,180
6	77	290	416	700	1,030	5,190	1,800	268	113	113	1,120	2,140
7	91	265	400	760	880	7,040	1,490	300	105	91	1,590	2,070
8	102	400	416	745	820	6,650	1,280	335	102	80	1,240	1,590
9	119	463	493	611	1,120	5,910	1,630	324	93	146	1,060	1,150
10	141	463	880	538	1,450	4,320	1,870	286	85	760	970	850
11	141	1,120	1,450	508	2,070	3,190	2,250	262	77	1,630	656	552
12	144	1,150	1,800	478	3,280	2,820	1,930	229	72	2,350	523	342
13	138	1,180	2,860	626	2,860	2,780	1,520	216	59	2,040	611	300
14	121	1,120	4,210	760	2,110	2,580	1,280	206	59	2,140	538	290
15	107	1,450	3,700	850	1,800	2,280	1,060	194	64	2,980	432	290
16	105	1,380	3,820	880	1,870	2,070	910	176	135	3,020	394	272
17	119	1,380	3,480	850	1,800	2,250	790	164	219	2,580	641	245
18	121	1,380	3,190	880	1,520	2,350	700	158	279	2,250	432	216
19	127	1,210	2,700	850	1,260	2,280	626	141	272	1,770	400	185
20	130	970	2,070	760	1,120	3,020	552	135	258	2,040	390	167
21	127	850	1,590	790	1,030	3,060	508	127	255	1,630	345	153
22	116	850	1,280	820	1,210	2,350	448	121	296	1,210	416	138
23	113	880	1,120	880	1,180	2,740	432	110	242	970	279	133
24	124	1,210	970	1,210	1,180	4,210	416	107	210	760	248	127
25	119	1,410	910	1,240	1,150	3,230	400	119	179	790	185	116
26	105	1,520	820	1,340	1,150	2,420	390	107	138	538	161	110
27	105	1,410	790	1,410	1,060	2,040	378	121	116	493	144	149
28	105	1,120	760	1,590	1,030	1,630	368	127	133	552	135	715
29	127	910	730	1,520	940	1,450	335	156	121	685	124	1,090
30	158	760	685	1,450	-	1,240	314	164	99	790	113	1,310
31	144	-	670	1,410	-	1,450	-	173	-	970	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,626	158	72	114	0.228	0.26
November	26,707	1,520	158	890	1.78	1.99
December	44,638	4,210	400	1,440	2.88	3.32
Calendar year 1947	382,331	11,800	72	1,047	2.09	28.45
January	27,838	1,590	478	898	1.80	2.07
February	41,560	3,280	820	1,433	2.87	3.09
March	90,930	7,040	850	2,933	5.87	6.76
April	37,597	3,020	314	1,253	2.51	2.80
May	6,164	355	107	199	.398	.46
June	4,681	296	59	156	.312	.35
July	34,399	3,020	80	1,110	2.22	2.56
August	17,682	1,590	105	570	1.14	1.32
September	16,725	2,140	110	558	1.12	1.24
Water year 1947-48	352,447	7,040	59	963	1.93	26.22

Peak discharge (base, 4,000 sec.-ft.).- Dec. 14 (8 a.m.) 4,410 sec.-ft.; Mar. 7 (12 m.) 7,170 sec.-ft.; Mar. 24 (6 a.m.) 4,470 sec.-ft.

Pea River near Samson, Ala.

Location.- Water-stage recorder, lat. 31°07', long. 86°06', in sec. 25, T. 2 N., R. 19 E., at bridge on State Highway 12, 500 feet downstream from Boyenton Creek, 1¾ miles downstream from Louisville & Nashville Railroad bridge, 3 miles west of Samson, and 6½ miles upstream from Flat Creek. Datum of gage is 97.95 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 1,170 square miles.

Records available.- May 1935 to September 1948. August 1904 to August 1913 and June 1922 to October 1925 at site 1½ miles upstream, published as Pea River at Pera.

Average discharge.- 23 years (1904-12, 1923-25, 1935-48), 1,815 second-feet.

Extremes.- Maximum discharge during year, 15,300 second-feet Mar. 8 (gage height, 29.6 feet); minimum, 206 second-feet Oct. 6; minimum daily, 276 second-feet Oct. 6.

1904-13, 1922-25, 1935-48: Maximum stage, 42.0 feet Jan. 20, 1925, from floodmarks, site and datum then in use (discharge uncertain, figures previously published believed to be too low); minimum discharge observed, 41 second-feet Oct. 26, 1935; minimum daily, 63 second-feet Oct. 26, 1935.

Maximum stage known, 45.3 feet Mar. 15, 1929, from floodmarks.

Remarks.- Records good. Diurnal fluctuation and some regulation at low flow caused by power plant 25 miles above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 16				Dec. 17 to Sept. 30					
2.0	266	12.0	3,310	2.4	322	8.0	1,800	24.0	10,000
3.0	471	15.0	4,550	3.0	442	10.0	2,510	27.0	12,500
4.0	707	19.0	6,700	4.0	655	14.0	4,200	30.0	15,800
6.0	1,250	23.0	9,600	5.0	896	18.0	6,210		
9.0	2,220								

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	374	574	1,890	2,030	3,830	2,240	7,290	1,120	699	611	1,970	494
2	353	1,020	1,720	2,670	3,150	2,510	10,100	1,060	699	611	1,870	516
3	343	1,070	1,560	2,070	2,860	5,460	8,950	1,010	699	745	2,170	568
4	333	1,160	1,460	1,870	2,700	8,670	7,220	1,010	699	745	2,670	793
5	353	1,020	1,400	1,830	2,670	9,090	5,880	1,270	589	568	3,740	3,360
6	276	859	1,430	1,730	2,470	10,200	5,400	1,210	526	474	3,740	3,350
7	384	833	1,400	1,700	2,240	13,900	5,200	1,360	474	452	2,430	3,060
8	374	1,460	1,370	1,730	2,070	15,200	4,020	1,210	505	452	2,390	3,100
9	405	1,250	1,720	1,730	2,350	14,400	3,970	1,120	494	1,100	2,070	2,430
10	416	1,160	2,360	1,630	3,970	13,500	4,810	1,040	611	2,860	2,030	1,900
11	427	2,630	4,800	1,510	3,650	12,600	4,480	979	505	2,350	2,430	1,510
12	438	6,910	7,820	1,450	4,150	10,300	4,250	923	474	2,980	2,140	1,270
13	384	5,500	7,820	1,800	4,580	8,060	3,880	869	432	3,480	1,600	1,010
14	405	3,390	8,590	2,430	5,050	6,450	3,520	818	322	3,970	1,360	869
15	384	3,840	8,380	2,100	4,720	5,660	3,150	745	474	4,110	1,210	1,040
16	394	5,200	9,280	2,070	3,650	6,100	2,740	677	1,010	4,290	1,330	951
17	394	3,620	8,670	1,970	3,400	6,330	2,350	745	923	4,390	2,780	818
18	394	3,090	7,580	2,030	3,310	6,330	2,140	655	843	4,060	2,280	677
19	394	4,060	6,390	1,970	2,900	6,270	1,970	633	818	3,400	1,420	633
20	405	3,470	5,400	1,930	2,590	5,510	1,870	633	793	2,700	1,150	589
21	405	2,690	4,440	2,240	2,390	5,250	1,730	589	951	2,630	1,040	568
22	449	2,870	3,480	2,700	3,520	5,460	1,630	589	745	2,470	1,010	547
23	427	2,980	2,900	2,310	3,700	5,940	1,540	547	722	1,870	1,040	484
24	416	3,310	2,670	3,230	3,060	7,160	1,510	484	677	1,540	923	505
25	394	5,050	2,470	3,650	2,740	7,220	1,450	547	611	1,870	769	463
26	416	4,190	2,350	2,980	2,510	6,620	1,420	526	547	1,800	633	402
27	405	3,500	2,210	2,780	2,390	5,460	1,450	843	474	1,420	589	412
28	416	3,010	2,470	3,190	2,430	4,480	1,390	896	432	1,330	589	589
29	494	2,470	2,390	3,400	2,740	3,740	1,270	1,180	505	2,630	568	1,300
30	449	2,120	1,970	3,440	-	3,310	1,180	1,040	494	2,550	505	1,870
31	460	-	1,930	4,250	-	3,610	-	843	-	2,280	494	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,361	494	276	399	0.341	0.39
November	84,306	6,910	574	2,810	2.40	2.68
December	120,320	9,280	1,370	3,881	3.32	3.82
Calendar year 1947	1,033,646	12,700	276	2,832	2.42	32.85
January	72,420	4,250	1,450	2,336	2.00	2.30
February	91,790	5,050	2,070	3,165	2.71	2.92
March	227,030	15,200	2,240	7,324	6.26	7.22
April	107,760	10,100	1,180	3,592	3.07	3.43
May	27,171	1,360	484	876	.749	.86
June	18,747	1,010	322	625	.534	.60
July	66,738	4,390	452	2,153	1.84	2.12
August	50,940	3,740	494	1,643	1.40	1.62
September	36,078	3,360	402	1,203	1.03	1.16
Water year 1947-48	915,661	15,200	276	2,502	2.14	29.11

Peak discharge (base, 7,000 sec.-ft.).- Nov. 12 (3 p.m.) 7,400 sec.-ft.; Dec. 16 (6 p.m.) 9,520 sec.-ft.; Mar. 8 (8 a.m.) 15,300 sec.-ft.; Mar. 16 (8 p.m.) 7,220 sec.-ft.; Mar. 24 (8 p.m.) 7,340 sec.-ft.; Apr. 2 (11 a.m.) 10,300 sec.-ft.

Yellow River at Milligan, Fla.

Location.- Water-stage recorder, lat. 30°45'10", long. 86°37'40", in sec. 15, T. 3 N., R. 24 W., at bridge on U. S. Highway 90, half a mile east of Milligan, 4 miles west of Crestview, and 6¾ miles upstream from Shoal River.

Drainage area.- 600 square miles.

Records available.- July 1938 to September 1948.

Average discharge.- 10 years, 1,321 second-feet.

Extremes.- Maximum discharge during year, 11,800 second-feet Mar. 9 (gage height, 11.23 feet); minimum, 380 second-feet Oct. 18 (gage height, 2.57 feet).

1938-48: Maximum discharge, 21,200 second-feet Sept. 13, 1944 (gage height, 13.29 feet); minimum, 220 second-feet Oct. 25, 26, Nov. 5, 6, 1943 (gage height, 1.43 feet).

Flood in 1929 reached a stage of 26.2 feet, from information by local residents.

Remarks.- Records good.

Revisions (water years).- W 892: 1938-39.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 19 to Aug. 2)

2.6	391	6.7	1,710	8.5	3,550
3.9	735	7.5	2,270	9.0	4,910
5.6	1,260	8.1	2,900	11.2	11,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	428	516	1,610	1,260	2,190	1,120	2,840	880	664	516	1,190	440
2	428	582	1,410	1,300	2,270	1,260	4,040	822	608	529	1,380	440
3	415	582	1,340	1,410	2,110	1,610	4,910	793	555	529	1,160	465
4	415	595	1,230	1,450	1,830	2,450	7,250	764	542	490	1,230	822
5	415	622	1,190	1,340	1,570	3,910	5,830	793	529	465	1,530	1,380
6	428	582	1,160	1,190	1,410	6,780	3,910	851	516	452	1,530	1,490
7	415	608	1,120	1,120	1,340	10,600	3,100	1,030	503	440	1,710	1,380
8	428	940	1,120	1,060	1,260	10,600	3,180	1,060	503	440	1,660	1,380
9	428	940	1,160	1,030	1,260	11,800	2,840	1,060	503	1,000	1,260	1,190
10	428	880	1,410	1,030	1,260	9,610	2,600	910	503	1,410	940	720
11	428	1,160	1,890	1,000	1,410	7,880	2,360	822	503	1,340	822	608
12	415	1,660	2,900	1,000	1,770	7,250	2,190	764	503	1,450	793	608
13	403	2,190	4,040	1,090	1,890	6,150	1,960	735	503	1,570	880	678
14	403	2,840	5,520	1,230	1,890	5,060	1,770	692	490	1,610	851	692
15	391	4,040	7,250	1,380	1,770	3,910	1,710	664	478	1,530	692	940
16	391	4,320	7,560	1,490	1,770	3,260	1,710	636	478	2,040	692	1,000
17	391	3,660	6,300	1,450	1,660	3,180	1,660	622	664	2,190	706	880
18	391	3,550	5,210	1,340	1,490	3,550	1,570	595	793	1,570	793	720
19	403	3,780	4,460	1,260	1,380	4,460	1,570	568	940	1,260	851	608
20	440	3,260	3,450	1,300	1,260	4,910	1,450	568	880	1,090	735	542
21	720	2,900	2,780	1,380	1,230	4,610	1,260	555	793	822	664	516
22	764	2,960	2,270	1,490	1,230	3,780	1,160	542	735	692	595	490
23	542	3,350	1,960	1,660	1,340	3,030	1,090	529	706	622	542	478
24	542	3,450	1,770	1,890	1,450	2,720	1,030	516	650	568	555	452
25	516	3,260	1,660	1,830	1,490	2,600	1,000	516	622	542	622	440
26	490	3,030	1,570	1,890	1,410	2,780	1,030	503	692	568	608	428
27	465	2,900	1,530	1,890	1,260	2,840	1,060	529	622	822	542	428
28	516	2,960	1,490	2,040	1,160	2,660	1,030	608	568	822	503	428
29	678	2,660	1,410	1,890	1,090	2,270	1,030	706	529	764	478	428
30	555	2,110	1,380	1,960	-	1,890	970	720	529	880	478	440
31	503	-	1,300	2,110	-	1,770	-	678	-	1,030	452	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,575	764	391	470	0.783	0.90
November	66,887	4,320	516	2,230	3.72	4.15
December	80,450	7,560	1,120	2,595	4.32	4.99
Calendar year 1947	684,445	11,500	391	1,875	3.12	42.41
January	44,760	2,110	1,000	1,444	2.41	2.77
February	44,450	2,270	1,090	1,533	2.56	2.76
March	140,300	11,800	1,120	4,526	7.54	8.70
April	69,110	7,250	970	2,304	3.84	4.28
May	22,031	1,060	503	711	1.18	1.37
June	18,104	940	478	603	1.00	1.12
July	30,053	2,190	440	969	1.62	1.86
August	27,444	1,710	452	885	1.48	1.70
September	21,511	1,490	428	717	1.20	1.33
Water year 1947-48	579,675	11,800	391	1,584	2.64	35.93

Peak discharge (base, 3,200 sec.-ft.).- Nov. 16 (4 p.m.) 4,460 sec.-ft.; Dec. 16 (4 a.m.) 7,720 sec.-ft.; Mar. 9 (11:30 a.m.) 11,800 sec.-ft.; Mar. 20 (4 p.m.) 4,910 sec.-ft.; Apr. 4 (1 p.m.) 7,560 sec.-ft.

Lightwood Knot Creek at Babbie, Ala.

(Formerly published as Poley Creek at Babbie, Ala.)

Location.- Water-stage recorder, lat. 31°16', long. 86°19', in SW¼ sec. 36, T. 4 N., R. 17 E., at bridge on State Highway 12, 1 mile east of Babbie, 1¼ miles downstream from Poley Creek (revised), 2 miles upstream from mouth, and 3½ miles west of Opp. Prior to Dec. 30, 1947, wire-weight gage at same site and datum.

Drainage area.- 114 square miles.

Records available.- February 1944 to September 1948 (prior to October 1947 published as Poley Creek at Babbie).

Extremes.- Maximum discharge during year, 3,440 second-feet Apr. 1 (gage height, 7.58 feet); minimum, 47 second-feet Sept. 26.
1944-48: Maximum discharge observed, 12,100 second-feet Sept. 11, 1944 (gage height, 11.86 feet); minimum observed, 30 second-feet June 14, 15, 1945 (gage height, 0.74 foot).

Remarks.- Records fair. Gage read twice daily prior to Dec. 30. Some diurnal fluctuation at low flow.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	169	d200	248	376	g290	2,740	152	110	74	143	82
2	50	260	194	261	329	g390	1,350	149	101	79	139	98
3	50	270	203	242	268	g717	700	149	116	67	601	103
4	50	260	198	224	248	g894	461	149	96	56	1,060	158
5	50	224	198	213	242	g622	404	190	84	51	608	1,030
6	50	173	186	208	236	g2,000	468	364	76	49	363	825
7	d59	181	198	203	236	g2,540	638	309	74	50	195	252
6	d70	314	203	203	g236	g1,370	508	236	76	59	141	146
9	d76	296	308	203	g440	g1,010	390	174	79	258	123	123
10	d74	296	908	203	g516	g799	376	149	84	982	146	112
11	d70	1,580	1,090	g198	g390	g572	340	143	84	694	411	128
12	68	3,080	1,320	g224	319	g562	290	134	71	535	230	139
13	73	d1,500	1,400	g275	329	g516	283	128	66	1,050	143	134
14	73	d500	1,280	g364	376	g420	309	122	64	790	121	141
15	68	d750	1,300	g290	g364	g390	364	113	92	404	112	206
16	73	792	894	g236	g291	g390	319	110	420	404	157	185
17	88	760	548	g254	g268	g544	261	107	468	290	320	134
18	76	832	480	g248	261	572	242	104	340	231	185	107
19	76	838	420	g236	g236	500	230	98	248	155	170	98
20	70	908	364	g230	g205	404	218	93	178	131	118	94
21	73	d730	329	g275	g248	364	208	90	149	119	103	89
22	94	d700	d300	g291	g376	340	198	87	122	104	107	85
23	d90	665	d290	g291	436	476	190	84	101	93	266	80
24	94	748	d280	g351	319	799	190	82	84	108	204	76
25	94	1,210	d270	g309	g261	476	190	79	84	152	112	74
26	106	504	d260	291	236	340	186	84	82	155	98	74
27	112	283	a250	254	236	319	213	140	71	140	107	74
28	112	254	d250	291	254	309	218	164	70	125	121	110
29	118	242	242	g309	351	283	186	208	66	739	98	128
30	106	213	236	364	-	275	158	203	74	583	89	110
31	94	-	236	420	-	521	-	140	-	236	85	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,409	118	50	77.7	0.682	0.79
November	19,532	3,080	169	651	5.71	6.37
December	14,835	1,400	186	479	4.20	4.84
Calendar year 1947	122,459	3,080	50	336	2.95	39.94
January	8,209	420	198	265	2.32	2.68
February	8,881	516	203	306	2.68	2.90
March	20,004	2,540	275	645	5.66	6.53
April	12,828	2,740	158	428	3.75	4.18
May	4,534	364	79	146	1.28	1.48
June	3,830	468	64	128	1.12	1.25
July	8,966	1,050	49	289	2.54	2.92
August	6,876	1,060	85	222	1.95	2.24
September	5,195	1,030	74	173	1.52	1.69
Water year 1947-48	116,099	3,080	49	317	2.78	37.87

Peak discharge (base, 1,800 sec.-ft.).- Nov. 12 (11 a.m.) 3,260 sec.-ft.; Mar. 6 (time unknown) 3,350 sec.-ft.; Apr. 1 (3 p.m.) 3,440 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.

d Doubtful gage-height record; discharge computed as explained in footnote a.

g Computed from graph based on gage readings.

Shoal River near Crestview, Fla.

Location.- Water-stage recorder, lat. 30°41'50", long. 86°34'15", in sec. 5, T. 2 N., R. 23 W., at bridge on State Highway 85, 3½ miles downstream from Titi Creek, 4¼ miles south of Crestview, and 7 miles upstream from mouth.

Drainage area.- 500 square miles.

Records available.- July 1938 to September 1948.

Average discharge.- 10 years, 1,185 second-feet.

Extremes.- Maximum discharge during year, 8,870 second-feet Apr. 3 (gage height, 9.54 feet); minimum, 517 second-feet July 8 (gage height, 2.85 feet).
1938-48: Maximum discharge, 33,100 second-feet July 7, 1940 (gage height, 14.26 feet), from rating curve extended above 8,500 second-feet by logarithmic plotting; minimum, 294 second-feet Oct. 23-27, Nov. 3-7, 1943; minimum gage height, 0.98 foot Oct. 26, Nov. 4, 1943.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet and discharge, in second-feet)

2.9	538	6.3	1,800
4.2	837	8.5	6,390
5.8	1,350	9.1	7,770
6.1	1,530		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	782	782	1,310	1,210	2,390	988	4,040	1,110	782	926	1,140	644
2	757	1,210	1,270	1,210	1,800	1,050	7,050	1,080	733	782	1,080	688
3	733	1,310	1,240	1,210	1,430	2,010	7,770	1,080	710	782	1,310	757
4	710	1,080	1,210	1,170	1,310	3,100	4,880	1,050	688	733	1,500	1,480
5	710	896	1,210	1,140	1,270	3,300	3,100	1,050	666	622	2,390	2,890
6	710	809	1,210	1,080	1,240	3,720	2,990	1,140	644	580	2,090	2,990
7	710	866	1,210	1,080	1,210	5,730	3,200	1,350	622	559	1,400	1,990
8	757	1,400	1,170	1,050	1,170	7,520	3,410	1,310	622	538	1,210	1,270
9	733	1,530	1,270	1,050	1,170	6,170	2,890	1,140	644	1,540	1,140	1,080
10	710	1,240	1,500	1,050	1,240	5,510	2,390	1,050	666	3,100	1,350	957
11	688	1,240	2,590	1,020	1,240	5,730	2,090	1,020	644	2,590	1,350	988
12	688	2,790	3,410	1,020	1,310	5,200	1,900	1,020	622	2,090	1,080	1,110
13	666	3,200	3,620	1,080	1,640	4,670	1,800	1,020	622	1,800	926	1,170
14	641	2,390	3,300	1,400	1,580	3,520	1,800	957	601	1,350	866	1,210
15	644	1,720	2,990	1,310	1,350	2,590	1,900	926	601	1,240	837	1,460
16	622	1,990	3,410	1,170	1,240	2,590	1,800	866	601	1,530	1,050	1,460
17	644	1,900	3,720	1,080	1,140	3,200	1,580	837	809	1,720	1,350	1,210
18	644	1,640	3,300	1,240	1,140	3,720	1,500	837	988	1,240	1,270	1,020
19	666	2,990	2,290	1,310	1,110	3,940	1,500	809	926	1,080	988	896
20	733	3,520	1,800	1,240	1,050	3,830	1,430	782	733	1,310	837	809
21	1,050	2,890	1,580	1,270	1,080	3,100	1,350	757	782	1,240	837	782
22	1,500	2,790	1,500	1,460	1,240	2,490	1,310	733	866	1,110	988	757
23	1,270	3,620	1,430	1,400	1,350	2,490	1,270	733	866	1,080	809	733
24	1,140	3,940	1,350	1,460	1,270	2,690	1,240	710	688	896	757	688
25	988	3,520	1,350	2,190	1,170	2,390	1,240	710	622	957	733	688
26	837	2,790	1,350	1,990	1,080	1,990	1,240	710	733	896	733	666
27	782	2,090	1,310	1,460	1,050	1,990	1,270	710	837	1,020	837	666
28	757	1,580	1,270	1,500	1,020	2,190	1,240	837	710	926	782	733
29	1,050	1,430	1,240	2,290	1,020	2,190	1,170	1,240	896	1,140	710	733
30	988	1,350	1,240	2,090	-	1,720	1,140	1,210	926	1,530	666	688
31	757	-	1,210	2,290	-	1,800	-	957	-	1,430	644	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	25,067	1,500	622	809	1.62	1.86
November	60,503	3,940	782	2,017	4.03	4.50
December	57,860	3,720	1,170	1,866	3.73	4.30
Calendar year 1947	561,419	16,100	538	1,538	3.08	41.75
January	42,520	2,290	1,020	1,372	2.74	3.16
February	37,310	2,390	1,020	1,287	2.57	2.78
March	103,128	7,520	988	3,327	6.65	7.67
April	71,490	7,770	1,140	2,383	4.77	5.32
May	29,741	1,350	710	959	1.92	2.21
June	21,850	988	601	728	1.46	1.63
July	38,337	3,100	538	1,237	2.47	2.85
August	33,660	2,390	644	1,086	2.17	2.50
September	33,213	2,990	644	1,107	2.21	2.47
Water year 1947-48	554,679	7,770	538	1,516	3.03	41.25

Peak discharge (base, 3,600 sec.-ft.).- Nov. 20 (6 a.m.) 3,620 sec.-ft.; Nov. 24 (3:30 p.m.) 3,940 sec.-ft.; Dec. 17 (1 p.m.) 3,830 sec.-ft.; Mar. 8 (1:30 p.m.) 7,770 sec.-ft.; Mar. 19 (2 a.m.) 4,040 sec.-ft.; Apr. 3 (2 a.m.) 8,870 sec.-ft.

Coldwater Creek near Milton, Fla.

Location.- Water-stage recorder, lat. 30°42'30", long. 86°58'20", in sec. 5, T. 2 N., R. 27 W., at bridge on State Highway 191, 2¾ miles upstream from mouth and 6½ miles northeast of Milton.

Drainage area.- 275 square miles.

Records available.- November 1938 to September 1948.

Average discharge.- 10 years, 592 second-feet.

Extremes.- Maximum discharge during year, 6,260 second-feet Mar. 7 (gage height, 9.59 feet); minimum, 356 second-feet June 7, 8, Aug. 31, Sept. 26, 27, 30; minimum gage height, 2.36 feet Oct. 4, 5.
1938-48: Maximum discharge, 23,100 second-feet Aug. 17, 1939 (gage height, 17.33 feet); minimum, 229 second-feet Dec. 11, 1938 (gage height, 0.94 foot).

Remarks.- Records good except those for periods of no gage-height record, which are poor.

Revisions (water years).- W 892: 1939.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 12				Nov. 13 to Sept. 30			
2.3	369	5.4	1,510	2.4	356	5.4	1,370
2.8	483	5.7	1,730	3.6	660	9.1	5,610
4.4	1,000	6.2	2,250	5.0	1,130		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	457	524	560	756	464	1,460	464	392	488	573	368
2	390	589	512	614	644	692	1,920	464	380	440	724	f404
3	390	483	500	548	600	1,740	1,050	452	380	452	1,050	a420
4	380	433	488	524	586	2,820	772	452	368	416	855	a575
5	400	422	488	500	573	1,520	676	452	368	380	772	a790
6	470	411	560	488	560	3,270	789	488	368	404	614	1,050
7	411	589	573	488	548	5,610	724	600	356	512	500	614
8	411	749	548	488	548	2,760	660	512	356	512	464	a508
9	411	605	676	476	573	2,030	629	476	392	1,980	452	a445
10	400	470	888	476	692	2,250	614	452	392	1,690	560	a429
11	400	1,360	1,580	476	600	2,030	573	452	380	855	586	a442
12	390	2,250	2,370	476	586	1,800	560	440	404	987	500	a466
13	390	1,200	2,080	838	614	1,020	560	428	440	1,130	452	488
14	390	708	2,480	1,050	629	888	921	428	392	954	428	644
15	390	954	1,920	724	600	806	954	416	368	888	488	1,200
16	390	1,370	2,420	560	548	806	692	416	368	954	452	987
17	390	888	1,340	573	536	822	724	416	644	708	500	644
18	390	954	888	660	524	1,330	573	404	708	573	452	500
19	400	2,420	772	600	512	2,080	573	392	660	524	416	452
20	422	1,620	708	629	512	1,090	524	404	660	488	404	428
21	527	921	660	921	524	855	500	392	888	464	392	404
22	669	1,290	629	954	614	789	488	392	500	440	392	392
23	573	1,370	600	806	573	822	476	392	428	428	380	380
24	573	1,690	573	1,090	524	756	476	392	392	404	380	368
25	542	1,130	573	888	500	676	476	440	416	464	380	368
26	483	855	560	676	488	644	488	404	500	524	368	356
27	445	724	536	772	488	676	600	440	428	500	392	356
28	457	629	524	1,130	488	644	560	614	404	560	404	368
29	433	586	512	921	488	586	500	560	428	855	380	368
30	422	548	524	921	-	573	476	464	536	987	368	356
31	400	-	524	921	-	692	-	416	-	708	356	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	13,539	669	380	437	1.59	1.83
November	28,675	2,420	411	956	3.48	3.88
December	28,530	2,480	488	920	3.35	3.86
Calendar year 1947	302,258	9,400	358	828	3.01	40.87
January	21,748	1,130	476	702	2.55	2.94
February	16,428	756	488	566	2.06	2.22
March	43,541	5,610	464	1,405	5.11	5.89
April	20,988	1,920	476	700	2.55	2.84
May	13,914	614	392	449	1.63	1.88
June	13,696	888	356	457	1.66	1.85
July	21,669	1,980	380	699	2.54	2.93
August	15,434	1,050	356	498	1.81	2.09
September	15,570	1,200	356	519	1.89	2.11
Water year 1947-48	253,732	5,610	356	693	2.52	34.32

Peak discharge (base, 2,700 sec.-ft.).- Nov. 19 (4 p.m.) 2,700 sec.-ft.; Mar. 4 (12 m.) 2,930 sec.-ft.; Mar. 7 (11 a.m.) 6,260 sec.-ft.

a No gage-height record; discharge computed on basis of records for Yellow River at Milligan and Shoal River near Crestview.

f Computed on basis of partly estimated gage-height record.

Escambia River at Flomaton, Ala.

Location.- Water-stage recorder, lat. 31°01', long. 87°15', in NE¼ sec. 33, T. 1 N., R. 8 E., at bridge on U. S. Highway 31 at north edge of Flomaton, 1¼ miles upstream from Louisville & Nashville Railroad bridge, 1½ miles upstream from Alabama-Florida State line, and 4 miles upstream from Conecuh River. Datum of gage is 52.40 feet above mean sea level, datum of 1929.

Drainage area.- 325 square miles.

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge during year, 6,490 second-feet Mar. 7 (gage height, 10.4 feet); minimum, 257 second-feet June 14, 15, July 6.
1939-48: Maximum discharge, 41,400 second-feet Sept. 27, 1939 (gage height, 19.26 feet), by slope-area method; minimum observed, 144 second-feet May 18, 1939.

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used below 1,350 second-feet Mar. 13 to July 9)

Oct. 1 to Jan. 13				Jan. 14 to Sept. 30			
0.8	276	4.0	1,430	0.7	236	6.0	2,360
1.0	331	5.0	1,920	1.0	308	8.0	3,750
1.4	450	6.0	2,480	2.0	597	9.0	4,670
2.0	648	7.0	3,150	3.0	951	10.0	5,890
3.0	1,000	9.0	4,950	4.0	1,350		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	314	360	532	648	1,030	475	2,130	403	311	581	680	417
2	311	389	515	716	912	980	1,530	389	296	417	1,210	358
3	309	434	482	631	731	3,590	1,030	375	283	318	1,070	353
4	303	404	466	581	646	4,570	801	417	283	283	714	504
5	309	360	482	532	614	2,420	646	646	276	273	2,280	630
6	389	340	614	515	597	5,120	663	597	271	257	1,610	519
7	354	598	548	515	581	5,890	646	597	266	361	714	403
8	340	853	716	498	550	4,000	565	475	264	403	504	345
9	328	648	1,020	498	897	2,420	581	417	298	871	614	324
10	314	482	1,300	515	1,270	2,240	581	389	298	1,150	597	326
11	306	1,310	3,190	498	1,070	1,880	519	375	283	581	490	353
12	298	1,820	4,650	498	951	1,430	475	375	273	565	460	375
13	298	1,620	3,550	1,580	801	1,150	475	356	269	1,480	460	490
14	295	944	2,480	1,150	856	970	663	342	259	1,270	403	1,050
15	292	1,980	2,480	856	784	874	714	334	281	630	375	1,480
16	284	1,520	2,600	697	714	837	597	329	446	504	361	856
17	287	1,040	1,820	597	630	837	475	324	1,030	630	389	534
18	290	1,270	1,390	630	581	837	446	321	1,190	597	361	403
19	292	1,300	1,040	581	550	856	417	308	663	550	331	356
20	372	944	889	597	534	784	403	306	417	432	324	334
21	515	1,000	818	893	534	714	389	303	874	375	329	324
22	515	1,180	750	1,030	630	663	389	300	565	356	389	311
23	498	1,480	716	837	663	801	375	298	475	337	348	303
24	450	1,770	682	990	630	714	375	296	389	313	358	293
25	389	1,390	665	801	565	630	361	308	345	321	375	286
26	360	1,300	648	697	534	614	822	308	329	446	353	283
27	348	1,000	614	663	504	597	1,680	316	298	680	389	283
28	377	731	598	1,070	504	581	1,030	446	281	534	356	300
29	348	631	581	1,030	519	550	630	680	298	614	324	303
30	323	564	581	1,070	-	519	460	446	318	1,190	306	296
31	311	-	581	1,190	-	916	-	348	-	856	303	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,719	515	284	346	1.06	1.23
November	29,662	1,980	340	989	3.04	3.39
December	37,998	4,650	466	1,226	3.77	4.35
Calendar year 1947	318,456	6,340	255	872	2.68	36.45
January	23,604	1,580	498	761	2.34	2.70
February	20,382	1,270	504	703	2.16	2.33
March	49,459	5,890	475	1,595	4.91	5.66
April	20,868	2,130	361	696	2.14	2.39
May	12,124	680	296	391	1.20	1.39
June	12,129	1,190	259	404	1.24	1.39
July	18,175	1,480	257	586	1.80	2.08
August	17,777	2,280	303	573	1.76	2.03
September	13,392	1,480	283	446	1.37	1.53
Water year 1947-48	266,289	5,890	257	728	2.24	30.47

Peak discharge (base, 4,000 sec.-ft.).- Dec. 12 (2 a.m.) 5,060 sec.-ft.; Mar. 4 (2 a.m.) 4,890 sec.-ft.; Mar. 7 (3 a.m.) 6,490 sec.-ft.

Escambia River near Century, Fla.

Location.- Water-stage recorder, lat. 30°58', long. 87°15', on line between secs. 9 and 10, T. 5 N., R. 30 W., at bridge on State Highway 4, 1½ miles downstream from Conecuh River and 1¼ miles east of Century.

Drainage area.- 3,700 square miles.

Records available.- October 1934 to September 1948.

Average discharge.- 14 years, 6,888 second-feet.

Extremes.- Maximum discharge during year, 45,400 second-feet Mar. 11, 12; maximum gage height, 18.64 feet Mar. 11; minimum discharge, 1,400 second-feet Oct. 15 (gage height, 3.19 feet).

1934-48: Maximum discharge, 73,900 second-feet Mar. 22, 1938 (gage height, 20.66 feet, from floodmarks); minimum observed, 810 second-feet Oct. 19, 26, Nov. 1, 2, 1938; minimum gage height observed, 1.90 feet Nov. 2, 1938.

Maximum stage known, 37.8 feet in March 1929, from information by local residents (discharge, 315,000 second-feet, from rating curve extended above 72,000 second-feet).

Remarks.- Records good. Some regulation by power plants above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 16				Dec. 17 to Mar. 11				Mar. 12 to Sept. 30			
3.3	1,430	13.2	11,100	8.2	4,300	15.6	17,000	3.4	1,540	10.0	6,420
3.7	1,590	15.0	14,900	10.8	7,280	16.5	22,000	4.4	2,030	10.8	7,280
4.7	2,110	16.0	19,000	13.9	11,700	17.2	28,100	5.8	2,930		
7.2	3,900	16.7	23,500	14.7	13,600	18.6	45,400				
9.6	6,200										

Note.- Same as preceding table above 10.8 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,540	1,820	5,780	6,170	10,600	7,800	13,600	4,370	2,030	2,770	4,700	1,910
2	1,680	2,510	5,180	6,640	10,900	7,800	18,500	4,210	2,210	3,170	4,700	2,150
3	1,720	2,580	5,180	6,890	10,700	11,500	20,100	3,810	2,510	2,570	6,930	2,030
4	1,630	2,300	4,880	6,400	10,100	24,300	18,500	3,170	2,450	2,330	7,540	2,390
5	1,630	2,170	4,600	6,170	9,290	28,100	16,100	3,970	2,330	2,090	8,210	4,530
6	1,680	2,170	5,080	5,360	8,750	33,900	13,900	4,370	2,210	1,760	9,830	5,020
7	1,590	2,440	4,880	5,020	8,340	42,700	11,900	4,700	2,030	1,760	8,340	3,970
8	1,540	4,060	4,690	5,020	7,940	45,400	10,600	4,610	1,720	2,090	6,620	3,330
9	1,680	4,240	6,090	4,910	7,940	42,700	10,100	4,290	1,860	3,010	6,060	3,090
10	1,680	3,150	7,040	4,910	9,560	44,000	9,960	3,730	2,150	5,100	6,240	3,090
11	1,630	3,670	9,620	4,500	10,400	45,400	9,560	3,010	2,030	5,180	5,700	3,010
12	1,590	9,060	16,300	4,300	11,000	45,400	9,290	3,570	2,030	4,210	5,340	3,010
13	1,540	10,800	21,300	6,170	11,300	42,700	10,100	3,730	2,030	5,020	4,610	3,170
14	1,460	9,620	22,700	9,150	11,500	37,500	10,600	3,410	1,860	5,430	3,890	3,730
15	1,430	9,480	22,700	9,290	11,200	32,700	10,700	3,170	1,630	4,780	3,650	6,150
16	1,540	11,400	23,500	8,480	11,300	28,100	10,600	3,090	2,090	4,700	3,570	5,520
17	1,540	11,200	23,500	7,280	12,100	24,300	9,560	2,770	3,170	5,340	3,650	4,050
18	1,540	10,000	23.500	6,890	12,100	20,700	8,480	2,330	4,290	5,520	3,890	3,090
19	1,540	10,800	22,700	7,020	11,200	18,500	7,160	2,510	4,050	5,180	3,410	2,630
20	1,630	10,800	21,300	6,520	10,600	17,000	6,150	2,570	3,090	4,530	3,330	2,330
21	2,110	10,000	20,100	6,760	9,960	16,500	5,970	2,510	3,250	4,700	3,250	1,910
22	2,050	10,300	18,000	8,340	9,150	15,300	5,790	2,450	3,810	4,530	3,250	1,970
23	1,930	11,200	16,500	8,750	9,150	14,900	5,430	2,450	3,570	3,890	3,090	2,150
24	1,820	12,600	13,300	8,880	9,960	14,500	5,100	2,270	3,250	3,410	2,510	2,030
25	1,770	13,000	10,300	9,150	9,690	14,200	4,860	2,030	2,770	3,250	2,390	1,860
26	1,770	12,400	8,880	9,020	9,150	14,900	4,860	2,150	2,570	3,410	2,510	1,720
27	1,720	11,400	8,070	8,610	8,750	14,900	6,330	2,270	2,390	3,890	2,570	1,670
28	1,720	9,760	6,890	9,150	8,480	13,300	6,420	2,570	2,090	3,810	2,510	1,540
29	1,770	8,380	6,400	9,560	8,340	11,900	5,520	2,930	1,860	4,290	2,330	1,630
30	1,870	6,660	6,170	9,830	-	10,900	4,780	2,770	1,910	5,790	2,030	1,810
31	1,770	-	6,280	10,300	-	10,700	-	2,450	-	5,610	1,670	- -

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	52,110	2,110	1,430	1,681	0.454	0.52
November	229,970	13,000	1,820	7,666	2.07	2.31
December	381,410	23,500	4,600	12,300	3.32	3.83
Calendar year 1947	3,344,960	33,900	1,430	9,164	2.48	33.62
January	225,440	10,300	4,300	7,272	1.97	2.27
February	289,450	12,100	7,940	9,981	2.70	2.91
March	752,500	45,400	7,800	24,270	6.56	7.56
April	290,520	20,100	4,780	9,684	2.62	2.92
May	98,240	4,700	2,030	3,169	.856	.99
June	75,240	4,290	1,630	2,508	.678	.76
July	123,120	5,790	1,760	3,972	1.07	1.24
August	138,320	9,830	1,670	4,462	1.21	1.39
September	86,490	6,150	1,540	2,883	.779	.87
Water year 1947-48	2,742,810	45,400	1,430	7,494	2.03	27.57

Peak discharge (base, 23,000 sec.-ft.).- Dec. 16 (7 p.m.) 24,300 sec.-ft.; Mar. 11, 12, 45,400 sec.-ft.

Conecuh River near Troy, Ala.

Location.- Staff gage, lat. 31°51', long. 86°00', in NE¼ sec. 13, T. 10 N., R. 20 E., at bridge on U. S. Highway 231, 1½ miles downstream from Mannings Creek and 3 miles north of Troy. Prior to Jan. 1, 1948, wire-weight gage at same site and datum.

Drainage area.- 240 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 5,780 second-feet Mar. 7 (gage height, 12.2 feet, from graph based on gage readings); minimum observed, 4.2 second-feet Oct. 2.
1943-48: Maximum discharge observed, 16,500 second-feet Mar. 23, 1944 (gage height, 15.58 feet); minimum observed, 3.8 second-feet Sept. 6, 1947.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Gage read twice daily prior to Jan. 1 and once daily thereafter.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 12 to July 9, Sept. 29, 30)

Oct. 1 to Nov. 11

0.8	4.0	2.0	34
.9	5.7	2.5	51
1.0	7.5	3.0	75
1.2	12	3.5	105
1.5	19	4.2	157

Nov. 12 to Sept. 30

0.9	6.0	4.0	122	8.5	875
1.0	8.0	5.0	196	9.0	1,180
1.4	16	6.0	288	9.5	1,590
1.8	24	6.5	349	10.0	2,110
2.2	36	7.0	430	10.5	2,800
3.0	68	7.5	527	11.0	3,600
3.5	92	8.0	669	12.0	5,390

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a5.0	30	122	268	875	349	485	77	46	104	221	27
2	4.3	58	110	349	875	413	772	72	38	92	221	23
3	4.7	40	104	364	705	988	1,180	68	30	48	239	20
4	4.7	43	98	380	577	2,500	1,040	64	26	28	335	30
5	5.0	37	98	380	466	2,230	743	72	21	21	430	235
6	5.2	28	98	349	396	2,650	605	92	17	15	485	239
7	6.4	39	98	299	268	5,200	551	110	15	12	322	180
8	10	93	98	248	322	3,600	527	98	15	10	239	150
9	14	75	140	204	503	2,230	705	77	13	52	221	122
10	13	70	365	196	1,540	1,890	1,250	64	11	288	180	68
11	12	156	927	188	2,360	2,230	1,180	56	11	364	110	48
12	10	268	2,230	188	1,690	2,360	766	50	9.2	364	122	44
13	9.9	230	2,650	278	1,690	1,690	551	46	8.6	335	150	40
14	9.1	204	2,110	430	1,690	1,110	448	40	7.6	380	122	38
15	8.7	230	2,110	551	1,590	875	396	34	7.0	413	92	36
16	10	268	2,110	577	980	743	349	32	13	505	82	33
17	12	230	2,000	605	875	743	299	30	48	784	92	30
18	12	221	1,250	605	705	934	248	27	72	875	68	23
19	12	288	925	430	605	2,230	212	23	50	551	91	19
20	13	299	784	322	505	2,500	180	21	50	485	129	17
21	12	288	a650	448	430	1,330	164	20	56	396	40	16
22	11	248	a520	505	485	875	150	18	60	223	32	15
23	9.9	248	a450	485	577	784	143	17	50	122	28	14
24	9.9	268	a400	605	669	784	136	15	36	92	24	13
25	10	299	a350	743	577	925	129	14	22	87	22	12
26	9.5	288	a320	980	505	705	122	13	23	110	19	10
27	9.1	248	a290	716	448	577	110	12	42	116	17	53
28	12	212	a270	448	396	551	110	37	38	116	16	340
29	16	172	a250	396	364	505	98	157	19	212	15	349
30	14	143	a240	380	-	430	82	110	34	258	14	322
31	14	-	a230	430	-	396	-	68	-	221	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
tober	308.4	16	4.3	9.95	0.041	0.05
vember	5,321	299	28	177	.738	.82
cember	22,397	2,650	98	722	3.01	3.47
Calendar year 1947	151,457.4	7,200	3.8	415	1.73	23.47
nuary	13,347	980	188	431	1.80	2.07
bruary	23,668	2,360	268	816	3.40	3.67
rch	45,327	5,200	349	1,462	6.09	7.02
ril	13,731	1,250	82	458	1.91	2.13
y	1,634	157	12	52.7	.220	.25
ne	888.4	72	7.0	29.6	.123	.14
ly	7,679	875	10	248	1.03	1.19
gust	4,195	485	14	135	.562	.65
ptember	2,566	349	10	85.5	.356	.40
Water year 1947-48	141,061.8	5,200	4.3	385	1.60	21.86

Peak discharge (base, 2,500 sec.-ft.).- Dec. 13 (4 a.m.) 3,270 sec.-ft.; Dec. 17 (3 a.m.) 2,800 sec.-ft.; Feb. 11 (5 a.m.) 2,800 sec.-ft.; Mar. 4 (4 p.m.) 2,950 sec.-ft.; Mar. 7 (11 a.m.) 5,780 sec.-ft.; Mar. 12 (6 a.m.) 2,500 sec.-ft.; Mar. 20 (5 a.m.) 2,950 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

Conecuh River at Brantley, Ala.

Location.- Water-stage recorder, 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. Datum of gage is 226.2 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 485 square miles.

Records available.- October 1937 to September 1948.

Average discharge.- 11 years, 787 second-feet.

Extremes.- Maximum discharge during year, 7,850 second-feet Mar. 7 (gage height, 18.6 feet); minimum, 88 second-feet Oct. 4 (gage height, 1.73 feet).
1937-48: Maximum discharge, 15,600 second-feet Aug. 19, 1939, Mar. 23, 1943 (gage height, 22.9 feet); minimum, 43 second-feet Oct. 25, 26, 1941 (gage height, 1.26 feet).

Remarks.- Records good.

Revisions.- W 952: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	139	486	641	1,330	943	2,290	339	411	144	456	126
2	93	169	426	674	1,240	1,130	2,100	324	289	145	486	149
3	92	317	382	723	1,170	2,310	1,730	303	240	175	531	163
4	90	339	367	723	1,170	3,120	1,520	296	208	201	723	312
5	90	254	339	707	1,260	2,390	1,450	296	182	157	1,360	707
6	90	208	332	690	1,220	5,480	1,660	332	163	127	1,010	840
7	96	234	324	674	1,090	7,410	1,710	374	146	111	857	823
8	103	303	324	674	978	6,150	1,540	396	146	107	789	625
9	114	360	367	641	1,190	7,550	1,680	353	145	220	723	471
10	.20	339	516	577	1,500	5,940	1,900	310	138	441	609	382
11	121	753	874	531	1,380	4,400	1,660	289	127	625	690	346
12	120	943	1,290	501	1,400	3,620	1,570	261	117	723	657	289
13	112	874	1,470	740	1,840	3,540	1,640	240	111	823	441	247
14	107	789	1,870	823	2,790	3,400	1,760	227	108	908	367	227
15	105	874	3,190	823	2,490	3,050	1,570	214	182	1,010	346	240
16	105	857	3,780	806	2,290	2,610	1,260	201	175	978	441	234
17	106	756	3,190	789	2,170	2,550	1,070	194	206	995	707	208
18	113	740	2,850	840	1,940	2,440	926	182	234	978	690	188
19	121	840	2,670	874	1,760	2,100	806	169	220	840	516	169
20	120	756	2,550	891	1,540	1,840	707	163	214	857	346	151
21	119	707	2,070	978	1,360	2,100	625	151	214	960	275	138
22	112	707	1,680	995	1,540	3,860	577	150	220	960	247	128
23	112	723	1,400	943	1,430	2,980	531	144	234	806	214	119
24	111	908	1,220	1,130	1,240	2,290	501	134	208	625	194	113
25	111	1,010	1,050	1,070	1,110	1,870	471	133	182	486	169	108
26	114	960	926	1,030	1,050	1,640	456	129	163	441	157	105
27	114	840	806	1,050	1,050	1,590	456	132	141	332	151	107
28	119	707	740	1,170	1,030	1,640	441	135	134	317	140	129
29	135	609	690	1,290	995	1,520	411	169	143	657	128	310
30	163	546	641	1,430	-	1,380	360	289	147	593	119	456
31	150	-	609	1,470	-	1,470	-	471	-	501	113	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,473	163	90	112	0.231	0.27
November	18,561	1,010	139	619	1.28	1.42
December	39,429	3,780	324	1,272	2.62	3.02
Calendar year 1947	354,650	9,920	90	972	2.00	27.20
January	26,898	1,470	501	868	1.79	2.06
February	42,553	2,790	978	1,467	3.02	3.26
March	94,613	7,550	943	3,052	6.29	7.25
April	35,378	2,290	360	1,179	2.43	2.71
May	7,500	471	129	242	.499	.58
June	5,550	411	108	185	.381	.43
July	17,243	1,010	107	556	1.15	1.32
August	14,652	1,360	113	473	.975	1.12
September	8,610	840	105	287	.592	.66
Water year 1947-48	314,460	7,550	90	859	1.77	24.10

Peak discharge (base, 4,000 sec.-ft.).- Dec. 16 (2 a.m.) 4,030 sec.-ft.; Mar. 7 (4 a.m.) 7,850 sec.-ft.; Mar. 22 (7 a.m.) 4,120 sec.-ft.

Conecuh River near Andalusia, Ala.

Location.- Water-stage recorder, lat. 31°16', long. 86°36', in NE¼ sec. 1, T. 3 N., R. 14 E., at Simmons Bridge on State Highway 83, 7½ miles southwest of Andalusia. Datum of gage is 106.77 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 1,300 square miles.

Records available.- August 1904 to December 1919 (published as Conecuh River at Beck), September 1929 to September 1948.

Average discharge.- 34 years, 1,986 second-feet.

Extremes.- Maximum discharge during year, 22,100 second-feet Mar. 8 (gage height, 33.4 feet); minimum, 71 second-feet June 14; minimum daily, 169 second-feet June 13.

1904-19, 1929-48: Maximum discharge observed, 42,000 second-feet (revised) Mar. 19, 1913 (gage height, 39.2 feet); minimum, 40 second-feet Nov. 3, 1941; minimum daily, 47 second-feet Oct. 26, Nov. 9, 1941.

Maximum stage known, 47.64 feet Mar. 15, 1929 (discharge, 154,000 second-feet, by slope-area method).

Revisions.- The maximum discharge observed for the water year 1913 has been revised to 42,000 second-feet Mar. 19 (gage height, 39.2 feet) superseding figure published in previous Water-Supply Papers.

Remarks.- Records good. Flow regulated by hydroelectric plants and by Gantt Reservoir (usable capacity, 12,100 acre-feet) on Conecuh River at Gantt, and by Point A Reservoir (usable capacity, 2,300 acre-feet) on Conecuh River, half a mile below Patsaliga Creek.

Revisions.- W 697: Drainage area.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 5

1.6	173	3.0	549	10.0	3,350
2.0	264	4.0	910	15.0	5,700
2.5	394	7.0	2,110	23.0	10,000

Mar. 6 to Sept. 30

1.7	165	6.0	1,570	28.0	13,800
2.0	233	10.0	3,200	30.0	16,000
2.5	359	15.0	5,710	32.0	19,200
3.0	512	25.0	11,400		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	650	666	1,910	2,560	3,710	2,600	8,600	1,420	1,100	696	1,640	f512
2	566	504	2,190	2,190	3,440	2,800	7,310	f511	1,130	764	1,530	f496
3	484	646	1,870	2,760	3,220	6,440	6,150	f792	990	671	1,420	f575
4	352	1,110	1,710	1,950	3,010	8,890	6,040	1,200	885	251	1,570	1,450
5	197	974	2,230	1,830	3,180	9,720	4,130	1,310	747	291	3,110	1,600
6	195	950	1,590	1,870	3,530	13,600	3,520	1,380	185	432	3,200	1,420
7	500	1,080	1,510	2,270	3,400	19,000	4,180	1,380	431	464	2,890	1,420
8	453	1,150	1,670	2,270	3,940	19,000	4,230	1,420	798	340	2,680	1,420
9	394	999	1,750	1,950	2,840	16,900	4,180	417	713	1,200	2,600	1,420
10	475	1,110	2,110	1,830	3,890	17,200	3,650	890	679	1,380	2,600	1,420
11	358	2,310	3,980	1,750	4,450	15,600	5,880	1,450	713	1,420	2,240	1,420
12	177	1,830	4,400	1,750	4,170	12,900	4,640	1,450	528	1,420	1,680	1,130
13	280	2,680	4,350	2,150	3,760	10,900	3,290	1,200	169	1,450	1,570	1,340
14	498	2,640	5,160	2,930	4,210	11,300	3,750	1,130	345	1,450	1,530	1,310
15	552	3,580	7,250	2,720	7,520	7,930	4,590	990	730	1,960	1,490	1,420
16	491	2,720	8,660	2,430	4,730	6,040	3,560	990	815	2,560	1,490	1,130
17	516	2,600	8,890	2,510	4,680	7,260	3,240	621	815	2,400	1,640	1,060
18	397	3,220	8,720	2,720	4,780	5,760	2,120	990	747	1,760	1,720	868
19	210	3,710	7,730	2,270	4,870	6,150	2,200	920	696	2,280	1,840	f342
20	232	2,970	8,490	2,600	4,080	5,660	2,400	885	488	2,440	1,570	632
21	199	3,090	7,620	2,640	3,180	6,590	2,480	850	528	2,240	1,490	990
22	186	3,620	4,680	2,800	5,360	4,380	2,040	730	990	1,680	1,190	f938
23	361	3,090	3,260	2,680	3,620	6,590	1,880	231	832	1,600	f769	f714
24	293	2,890	3,050	3,310	3,140	8,040	1,840	f350	764	1,600	1,170	559
25	452	3,440	3,480	3,220	3,180	6,700	1,720	f747	850	1,640	f1,020	452
26	309	3,310	2,270	3,800	3,090	5,390	1,640	f730	645	1,720	1,060	196
27	317	3,350	2,270	2,600	3,350	4,540	1,640	f713	245	1,600	f1,000	f464
28	599	2,760	1,950	3,050	2,970	4,440	1,570	f645	417	1,640	f698	f704
29	607	2,070	2,350	3,310	3,350	4,330	1,530	f512	696	2,280	f315	f620
30	582	1,670	2,470	3,580	-	4,180	1,490	f215	798	1,760	f296	f574
31	550	-	2,230	4,450	-	4,230	-	f527	-	2,040	f512	-

Month	Observed				Change in contents (equivalent, second-feet)†	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	12,432	650	177	401	+14	415	0.319	0.37
November	66,339	5,710	504	2,211	+168	2,379	1.83	2.04
December	121,800	8,890	1,510	3,929	-15	3,914	3.01	3.47
Calendar year 1947	1,090,083	15,300	177	2,987	+11	2,998	2.31	31.30
January	80,750	4,450	1,750	2,605	-3	2,602	2.00	2.31
February	112,650	7,520	2,840	3,884	+23	3,907	3.01	3.25
March	265,060	19,000	2,600	8,550	+9	8,559	6.58	7.59
April	105,490	8,600	1,490	3,516	-108	3,408	2.62	2.92
May	27,596	1,450	215	890	-35	855	.658	.76
June	20,469	1,130	169	682	-22	660	.508	.57
July	45,429	2,560	251	1,465	+61	1,526	1.17	1.35
August	49,530	3,200	296	1,598	-42	1,556	1.20	1.38
September	28,596	1,600	196	953	-18	935	.719	.80
Water year 1947-48	936,141	19,000	169	2,558	+2	2,560	1.97	26.81

† Change in contents in Gantt and Point A Reservoirs.

f Computed on basis of partly estimated gage-height record.

Conecuh River near Brooklyn, Ala.

Location.- Water-stage recorder, lat. 31°10', long. 86°48', in W½ sec. 6, T. 2 N., R. 13 E., at bridge on U. S. Highway 29, 3 miles downstream from Sepulga River and 7 miles southwest of Brooklyn. Datum of gage is 76.95 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 2,400 square miles.

Records available.- May 1935 to September 1948.

Average discharge.- 13 years, 4,246 second-feet.

Extremes.- Maximum discharge during year, 36,700 second-feet Mar. 10 (gage height, 33.8 feet); minimum daily, 465 second-feet Oct. 6.

1935-48: Maximum discharge, 60,700 second-feet Mar. 20, 1938 (gage height, 38.0 feet); minimum daily, 255 second-feet Oct. 27, 1941.

Maximum stage known, about 41 feet Mar. 15, 1929.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Flow partly regulated by Gantt and Point A Reservoirs (see preceding page for monthly change in contents) and power plants.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	909	945	2,880	4,000	7,940	5,130	12,700	2,400	1,330	1,600	2,460	a850
2	945	1,240	3,160	4,140	7,800	5,130	12,700	1,890	1,510	1,330	2,240	a820
3	838	909	2,880	4,140	6,930	10,700	10,700	1,280	1,510	1,280	2,340	a780
4	786	1,280	2,640	4,210	6,420	16,900	9,260	1,940	1,280	1,060	2,700	1,150
5	653	1,370	3,020	3,510	6,140	19,400	8,710	2,190	1,280	a800	4,280	2,400
6	465	1,420	2,640	3,370	5,920	23,400	6,930	2,340	982	a840	5,200	1,940
7	637	1,420	2,400	3,580	5,630	28,500	6,860	2,400	a800	a880	4,640	1,890
8	838	2,290	2,400	3,440	5,630	33,500	6,860	2,400	982	a800	4,280	1,990
9	803	1,510	2,950	3,510	5,850	36,100	6,780	1,890	1,060	1,110	3,930	2,040
10	752	1,240	3,370	3,020	6,930	36,700	6,350	1,330	1,020	2,760	3,650	1,890
11	786	3,310	7,080	2,950	8,470	35,800	7,140	2,140	1,060	2,140	3,090	1,790
12	669	5,850	10,900	2,820	8,630	31,900	8,550	2,190	1,060	2,040	2,460	1,690
13	480	4,350	11,200	4,500	8,100	26,400	6,570	1,990	a800	2,190	2,090	1,600
14	669	4,350	12,600	5,490	8,100	20,600	6,930	1,790	a700	2,460	2,040	1,840
15	803	5,420	14,300	5,350	9,850	17,300	7,360	1,690	982	2,700	1,990	2,140
16	820	6,140	16,900	4,710	10,600	12,700	6,060	1,370	1,150	3,720	1,940	1,740
17	752	5,060	17,200	4,500	8,790	11,200	5,700	909	1,550	4,210	2,240	1,510
18	820	4,710	16,600	4,850	8,240	10,800	4,570	1,420	1,420	3,720	2,090	1,370
19	686	6,640	15,000	4,350	7,870	10,600	3,790	1,460	1,420	3,160	2,190	1,060
20	495	5,350	13,100	4,140	7,290	10,500	4,000	1,370	1,420	3,790	2,090	a770
21	669	4,780	12,600	4,850	5,700	10,000	3,860	1,370	1,330	3,650	1,940	1,150
22	541	5,560	10,300	5,420	6,930	9,510	3,510	1,330	1,420	2,760	1,840	1,190
23	541	5,560	6,860	5,490	7,720	9,180	3,160	1,060	1,510	2,290	1,150	1,100
24	702	5,490	5,700	6,140	6,780	11,400	3,020	a840	1,420	2,190	1,330	a800
25	702	6,570	5,630	5,920	6,860	11,300	2,880	1,060	1,280	2,190	1,370	a690
26	820	6,210	4,780	6,420	6,420	9,600	2,640	1,150	1,280	2,190	1,280	g653
27	556	5,420	4,140	5,490	6,420	8,550	2,820	1,190	982	2,090	1,280	a640
28	909	4,990	4,000	5,630	5,990	7,650	2,700	1,150	a870	2,140	1,190	a770
29	1,020	3,720	3,930	6,060	5,630	7,720	2,520	1,060	945	2,880	g820	a910
30	945	3,300	4,140	6,500	-	7,000	2,400	1,060	1,420	2,520	a700	a860
31	891	-	3,860	7,430	-	7,430	-	a740	-	2,400	a680	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	22,902	1,020	465	739	0.308	0.35
November	116,404	6,640	909	3,880	1.62	1.80
December	229,160	17,200	2,400	7,392	3.08	3.55
Calendar year 1947	2,016,855	26,600	465	5,526	2.30	31.24
January	145,930	7,430	2,820	4,707	1.96	2.26
February	209,580	10,600	5,630	7,227	3.01	3.25
March	502,600	36,700	5,130	16,210	6.75	7.79
April	178,030	12,700	2,400	5,934	2.47	2.76
May	48,399	2,400	740	1,561	.650	.75
June	35,773	1,550	700	1,192	.497	.55
July	69,890	4,210	800	2,255	.940	1.08
August	71,520	5,200	680	2,307	.961	1.11
September	40,023	2,400	640	1,334	.556	.62
Water year 1947-48	1,670,211	36,700	465	4,563	1.90	25.87

Peak discharge (base, 16,000 sec.-ft.).- Dec. 16 (8 p.m.) 17,300 sec.-ft.: Mar. 10 (4 p.m.) 36,700 sec.-ft.

a No gage-height record; discharge computed on basis of records for station near Andalusia.

g Computed from graph based on gage readings.

Patsaliga Creek at Luverne, Ala.

Location.--Wire-weight gage, lat. 31°44', long. 86°17', in SW¼ sec. 29, T. 9 N., R.18 E., at bridge on State Highways 9 and 10, 1 mile northwest of Luverne and 3 miles downstream from Pond Creek. Datum of gage is 267.53 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 250 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 6,800 second-feet Mar. 7 (gage height, 13.4 feet, from graph based on gage readings); minimum observed, 42 second-feet Oct. 1 (gage height, 2.05 feet).

1943-48: Maximum discharge, 13,100 second-feet Mar. 24, 1944 (gage height, 15.55 feet); minimum observed, 27 second-feet June 28, 1945 (gage height, 1.67 feet).

Remarks.- Records good. Gage read once daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 12

2.0	40	5.0	260	10.0	1,250
2.5	65	6.0	376	10.5	1,600
3.0	95	7.0	515	11.0	2,120
3.5	127	8.0	680	11.5	2,800
4.0	165	9.0	888	12.0	3,640

Dec. 13 to Sept. 30

2.2	46	7.0	490	11.0	2,120
2.6	66	8.0	680	11.5	2,800
3.0	90	9.0	909	12.0	3,640
4.0	151	9.5	1,050	12.5	4,640
5.0	233	10.0	1,260	13.1	6,050
6.0	345	10.5	1,600		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	156	230	358	836	412	813	144	120	102	297	58
2	45	192	220	398	1,210	710	767	138	126	84	371	66
3	45	201	201	371	1,210	1,270	813	132	102	66	790	64
4	45	210	192	371	860	3,830	1,050	132	90	58	991	131
5	45	141	192	358	598	4,020	1,050	158	78	51	1,440	384
6	45	113	192	286	458	2,800	836	196	72	46	1,120	458
7	52	149	192	253	398	6,050	598	214	132	46	962	384
8	62	230	201	233	398	5,560	560	196	96	46	723	188
9	71	250	240	223	618	3,290	860	165	75	188	321	114
10	65	271	727	223	745	2,120	935	138	69	398	205	102
11	68	515	913	223	1,320	3,120	1,670	132	58	398	223	108
12	65	500	3,570	233	2,000	2,200	1,370	120	56	618	205	102
13	62	515	3,640	398	1,600	1,310	884	120	54	638	172	102
14	58	662	2,800	458	1,440	1,050	638	114	54	524	151	102
15	55	841	2,370	524	1,440	860	524	108	100	442	138	108
16	58	777	2,240	638	1,310	790	490	102	151	490	126	96
17	65	699	2,370	680	1,160	860	458	96	205	734	253	84
18	71	864	2,240	490	935	860	371	90	243	1,520	303	75
19	65	1,000	1,440	474	680	972	297	84	158	1,260	196	66
20	62	798	991	384	542	3,440	264	78	78	759	138	58
21	62	644	745	384	507	2,560	243	78	151	309	120	58
22	65	610	560	427	598	1,310	233	75	138	196	114	58
23	62	577	412	507	659	1,080	214	72	108	144	114	56
24	65	644	412	680	909	935	196	69	96	158	96	54
25	68	561	398	701	1,050	1,700	188	69	84	214	90	48
26	62	515	358	680	836	1,520	196	66	69	223	78	46
27	62	515	345	638	598	1,050	196	66	69	158	72	46
28	101	500	321	638	507	767	188	75	61	120	69	78
29	157	402	309	560	458	790	172	218	56	180	66	102
30	89	282	286	542	-	962	151	243	90	253	66	114
31	62	-	275	701	-	909	-	165	-	358	61	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,001	157	42	64.5	0.258	0.30
November	14,334	1,000	113	478	1.91	2.13
December	29,582	3,640	192	954	3.82	4.40
Calendar year 1947	194,753	4,860	42	534	2.14	28.96
January	14,034	701	223	453	1.81	2.09
February	25,880	2,000	398	892	3.57	3.85
March	59,107	6,050	412	1,907	7.63	8.79
April	17,225	1,670	151	574	2.30	2.56
May	3,853	243	66	124	.496	.57
June	3,039	243	54	101	.404	.45
July	10,781	1,520	46	348	1.39	1.60
August	10,077	1,440	61	325	1.30	1.50
September	3,510	458	46	117	.468	.52
Water year 1947-48	193,423	6,050	42	528	2.11	28.76

Peak discharge (base, 3,000 sec.-ft.).- Dec. 12 (7 p.m.) 4,860 sec.-ft.; Mar. 4 (9 p.m.) 4,860 sec.-ft.; Mar. 7 (4 p.m.) 6,800 sec.-ft.; Mar. 11 (5 p.m.) 3,640 sec.-ft.; Mar. 20 (4 p.m.) 4,430 sec.-ft.

Sepulga River near McKenzie, Ala.

Location.- Water-stage recorder, lat. 31°27', long. 86°47', in SE¼ sec. 30, T. 6 N., R. 13 E., at Watt Bridge on U. S. Highway 31, three-eighths of a mile upstream from Old Town Creek, 2½ miles upstream from Piney Woods Creek, 5½ miles downstream from Persimmon Creek, and 7 miles southwest of McKenzie. Datum of gage is 155.96 feet above mean sea level, unadjusted (levels by Corps of Engineers).

Drainage area.- 470 square miles.

Records available.- October 1937 to September 1948.

Average discharge.- 11 years, 750 second-feet.

Extremes.- Maximum discharge during year, 13,300 second-feet Mar. 8 (gage height, 19.2 feet); minimum, 25 second-feet Oct. 5.

1937-48: Maximum discharge, 28,100 second-feet Mar. 17, 1938 (gage height, 24.5 feet, from floodmark); minimum, 17 second-feet Oct. 16 to Nov. 7, 1938.

Maximum stage known, about 33 feet in March 1929, from information by local residents.

Remarks.- Records good except those below 100 second-feet and those for periods of backwater from tributary inflow, which are fair.

Rating table, water year 1947-48, except periods of backwater
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 14 to July 10)

2.7	22	3.4	106	4.4	464	9.0	3,880
2.9	41	3.5	128	5.0	796	14.0	7,850
3.1	62	3.7	184	6.0	1,500	17.0	10,600
3.3	88	4.0	290	7.0	2,390	19.0	13,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	70	210	408	2,390	754	736	154	58	200	104	32
2	27	73	187	535	2,120	c1,060	1,060	136	63	146	202	33
3	27	59	172	639	1,720	3,300	1,300	128	59	95	310	31
4	26	58	160	562	1,420	5,960	1,100	126	52	90	248	46
5	26	78	154	489	1,100	8,890	892	144	48	72	343	72
6	26	85	149	386	859	9,550	760	151	44	61	282	60
7	26	c97	141	334	736	10,900	628	184	42	54	204	58
8	34	99	149	306	678	13,000	584	210	41	50	128	104
9	32	74	169	290	c1,060	10,600	540	194	41	108	101	87
10	29	70	922	282	2,210	6,680	778	175	40	119	95	66
11	29	c680	2,550	267	2,550	4,330	1,030	138	43	87	146	69
12	29	796	3,580	260	2,260	3,160	991	119	58	108	110	63
13	38	778	4,180	c490	2,120	2,470	892	106	50	184	85	68
14	35	445	4,260	991	2,080	2,030	695	101	48	151	77	85
15	30	870	4,110	958	2,260	1,670	572	90	52	256	70	87
16	29	760	3,810	796	1,980	1,300	556	84	c68	408	64	72
17	29	661	3,730	650	1,670	1,420	464	80	121	422	61	61
18	29	546	3,020	546	1,380	2,210	372	78	149	408	56	53
19	28	474	2,300	530	1,060	1,940	310	74	149	298	54	51
20	28	351	1,850	535	859	1,760	267	69	426	214	62	47
21	29	310	1,420	760	784	1,500	238	67	224	151	62	41
22	28	326	991	1,160	1,290	1,270	217	64	194	151	55	37
23	29	322	748	1,200	2,120	1,300	197	61	157	157	50	33
24	31	710	656	1,130	1,980	1,580	187	59	106	124	49	31
25	33	924	584	1,160	1,720	1,500	178	55	95	95	44	30
26	35	892	525	1,030	1,500	1,270	172	54	88	81	44	27
27	37	611	479	892	1,270	1,200	191	60	78	72	41	28
28	40	431	445	924	991	1,100	217	59	66	88	39	31
29	35	318	412	1,240	828	892	191	63	144	128	36	30
30	33	245	394	1,500	-	742	172	61	242	102	34	28
31	32	-	372	2,120	-	707	-	59	-	92	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	947	40	26	30.5	0.065	0.07
November	12,205	924	58	407	.866	.97
December	42,829	4,260	141	1,382	2.94	3.39
Calendar year 1947	313,566	9,000	26	859	1.83	24.81
January	23,370	2,120	260	754	1.60	1.85
February	44,995	2,550	678	1,552	3.30	3.56
March	106,045	13,000	707	3,421	7.28	8.39
April	16,487	1,300	172	550	1.17	1.30
May	3,203	210	54	103	.219	.25
June	3,046	426	40	102	.217	.24
July	4,772	422	50	154	.328	.38
August	3,287	343	31	106	.226	.26
September	1,561	104	27	52.0	.111	.12
Water year 1947-48	262,747	13,000	26	718	1.53	20.78

Peak discharge (base, 3,500 sec.-ft.).- Dec. 14 (2 p.m.) 4,330 sec.-ft.; Mar. 8 (12 m.) 13,300 sec.-ft.

c Backwater from tributary inflow; discharge computed from recorder graph adjusted from backwater effect.

Pigeon Creek near Thad, Ala.

Location.- Water-stage recorder, lat. 31°29', long. 86°39', in N½ sec. 21, T. 6 N., R. 14 E., at bridge on State Highway 55, 1½ miles upstream from Louisville & Nashville Railroad bridge, 2 miles southeast of Thad, 3 miles upstream from Reedy Creek, and 5½ miles southeast of McKenzie. Datum of gage is 172.58 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 296 square miles.

Records available.- October 1937 to September 1948.

Average discharge.- 11 years, 508 second-feet.

Extremes.- Maximum discharge during year, 7,540 second-feet Mar. 7 (gage height, 22.2 feet); minimum daily, 52 second-feet Oct. 2, 5, 7.

1937-48: Maximum discharge, 14,400 second-feet Mar. 18, 1938 (gage height, 26.06 feet); minimum, 1.6 second-feet (result of unusual regulation) Oct. 11, 1938 (gage height, 1.66 feet); minimum daily, 22 second-feet Sept. 28, Oct. 18, 1938.

Maximum stage known, about 30 feet in March 1929, from information by local residents.

Remarks.- Records good. Diurnal fluctuation and occasional regulation caused by small mill 200 feet above station.

Revisions.- W 952: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 23 to Sept. 30)

2.5	46	7.0	552	18.0	4,100
3.0	86	10.0	1,100	20.0	5,400
4.0	175	12.0	1,530	21.0	6,200
5.0	280	14.0	2,140	22.0	7,270
6.0	396	16.0	3,020		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	105	230	359	1,000	570	804	180	119	108	263	68
2	52	92	215	359	1,020	858	840	165	112	114	175	61
3	54	83	200	371	986	2,390	894	160	95	128	359	66
4	53	142	195	396	986	3,750	840	170	84	100	714	128
5	52	146	190	423	822	3,470	840	190	78	80	967	132
6	56	119	185	383	588	5,470	840	195	73	69	1,000	220
7	52	146	185	335	501	7,140	660	236	72	64	1,020	347
8	59	124	190	302	468	7,140	535	236	67	61	804	383
9	60	128	210	280	732	6,290	518	236	72	124	403	258
10	64	190	423	274	1,020	4,350	732	195	116	142	302	160
11	80	469	948	269	1,140	2,970	967	160	104	180	210	165
12	71	452	1,360	264	1,140	2,260	948	146	88	324	190	160
13	67	396	1,680	501	1,250	1,920	912	137	81	501	210	170
14	59	535	2,520	535	1,630	1,650	840	128	71	642	200	155
15	57	750	2,740	501	1,550	1,360	606	124	68	678	180	146
16	60	768	2,560	518	1,420	1,180	518	118	70	804	160	132
17	60	624	2,100	552	1,220	1,040	484	111	83	750	150	124
18	57	606	1,860	484	1,120	1,100	423	104	96	624	183	111
19	60	624	1,630	409	967	1,420	359	100	137	696	200	92
20	66	484	1,530	396	750	1,330	313	97	137	732	183	82
21	67	383	1,220	518	624	1,220	291	92	116	570	137	76
22	66	371	822	696	714	1,310	269	89	124	302	123	70
23	66	359	588	696	894	1,510	247	85	146	225	119	68
24	68	409	501	696	930	1,250	236	83	118	185	114	62
25	65	642	452	732	986	1,100	225	80	96	155	103	57
26	62	624	423	678	1,120	1,040	215	83	88	155	93	53
27	74	452	396	606	1,060	1,040	225	88	76	236	72	53
28	87	409	371	660	750	948	215	92	68	274	72	59
29	73	324	359	642	642	786	210	94	99	195	73	56
30	73	264	347	696	-	696	200	96	132	185	77	90
31	81	-	335	858	-	1,000	-	118	-	247	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per squmre mile	Runoff in inches
October	1,975	87	52	63.7	0.215	0.25
November	11,220	768	83	374	1.26	1.41
December	26,965	2,740	185	870	2.94	3.39
Cslendar year 1947	211,861	3,890	52	580	1.96	26.61
January	15,389	858	264	496	1.68	1.93
February	28,030	1,630	468	967	3.27	3.52
March	69,558	7,140	570	2,244	7.58	8.74
April	16,206	967	200	540	1.82	2.04
May	4,188	236	80	135	.456	.53
June	2,886	146	67	96.2	.325	.36
July	9,650	804	61	311	1.05	1.21
August	8,947	1,020	68	289	.976	1.12
September	3,804	383	53	127	.429	.48
Water year 1947-48	198,818	7,140	52	543	1.83	24.98

Peak discharge (base, 2,000 sec.-ft.).- Dec. 15 (4 p.m.) 2,830 sec.-ft.; Mar. 7 (8 a.m.) 7,540 sec.-ft.

Murder Creek near Evergreen, Ala.

Location.- Water-stage recorder, lat. 31°25', long. 87°00', in NW¼ sec. 8, T. 5 N., R. 11 E., at bridge on U. S. Highway 31, 1 mile upstream from Louisville & Nashville Railroad bridge and 2½ miles southwest of Evergreen. Datum of gage is 178.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 169 square miles.

Records vailable.- October 1937 to September 1948.

Average discharge.- 11 years, 306 second-feet.

Extremes.- Maximum discharge during year, 4,100 second-feet Mar. 3 (gage height, 11.2 feet); minimum, 80 second-feet Sept. 27 (gage height, 3.51 feet).

1937-48: Maximum discharge, 20,000 second-feet Mar. 16, 1938 (gage height, 16.65 feet, from graph based on gage readings), from rating curve extended above 5,000 second-feet on basis of records for Sepulga River near McKenzie; minimum, 63 second-feet Oct. 31, 1941 (gage height, 3.30 feet).

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.5	79	6.0	335	9.0	1,260
3.7	92	7.0	500	9.5	1,650
4.0	114	7.5	611	10.0	2,160
4.5	159	8.0	760	10.5	2,820
5.0	212	8.5	957	10.7	3,150

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	114	144	223	314	563	282	500	206	149	159	174	89
2	114	206	212	395	445	540	574	196	131	144	165	96
3	118	212	212	342	356	2,840	541	184	122	126	395	92
4	114	159	212	270	328	3,030	403	190	122	114	253	148
5	114	140	212	246	314	1,520	349	223	118	106	302	302
6	122	136	218	246	302	2,600	356	258	114	106	282	276
7	122	179	212	240	302	2,880	342	314	114	106	159	144
8	140	295	212	234	288	1,550	328	258	118	110	131	114
9	140	282	276	228	476	a1,200	335	201	114	174	126	106
10	131	169	502	234	777	1,300	314	196	126	308	126	114
11	122	511	1,970	234	728	1,040	295	223	122	264	154	149
12	118	1,740	1,700	223	500	794	276	196	114	169	149	149
13	118	768	1,160	395	428	652	288	179	114	144	126	122
14	118	342	982	552	483	586	420	169	114	149	114	144
15	118	428	890	403	454	552	403	159	136	136	110	201
16	122	500	957	288	403	541	364	154	179	149	106	164
17	122	436	760	270	356	541	295	149	372	174	106	122
18	122	295	552	282	335	839	264	149	328	184	106	106
19	122	356	436	270	314	744	240	140	234	154	106	102
20	122	328	395	270	295	586	234	140	335	122	99	92
21	154	276	372	364	308	530	228	136	445	131	99	96
22	164	314	342	436	411	481	223	131	321	169	96	92
23	131	342	335	387	500	500	212	131	246	118	91	92
24	136	436	314	379	463	530	212	126	179	106	106	88
25	144	760	308	349	349	500	206	131	149	118	102	88
26	144	530	295	308	314	420	223	144	140	126	92	85
27	140	335	288	314	302	428	372	140	131	114	99	81
28	144	264	282	500	308	428	364	154	122	140	102	102
29	140	240	276	436	308	395	264	206	122	258	99	114
30	126	234	270	463	-	356	206	179	140	240	87	102
31	126	-	270	574	-	395	-	149	-	190	89	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,982	164	114	128	0.757	0.88
November	11,357	1,740	136	379	2.24	2.50
December	15,645	1,970	212	505	2.99	3.44
Calendar year 1947	135,524	2,690	107	371	2.20	29.83
January	10,446	574	223	337	1.99	2.30
February	11,690	777	288	403	2.38	2.57
March	29,580	3,030	282	954	5.64	6.51
April	9,631	574	206	321	1.90	2.12
May	5,511	314	126	178	1.05	1.21
June	5,271	445	114	176	1.04	1.16
July	4,808	308	106	155	.917	1.06
August	4,351	395	87	140	.828	.96
September	3,772	302	81	126	.746	.83
Water year 1947-48	116,044	3,030	81	317	1.88	25.54

Peak discharge (base, 2,000 sec.-ft.).- Nov. 12 (7 a.m.) 2,050 sec.-ft.; Dec. 11 (3 p.m.) 2,400 sec.-ft.; Mar. 3 (11 p.m.) 4,100 sec.-ft.; Mar. 7 (3 a.m.) 3,510 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and adjacent record.

Perdido River at Barrineau Park, Fla.

Location.- Staff gage, lat. 30°41', long. 87°27', in sec. 15, T. 2 N., R. 32 W., at bridge on State Highway 227, half a mile southwest of Barrineau Park. Datum of gage is 26.11 feet above mean sea level, unadjusted.

Drainage area.- 370 square miles.

Records available.- June 1941 to September 1948.

Extremes.- Maximum discharge observed during year, 4,440 second-feet Mar. 4 (gage height, 11.00 feet); minimum observed, 271 second-feet Oct. 31 (gage height, 2.28 feet).
1941-48: Maximum discharge observed, 9,390 second-feet Mar. 24, 1944 (gage height, 16.17 feet), from rating curve extended above 5,500 second-feet; minimum observed, 242 second-feet June 12, 1941 (gage height, 1.85 feet).

Remarks.- Records good Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(*Shifting-control method used Jan. 10 to Feb. 17*)

Oct. 1 to Jan. 28				Jan. 29 to Sept. 30			
2.3	271	8.2	2,500	2.4	356	8.0	2,430
2.7	377	8.7	2,790	2.8	461	9.2	3,110
5.4	1,330			5.3	1,340	10.7	4,200

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	547	346	859	686	1,160	626	1,300	a526	493	1,120	661	356
2	443	478	755	651	1,120	939	1,680	493	404	939	592	356
3	377	426	617	651	1,050	2,330	1,800	526	379	731	800	493
4	346	362	547	686	870	4,200	1,760	1,490	356	626	731	1,270
5	332	295	513	686	800	3,670	1,450	1,760	356	525	661	1,230
6	362	295	790	651	765	3,900	1,080	1,520	356	559	626	1,080
7	651	346	929	651	765	4,200	1,010	1,050	356	835	661	904
8	547	721	999	651	731	4,050	974	559	356	1,160	661	696
9	513	721	1,140	617	800	3,670	904	526	431	1,340	696	559
10	443	686	1,410	617	939	3,390	870	493	904	1,450	800	493
11	443	1,290	1,730	617	1,160	2,740	835	461	661	1,340	765	526
12	443	1,810	2,090	617	1,120	2,080	765	461	461	1,160	661	559
13	443	1,570	2,310	686	974	1,560	765	431	379	1,010	661	1,080
14	443	1,370	2,180	894	800	1,410	1,010	431	356	800	765	1,680
15	443	1,850	2,310	1,030	731	1,190	1,080	431	356	592	835	1,960
16	443	1,770	2,790	1,100	731	1,230	974	431	379	461	800	1,920
17	443	1,290	2,670	1,070	696	1,410	870	404	661	404	731	1,720
18	409	1,370	2,180	999	731	1,520	800	404	1,080	493	626	1,520
19	409	2,610	1,770	859	696	1,300	731	379	1,080	696	526	1,230
20	443	2,400	1,410	790	696	1,120	626	356	870	559	461	800
21	547	1,970	1,140	755	696	1,010	559	356	765	461	404	461
22	686	2,270	1,070	686	661	939	493	356	661	431	379	404
23	825	2,450	1,030	721	661	870	493	356	626	431	404	404
24	755	2,270	999	1,210	661	870	493	356	592	404	431	379
25	651	2,400	964	1,370	661	835	526	356	939	431	431	356
26	582	2,220	929	1,450	626	800	493	356	1,120	404	404	356
27	476	1,970	859	1,370	626	731	493	559	835	379	404	356
28	409	1,690	825	1,250	626	696	493	1,050	974	493	431	356
29	332	1,370	790	1,160	626	696	592	939	1,300	696	404	356
30	283	1,030	755	1,160	-	661	a559	765	1,300	904	379	356
31	271	-	721	1,160	-	731	-	626	-	835	356	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,742	825	271	476	1.29	1.48
November	41,646	2,610	295	1,388	3.75	4.18
December	40,081	2,790	513	1,293	3.49	4.03
Calendar year 1947	453,034	8,530	271	1,241	3.35	45.53
January	27,501	1,450	617	887	2.40	2.76
February	23,179	1,160	626	799	2.16	2.33
March	55,374	4,200	626	1,786	4.83	5.57
April	26,478	1,800	493	883	2.39	2.66
May	19,207	1,760	356	620	1.68	1.93
June	19,786	1,300	356	660	1.78	1.99
July	22,670	1,450	379	731	1.98	2.28
August	18,147	835	356	585	1.58	1.82
September	24,216	1,960	356	807	2.18	2.43
Water year 1947-48	333,027	4,200	271	910	2.46	33.46

a No gage-height record; discharge interpolated.

Cartecay River near Ellijay, Ga.

Location.- Water-stage recorder, 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. Datum of gage is 1,255.39 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (Corps of Engineers bench mark).

Drainage area.- 135 square miles.

Records available.- March 1937 to September 1948. July 1904 to December 1905, May to November 1907 and December 1918 to June 1921 at site 8 miles upstream.

Average discharge.- 11 years (1937-48), 254 second-feet.

Extremes.- Maximum discharge during year, 3,240 second-feet Feb. 12 (gage height, 5.56 feet); minimum daily, 75 second-feet Oct. 6.

1937-48: Maximum discharge, 20,000 second-feet Apr. 8, 1938 (gage height, 13.0 feet, from floodmark), by slope-area method; minimum daily, 64 second-feet Oct. 26, 1941.

Remarks.- Records good. Some diurnal fluctuation caused by gristmills above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.1	64	2.2	358
1.3	98	2.6	552
1.5	138	3.0	790
1.7	183	3.5	1,150
1.9	240	4.3	1,840

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	109	128	169	228	251	607	280	201	158	405	121
2	80	222	125	186	196	337	596	300	193	145	426	119
3	82	172	123	156	183	308	485	308	188	138	558	117
4	80	145	121	149	174	288	431	312	183	132	901	134
5	78	246	151	142	201	265	417	292	178	132	465	174
6	75	176	156	142	276	402	465	296	174	132	316	174
7	78	178	134	140	401	848	470	329	221	123	258	145
8	96	209	165	136	1,060	531	490	276	196	121	231	153
9	151	162	174	136	648	431	465	262	178	123	215	145
10	115	147	209	134	552	385	422	254	172	158	201	140
11	104	318	218	130	436	350	408	251	169	794	196	134
12	98	240	186	130	1,800	329	394	247	165	385	204	125
13	93	183	167	209	1,070	308	376	247	162	254	188	121
14	89	165	156	169	1,310	296	490	240	160	296	178	125
15	89	296	207	142	732	292	422	234	160	320	181	119
16	112	221	333	151	558	300	390	231	176	237	193	117
17	520	183	224	142	475	308	372	228	165	201	181	111
18	206	176	193	134	417	280	354	221	158	181	169	109
19	149	186	176	134	380	288	345	215	176	169	165	108
20	130	167	167	132	367	284	337	206	165	167	172	109
21	119	156	158	138	341	269	333	204	172	158	156	106
22	109	149	153	138	350	269	329	199	209	158	153	106
23	106	151	149	134	316	858	316	196	183	151	156	106
24	106	156	147	142	296	510	316	196	158	151	174	106
25	108	153	153	130	288	412	308	193	149	138	165	104
26	108	142	153	134	300	372	304	191	145	136	151	102
27	106	138	145	156	292	792	300	212	142	142	142	104
28	178	134	140	193	280	542	292	324	158	221	138	134
29	130	130	138	167	262	450	292	292	188	196	134	125
30	113	130	134	196	-	403	280	247	188	174	130	113
31	108	-	136	296	-	558	-	218	-	209	125	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,796	520	75	122	0.904	1.04
November	5,340	318	109	178	1.32	1.47
December	5,119	333	121	165	1.22	1.41
Calendar year 1947	92,673	3,680	75	254	1.88	25.51
January	4,787	296	130	154	1.14	1.31
February	14,189	1,800	174	489	3.62	3.90
March	12,516	858	251	404	2.99	3.45
April	11,806	607	280	394	2.92	3.26
May	7,701	329	191	248	1.84	2.12
June	5,232	221	142	174	1.29	1.44
July	6,200	794	121	200	1.48	1.71
August	7,427	901	125	240	1.78	2.05
September	3,706	174	102	124	.919	1.03
Water year 1947-48	87,819	1,800	75	240	1.78	24.19

Peak discharge (base, 1,400 sec.-ft.).- Feb. 8 (8 a.m.) 1,480 sec.-ft.; Feb. 12 (11 a.m.) 3,240 sec.-ft.; Aug. 1 (10 p.m.) 1,480 sec.-ft.

Coosawattee River near Ellijay, Ga.

Location.- Water-stage recorder, lat. 34°41', long. 84°31', half a mile downstream from State Highway 5, 2 miles southwest of Ellijay, Gilmer County, and 2¼ miles downstream from confluence of Cartecay and Ellijay Rivers. Datum of gage is 1,216.04 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 238 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 444 second-feet.

Extremes.- Maximum discharge during year, 6,490 second-feet Feb. 12 (gage height, 8.94 feet); minimum daily, 113 second-feet Oct. 6.
1938-48: Maximum discharge, 13,000 second-feet Feb. 10, 1946, Jan. 20, 1947 (gage height, 14.3 feet); minimum, 101 second-feet on several days in October 1941.

Remarks.- Records good except those for period of no gage-height record, which are fair. Some minor regulation from gristmills upstream.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	171	205	314	415	465	1,060	475	337	250	643	205
2	123	334	201	347	356	584	1,060	496	314	217	649	197
3	123	264	197	281	323	556	845	524	304	205	806	197
4	120	226	194	268	309	529	754	540	295	194	1,260	226
5	120	361	259	255	351	496	709	512	290	186	703	286
6	113	272	277	246	518	728	754	502	281	209	496	277
7	116	272	226	242	697	1,660	760	584	351	178	410	230
6	142	356	295	234	1,830	985	800	460	318	167	371	250
9	230	264	328	234	1,220	774	774	430	286	171	342	250
10	175	238	385	226	1,060	697	661	415	268	230	323	259
11	175	503	410	217	819	637	643	410	268	1,100	318	221
12	153	a410	342	217	4,110	584	613	405	259	562	337	197
13	139	a330	299	435	2,490	551	584	400	255	390	309	190
14	136	a260	272	347	2,580	529	812	395	246	425	295	197
15	132	a800	412	277	1,420	518	661	385	246	540	314	186
16	150	a540	649	286	1,060	529	613	385	281	420	356	182
17	697	a350	425	264	880	551	578	375	255	332	314	175
18	328	a320	361	242	767	502	551	361	242	290	290	167
19	264	a300	318	230	691	518	540	361	272	255	272	167
20	213	286	295	230	661	507	524	351	255	250	290	164
21	186	268	277	238	613	490	518	351	246	238	268	164
22	175	255	268	238	631	485	507	342	318	238	264	156
23	167	268	255	226	568	1,380	502	332	295	221	268	156
24	167	264	246	242	534	887	490	328	246	213	351	156
25	171	255	268	213	512	703	490	337	234	197	281	153
26	171	238	277	221	540	637	490	328	226	194	268	150
27	164	230	255	264	529	1,340	485	347	217	226	246	150
28	250	221	246	347	507	985	485	551	234	430	234	205
29	194	213	242	286	485	793	475	470	351	309	226	186
30	171	209	238	318	-	715	475	455	309	268	217	164
31	164	-	234	507	-	915	-	366	-	332	213	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,749	697	113	185	0.777	0.90
November	9,278	800	171	309	1.30	1.45
December	9,156	649	194	295	1.24	1.43
Calendar year 1947	174,745	8,790	113	479	2.01	27.29
January	8,492	507	213	274	1.15	1.33
February	27,476	4,110	309	947	3.98	4.29
March	22,230	1,660	465	717	3.01	3.47
April	19,213	1,060	475	640	2.69	3.00
May	12,973	584	328	418	1.76	2.03
June	8,299	351	217	277	1.16	1.29
July	9,437	1,100	167	304	1.28	1.48
August	11,934	1,260	213	385	1.62	1.87
September	5,863	286	150	195	.819	.91
Water year 1947-48	150,100	4,110	113	410	1.72	23.45

Peak discharge (base, 2,000 sec.-ft.).- Feb. 8 (10 a.m.) 2,490 sec.-ft.; Feb. 12 (3 p.m.) 6,490 sec.-ft.; Mar. 7 (5 a.m.) 2,040 sec.-ft.

a No gage-height record; discharge computed on basis of records for Cartecay River near Ellijay.

Coosawattee River at Pine Chapel, Ga.

Location.- Water-stage recorder, lat. 34°35', long. 84°52', at county bridge at Pine Chapel, Gordon County, 4 miles downstream from Sallacoa Creek, 5 miles east of Resaca, and 6 miles upstream from confluence with Conasauga River. Auxiliary water-stage recorder at county bridge 2 miles upstream. Datum of each gage is 616.16 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 856 square miles.

Records available.- November 1938 to September 1948.

Average discharge.- 10 years, 1,323 second-feet.

Extremes.- Maximum discharge during year, 11,300 second-feet Feb. 13; maximum gage height, 23.6 feet Feb. 15; minimum daily discharge, 270 second-feet Oct. 7.

1938-48: Maximum discharge, 29,100 second-feet Feb. 11, 1946 (gage height, 29.6 feet), from rating curve extended above 13,000 second-feet; minimum daily, 220 second-feet Oct. 26, 1941.

Flood of Apr. 8, 1938, reached a stage of 30.0 feet, from gage reading.

Remarks.- Records good. Discharge for periods of backwater from Conasauga River computed by using fall as determined by auxiliary water-stage recorder as a factor. Moderate diurnal fluctuation at low flow caused by mills above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	281	368	470	720	1,960	1,190	4,090	1,080	805	656	1,940	425
2	278	470	455	1,110	1,360	1,430	4,150	1,080	737	560	2,510	396
3	281	771	455	822	1,110	1,700	3,000	1,270	704	500	3,610	396
4	287	576	440	704	964	1,510	2,410	1,190	688	470	4,100	396
5	276	640	455	656	964	1,350	2,120	1,230	672	455	2,750	500
6	273	928	672	608	1,540	1,580	2,280	1,110	656	440	1,440	1,110
7	270	608	576	592	2,630	4,190	2,250	1,270	688	440	1,110	704
8	304	928	545	560	6,730	3,470	2,810	1,150	822	410	928	576
9	515	688	788	560	8,630	2,430	3,830	1,040	688	396	839	576
10	455	560	839	545	7,370	2,020	2,650	964	640	440	771	640
11	396	802	1,230	530	4,960	1,760	2,160	928	608	2,170	754	560
12	410	1,520	1,000	515	6,260	1,580	1,970	928	592	2,130	805	500
13	354	822	822	1,110	10,700	1,460	1,820	892	592	1,050	720	440
14	326	656	720	1,320	11,000	1,350	3,100	892	592	1,350	656	440
15	323	964	1,090	856	9,630	1,310	2,700	856	592	2,060	624	425
16	318	1,260	2,790	704	6,440	1,350	2,070	839	640	1,660	704	410
17	876	822	1,630	720	3,360	1,530	1,820	822	688	1,250	672	396
18	1,190	704	1,110	640	2,630	1,350	1,660	805	592	839	624	382
19	640	754	928	608	2,280	1,340	1,580	788	592	704	576	368
20	530	720	805	608	1,920	1,310	1,510	754	624	656	560	368
21	440	640	720	592	1,780	1,230	1,430	754	576	608	530	354
22	396	592	688	640	1,870	1,230	1,390	737	640	624	500	348
23	382	576	656	608	1,740	4,970	1,350	704	672	560	530	340
24	368	608	624	808	1,550	5,770	1,310	704	576	530	545	334
25	368	608	608	592	1,430	2,710	1,270	688	530	500	624	334
26	368	576	672	576	1,430	2,050	1,230	688	500	470	545	332
27	368	530	640	624	1,430	3,840	1,190	688	515	485	500	332
28	410	515	592	1,080	1,390	4,970	1,150	1,270	485	1,080	470	410
29	530	500	576	1,000	1,270	2,770	1,110	1,420	545	1,260	440	470
30	410	485	560	1,230	-	2,140	1,110	1,300	1,000	788	425	396
31	368	-	545	2,590	-	2,790	-	928	-	720	440	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	12,991	1,190	270	419	0.489	0.56
November	21,191	1,520	368	706	.825	.92
December	24,701	2,790	440	797	.931	1.07
Calendar year 1947	514,610	19,400	270	1,410	1.65	22.35
January	24,628	2,590	515	794	.928	1.07
February	106,328	11,000	964	3,666	4.28	4.62
March	69,680	5,770	1,190	2,248	2.63	3.03
April	62,520	4,150	1,110	2,084	2.43	2.71
May	29,769	1,420	688	960	1.12	1.29
June	19,251	1,000	485	642	.750	.84
July	26,261	2,170	396	847	.989	1.14
August	32,242	4,100	425	1,040	1.21	1.40
September	13,658	1,110	332	455	.532	.59
Water year 1947-48	443,220	11,000	270	1,211	1.41	19.24

Peak discharge (base, 6,000 sec.-ft.).- Feb. 9 (7 a.m.) 8,980 sec.-ft.; Feb. 13 (12 p.m.) 11,300 sec.-ft.; Mar. 24 (2 a.m.) 6,740 sec.-ft.

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. Datum of gage is 604.14 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 1,610 square miles.

Records available.- April 1892 to September 1948. Gage-height records collected at same site since 1891 are contained in reports of U. S. Weather Bureau.

Average discharge.- 47 years (1896-98, 1903-48), 2,770 second-feet.

Extremes.- Maximum discharge during year, 26,800 second-feet Feb. 15; maximum gage height, 28.7 feet Feb. 15; minimum discharge, 380 second-feet Oct. 7 (gage height, 1.42 feet).

1892-48: Maximum discharge, 49,600 second-feet Jan. 21, 1947 (gage height, 33.5 feet); minimum observed, 180 second-feet Sept. 7, 8, 1925 (gage height, 0.5 foot).

Maximum stage known, 36.6 feet Apr. 1, 1886.

Remarks.- Records good.

Revisions (water years).- W 852: 1921(M).

Rating table, water year 1947-48, except period of backwater from return of over-bank flow (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 8-30)

1.4	380	6.0	2,570	23.0	18,500
2.2	630	8.0	3,920	26.0	22,600
3.0	950	10.0	5,480	28.0	27,100
4.0	1,420	15.0	10,000		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	395	515	740	1,130	5,560	2,330	7,110	1,570	1,270	905	1,970	595
2	395	560	700	2,090	4,060	2,330	8,100	1,520	1,110	820	3,220	560
3	395	882	700	2,270	2,690	2,940	6,840	1,730	1,020	740	4,360	560
4	410	780	700	2,270	2,210	2,810	5,400	1,730	972	665	6,040	560
5	410	780	700	1,320	2,030	2,510	3,990	1,850	950	648	5,000	595
6	395	1,150	860	1,200	2,570	2,690	4,060	1,790	928	630	2,570	1,040
7	395	950	882	1,110	4,840	6,840	4,520	1,790	928	630	1,730	1,080
8	425	1,080	860	1,040	10,800	8,460	5,160	1,730	1,080	578	1,370	860
9	578	1,060	1,040	995	14,000	7,920	6,930	1,570	995	560	1,220	820
10	578	860	1,270	972	15,300	6,210	6,840	1,470	905	595	1,080	882
11	530	928	1,730	928	14,900	3,640	4,840	1,420	860	1,800	1,040	1,040
12	545	1,910	1,620	882	15,200	3,010	3,640	1,320	860	2,940	1,110	905
13	530	1,420	1,370	1,880	17,800	2,630	3,220	1,320	840	1,570	1,060	700
14	500	1,130	1,200	3,570	21,600	2,450	4,200	1,270	820	1,620	950	648
15	470	1,320	1,580	3,150	c26,700	2,270	5,480	1,240	820	2,090	905	630
16	470	2,690	4,200	1,850	c23,400	2,270	4,680	1,220	860	2,330	905	595
17	579	2,570	4,680	1,520	c19,100	3,430	3,570	1,200	1,020	1,790	950	560
18	1,470	1,470	3,080	1,370	c14,900	4,840	3,010	1,180	882	1,320	882	545
19	905	1,240	1,850	1,220	c7,700	4,600	2,690	1,130	840	1,040	840	530
20	972	1,240	1,520	1,150	c4,000	3,010	2,450	1,080	860	905	780	530
21	972	1,130	1,370	1,130	3,500	2,630	2,330	1,060	840	840	760	515
22	682	995	1,220	1,180	3,570	2,390	2,210	1,040	1,020	820	720	515
23	578	950	1,150	1,180	3,920	7,110	2,090	1,020	995	780	700	485
24	545	950	1,080	1,130	3,430	11,000	1,970	995	860	700	720	470
25	530	950	1,040	1,080	2,870	9,600	1,910	995	760	665	820	470
26	515	905	1,080	972	2,690	7,200	1,850	972	700	648	760	470
27	530	860	1,080	1,040	2,750	6,300	1,790	972	700	630	700	455
28	530	820	1,020	1,670	2,690	8,910	1,730	1,420	700	1,060	665	545
29	665	780	972	2,090	2,570	7,020	1,620	1,850	700	1,670	630	630
30	560	760	928	2,090	-	4,360	1,620	1,970	1,150	1,180	612	578
31	530	-	905	4,680	-	4,440	-	1,620	-	1,080	630	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	17,984	1,470	395	580	0.360	0.42
November	33,635	2,690	515	1,121	.696	.78
December	43,127	4,680	700	1,391	.864	1.00
Calendar year 1947	965,267	44,400	395	2,645	1.64	22.33
January	50,159	4,680	882	1,618	1.00	1.15
February	257,350	26,700	2,030	8,874	5.51	5.94
March	148,150	11,000	2,270	4,779	2.97	3.42
April	115,850	8,100	1,620	3,862	2.40	2.68
May	43,044	1,970	972	1,389	.863	.99
June	27,245	1,270	700	908	.564	.63
July	34,249	2,940	560	1,105	.686	.79
August	45,699	6,040	612	1,474	.916	1.06
September	19,368	1,080	455	646	.401	.45
Water year 1947-48	835,860	26,700	395	2,284	1.42	19.31

Peak discharge (base, 10,000 sec.-ft.).- Feb. 15 (10 a.m.) 26,800 sec.-ft.; Mar. 24 (2 p.m.) 11,200 sec.-ft.

c Backwater from return of over-bank flow; discharge computed from backwater curve.

Coosa River near Rome, Ga.

Location.- Water-stage recorder, lat. 34°12', long. 85°16', at Mayo Bar lock and dam, 1½ miles upstream from Webb Creek, 6 miles southwest of Rome, Floyd County, and 7½ miles downstream from confluence of Oostanaula and Etowah Rivers. Datum of gage is 553.05 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 4,040 square miles.

Records available.- June 1928 to December 1931, March 1937 to September 1948. January 1897 to December 1903 at site at Rome. Gage-height records collected at same site since 1922 are contained in reports of U. S. Weather Bureau.

Average discharge.- 14 years (1928-31, 1937-48), 5,970 second-feet.

Extremes.- Maximum discharge during year, 41,000 second-feet Feb. 15 (gage height, 31.0 feet); minimum daily, 1,020 second-feet Oct. 1, 6, 7.

1897-1903, 1928-31, 1937-48: Maximum discharge, 65,000 second-feet Jan. 22, 1947 (gage height, 37.0 feet); minimum, 870 second-feet Oct. 18-22, 1931 (gage height, -0.55 foot).

Maximum stage known, 40.3 feet Apr. 1, 1886 (site and datum at Rome).

Remarks.- Records good. Moderate diurnal fluctuation during periods of low flow.

Rating table, water year 1947-48 except periods when rate of change of stage was a factor (gage height, in feet, and discharge, in second-feet)

-0.2	1,020	10.0	11,100
0.0	1,180	16.0	18,500
1.0	1,980	22.0	25,900
3.0	3,750	28.0	34,000
7.0	7,750	31.0	41,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,020	1,500	2,300	2,840	11,200	6,750	17,500	4,350	4,450	3,020	3,290	1,980
2	1,060	1,580	2,220	3,850	12,300	6,350	19,900	4,150	3,650	2,660	5,350	1,900
3	1,060	2,140	2,140	4,950	7,850	7,850	17,700	4,350	3,290	2,220	k15,600	1,820
4	1,060	3,200	2,140	4,650	6,150	8,250	14,100	4,650	3,020	2,060	18,900	1,900
5	1,060	2,480	2,140	3,750	5,450	7,350	11,500	5,050	2,930	1,940	18,400	1,980
6	1,020	2,300	2,140	3,290	5,750	7,550	k12,300	5,250	2,840	1,900	k15,900	3,470
7	1,020	3,020	2,300	3,020	8,580	k16,200	15,400	5,050	2,750	1,820	8,360	4,050
8	1,100	3,200	2,480	2,840	k23,500	20,700	15,300	5,050	3,110	1,780	5,350	3,290
9	1,700	4,150	2,480	2,750	k32,200	19,400	17,200	4,550	3,290	1,700	4,350	2,570
10	2,060	3,200	3,290	2,660	35,600	15,500	16,400	4,150	2,840	1,900	3,850	2,390
11	1,900	3,200	4,950	2,570	k33,200	12,100	14,000	3,950	2,660	5,750	3,650	2,390
12	1,580	7,950	5,650	2,570	k32,000	8,910	10,900	3,750	2,570	10,600	3,560	2,480
13	1,420	7,650	4,650	3,470	36,000	7,650	9,020	3,650	2,480	9,790	3,470	2,300
14	1,340	4,650	3,850	5,750	40,000	6,950	8,800	3,650	2,480	7,250	3,290	2,140
15	1,260	3,850	3,950	6,650	40,800	6,450	10,100	3,560	3,020	8,250	3,110	1,980
16	1,260	4,750	8,360	5,450	k37,000	6,350	10,500	3,470	2,750	10,900	3,650	1,980
17	1,300	5,950	11,500	4,050	36,000	7,050	9,020	3,380	2,840	12,100	3,380	1,900
18	3,200	4,950	9,240	3,650	34,600	8,470	7,750	3,290	2,840	k9,420	3,110	1,820
19	3,850	3,650	6,350	3,290	k29,800	9,020	6,950	3,200	2,570	g5,350	2,930	1,740
20	2,390	3,470	4,750	3,110	k24,600	8,150	6,450	3,110	2,480	g3,750	2,750	1,740
21	2,140	3,380	4,050	3,020	k13,300	6,850	6,150	3,020	2,570	g3,200	2,570	1,700
22	1,980	3,020	3,650	3,020	9,790	6,350	5,850	2,930	2,480	g2,930	2,480	1,700
23	1,620	2,840	3,380	3,110	9,240	k15,700	5,650	2,930	2,840	g2,840	2,390	1,660
24	1,500	2,840	3,200	3,110	8,800	24,700	5,450	2,840	2,660	2,660	2,390	1,620
25	1,420	3,110	3,110	3,020	7,750	23,400	5,250	2,750	2,390	2,480	2,390	1,620
26	1,460	3,290	3,110	2,930	7,050	18,400	5,050	2,750	2,220	2,300	2,570	1,580
27	1,500	2,930	3,200	2,840	6,850	18,500	4,950	2,750	2,060	2,300	2,390	1,580
28	1,500	2,660	3,110	3,470	6,750	21,200	4,750	4,250	2,060	2,660	2,220	1,780
29	1,500	2,480	2,930	4,350	6,550	18,800	4,550	6,250	2,140	3,560	2,140	1,940
30	1,700	2,390	2,840	5,250	-	13,700	4,450	7,250	2,140	3,650	2,060	2,060
31	1,580	-	2,660	8,050	-	k12,000	-	5,850	-	3,020	1,980	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	49,560	3,850	1,020	1,599	0.396	0.46
November	105,780	7,950	1,500	3,526	.873	.97
December	122,120	11,500	2,140	3,939	.975	1.12
Calendar year 1947	2,230,150	64,600	1,020	6,110	1.51	20.52
January	117,330	8,050	2,570	3,785	.937	1.08
February	568,660	40,800	5,450	19,610	4.85	5.23
March	376,600	24,700	6,350	12,150	3.01	3.47
April	302,890	19,900	4,450	10,100	2.50	2.79
May	125,180	7,250	2,750	4,038	1.00	1.15
June	82,420	4,450	2,060	2,747	.680	.76
July	135,760	12,100	1,700	4,379	1.08	1.24
August	157,830	18,900	1,980	5,091	1.26	1.45
September	63,060	4,050	1,580	2,102	.520	.58
Water year 1947-48	2,207,190	40,800	1,020	6,031	1.49	20.30

Peak discharge (base, 25,000 sec.-ft.).- Feb. 15 (3 a.m.) 41,000 sec.-ft.; Mar. 24 (6 p.m.) 25,200 sec.-ft.

g Computed from graph based on once-daily gage readings.
k Discharge computed by using rate of change of stage as a factor.

Coosa River at Leesburg, Ala.

Location.- Wire-weight gage, lat. 34°11', long. 85°45', in NW¼ sec. 12, T. 10 S., R. 8 E., at bridge on U. S. Highway 411, 1 mile east of Leesburg and 4 miles downstream from Yellow Creek. Datum of gage is 517.77 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 5,270 square miles.

Records available.- June 1937 to September 1948.

Average discharge.- 11 years, 7,910 second-feet.

Extremes.- Maximum discharge during year, 53,600 second-feet Feb. 15 (gage height, 31.5 feet, from graph based on gage readings); minimum observed, 1,300 second-feet Oct. 4, 7.

1937-48: Maximum discharge, 73,200 second-feet Feb. 14, 1946, Jan. 24, 1947 (gage height, 35.1 feet, from graph based on gage readings); minimum observed, 1,130 second-feet Oct. 24-27, 1941.

Remarks.- Records good. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 15						Feb. 16 to Sept. 30	
0.7	1,330	4.0	4,210	20.0	29,700	1.5	1,760
1.2	1,660	6.0	6,820	25.0	38,200	2.0	2,180
2.0	2,290	10.0	12,900	30.0	48,600	3.0	3,130
3.0	3,150	15.0	21,200	31.5	53,600	4.0	4,210

Note.- Same as preceding table above 4.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,390	2,130	2,870	3,870	14,700	8,130	19,700	5,190	6,120	2,730	3,540	2,180
2	1,330	2,050	2,780	5,320	14,800	8,880	23,600	4,930	4,690	3,330	4,810	2,180
3	1,330	2,130	2,690	5,710	12,300	10,800	23,900	4,930	4,090	2,830	11,600	2,090
4	1,330	2,690	2,610	6,120	9,480	11,100	20,200	5,190	3,650	2,540	20,200	2,000
5	1,330	3,650	2,610	5,450	8,280	10,500	17,300	5,580	3,540	2,360	21,000	2,180
6	1,390	3,050	2,610	4,570	7,980	11,900	18,600	5,980	3,330	2,270	19,500	2,360
7	1,330	3,050	2,610	4,090	13,200	21,000	21,500	6,260	3,230	2,180	15,500	3,980
8	1,390	3,650	2,960	3,760	27,200	25,400	22,600	5,980	3,330	2,090	7,980	3,980
9	1,450	3,980	3,150	3,550	36,200	25,800	22,600	5,710	4,090	2,000	5,580	3,330
10	1,890	4,330	3,760	3,450	40,600	23,100	23,400	5,190	3,760	2,090	4,690	2,830
11	2,370	3,980	6,540	3,350	42,100	17,800	20,400	4,690	3,230	2,930	4,330	2,630
12	2,130	6,270	7,240	3,350	43,700	13,500	16,300	4,570	3,030	7,530	4,090	2,730
13	1,890	9,180	6,680	4,930	47,600	11,300	13,400	4,330	2,930	11,900	3,980	2,730
14	1,660	7,530	5,580	8,280	51,000	10,800	12,900	4,210	2,830	10,400	4,090	2,540
15	1,660	6,260	5,980	8,580	53,200	8,580	13,400	4,090	3,540	8,280	3,760	2,360
16	1,660	6,820	11,000	7,980	52,400	8,280	13,500	3,980	3,540	9,780	3,650	2,180
17	1,660	6,680	14,000	6,400	50,100	8,880	12,400	3,870	3,330	12,300	4,090	2,090
18	1,730	7,100	13,100	5,060	47,400	9,930	10,500	3,870	3,230	11,900	3,650	2,090
19	3,550	5,710	10,100	4,570	45,000	10,700	9,180	3,760	3,230	8,130	3,430	2,000
20	3,760	4,690	7,100	4,330	42,700	10,700	8,430	3,540	3,030	5,320	3,230	1,920
21	2,690	4,450	5,710	4,090	39,600	9,480	7,980	3,430	2,930	3,980	3,030	1,920
22	2,450	4,090	5,060	4,090	30,700	8,580	7,530	3,430	3,030	3,650	2,830	1,840
23	2,290	3,760	4,570	4,090	18,500	17,000	7,100	3,330	3,030	3,330	2,730	1,840
24	1,970	3,550	4,210	3,980	12,300	25,800	6,820	3,330	3,130	3,030	2,630	1,840
25	1,810	3,550	3,980	3,870	10,800	28,300	6,540	3,230	2,930	2,830	2,730	1,760
26	1,730	3,870	3,870	3,760	9,780	27,000	6,260	3,130	2,730	2,730	2,630	1,760
27	1,730	3,870	3,870	3,870	9,180	25,400	6,120	3,130	2,540	2,630	2,730	1,760
28	1,890	3,450	3,870	4,810	8,880	26,600	5,840	4,620	2,450	2,730	2,630	2,000
29	1,890	3,150	3,650	5,710	8,580	24,800	5,580	7,830	2,360	3,870	2,450	2,270
30	1,810	2,960	3,450	8,880	-	20,900	5,320	8,880	2,830	3,980	2,360	2,180
31	2,050	-	3,350	12,400	-	17,000	-	8,130	-	3,870	2,270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	58,540	3,760	1,330	1,888	0.358	0.41
November	131,630	9,180	2,050	4,388	.833	.93
December	161,560	14,000	2,610	5,212	.989	1.14
Calendar year 1947	3,018,890	72,500	1,330	8,271	1.57	21.31
January	162,270	12,400	3,350	5,235	.993	1.15
February	808,260	53,200	7,980	27,870	5.29	5.70
March	497,940	28,300	8,130	16,060	3.05	3.51
April	408,900	23,900	5,320	13,630	2.59	2.89
May	148,320	8,880	3,130	4,785	.908	1.05
June	99,710	6,120	2,360	3,324	.631	.70
July	149,520	12,300	2,000	4,823	.915	1.06
August	181,720	21,000	2,270	5,862	1.11	1.28
September	69,550	3,980	1,760	2,318	.440	.49
Water year 1947-48	2,877,920	53,200	1,330	7,863	1.49	20.31

Peak discharge (base, 30,000 sec.-ft.).- Feb. 15 (1 p.m.) 53,600 sec.-ft.

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 and 1½ miles upstream from Big Wills Creek. Datum of gage is 485.97 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 5,800 square miles.

Records available.- October 1926 to September 1948. Gage-height records collected at same site since 1890 are contained in reports of U. S. Weather Bureau.

Average discharge.- 22 years, 9,079 second-feet.

Extremes.- Maximum discharge during year, 56,000 second-feet Feb. 17; maximum gage height, 26.7 feet Feb. 16; minimum discharge, 1,380 second-feet Oct. 4, 8, 9 (gage height, 0.55 foot).

1926-48: Maximum discharge, 76,900 second-feet Apr. 11, 1936 (gage height, 31.13 feet); minimum, 1,170 second-feet Oct. 27, 1941 (gage height, 0.36 foot).

Maximum stage known, 37.9 feet Apr. 6, 1886, from floodmarks established by Corps of Engineers. Flood of July 15, 1916, reached a stage of 32.7 feet.

Remarks.- Records good.

Revisions.- W 682: Drainage area.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 13, 14, 28-31, Feb. 6-17, Mar. 7, 23, 24, Aug. 1-3)

0.5	1,330	5.0	6,800	17.0	30,400
1.0	1,850	7.0	9,800	22.0	44,000
3.0	4,160	12.0	19,100	26.0	57,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,430	2,280	3,200	4,160	15,000	8,400	20,600	5,450	7,220	3,200	4,280	2,610
2	1,430	2,280	3,080	4,930	16,200	9,800	23,600	5,320	5,710	3,200	4,540	2,500
3	1,430	2,220	2,960	5,710	15,000	11,900	26,100	5,190	4,670	3,440	8,260	2,390
4	1,380	2,220	2,900	6,100	12,200	12,400	24,700	5,190	4,040	3,020	18,300	2,340
5	1,430	3,020	2,840	6,100	9,970	12,000	21,200	5,450	3,800	2,720	22,500	2,440
6	1,430	3,560	2,780	5,450	8,400	13,100	23,000	5,840	3,680	2,560	21,200	2,440
7	1,430	3,080	2,840	4,670	11,300	18,500	24,500	6,240	3,440	2,500	18,700	2,660
8	1,380	3,200	2,960	4,280	22,700	25,400	25,600	6,240	3,440	2,390	12,900	4,040
9	1,380	3,560	3,200	4,040	34,800	27,500	25,800	5,970	3,680	2,390	7,360	4,040
10	1,430	4,040	4,280	3,800	40,700	26,600	25,400	5,710	4,160	2,960	5,580	3,320
11	2,060	4,540	5,840	3,680	43,400	23,000	24,100	5,190	3,800	3,200	4,930	2,960
12	2,440	4,540	7,220	3,560	45,500	17,900	20,600	4,800	3,440	5,320	4,540	2,840
13	2,340	6,800	7,360	4,670	47,300	13,300	16,500	4,540	3,200	9,970	4,410	2,840
14	2,060	8,400	6,660	7,220	48,500	10,800	15,800	4,410	3,080	13,100	5,190	2,840
15	1,850	7,360	6,520	8,850	51,800	9,480	15,200	4,280	3,200	10,100	4,540	2,720
16	1,800	6,660	9,320	8,850	53,800	8,850	14,800	4,280	4,160	8,850	4,160	2,500
17	1,740	6,520	12,000	7,950	56,000	8,700	14,100	4,160	3,680	12,200	4,160	2,390
18	1,690	6,660	13,700	6,380	55,200	9,480	12,600	3,920	3,560	12,200	4,280	2,340
19	1,960	6,520	12,400	5,320	52,800	10,300	10,600	3,920	3,440	11,000	3,920	2,280
20	3,800	5,580	9,320	4,800	50,000	10,800	9,320	3,800	3,320	7,360	3,680	2,170
21	3,440	4,800	6,940	4,540	47,600	10,500	8,550	3,680	3,320	5,190	3,440	2,120
22	2,720	4,410	5,840	4,410	44,000	9,320	7,950	3,680	4,040	4,280	3,320	2,120
23	2,610	4,160	5,190	4,410	34,800	13,300	7,650	3,560	3,680	3,800	3,200	2,060
24	2,340	3,920	4,800	4,410	19,700	21,400	7,220	3,440	3,320	3,560	3,020	2,060
25	2,060	3,680	4,410	4,280	12,600	28,500	6,940	3,440	3,320	3,320	2,960	2,010
26	1,900	3,800	4,160	4,160	10,600	29,000	6,660	3,440	3,200	3,080	2,960	2,010
27	1,900	4,040	4,040	4,160	9,640	29,700	6,380	3,320	2,960	3,200	2,960	2,010
28	1,900	3,920	4,040	4,540	9,160	29,000	6,100	3,680	2,780	3,440	2,960	2,610
29	1,960	3,560	4,040	5,710	8,700	28,200	5,840	5,840	2,720	4,160	2,840	2,610
30	1,960	3,320	3,920	6,800	-	25,600	5,710	7,650	3,020	4,160	2,720	2,660
31	1,960	-	3,680	10,800	-	22,300	-	8,550	-	4,540	2,660	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	60,640	3,800	1,380	1,956	0.337	0.39
November	132,650	8,400	2,220	4,422	.762	.85
December	172,440	13,700	2,780	5,563	.959	1.11
Calendar year 1947	3,294,960	70,800	1,380	9,027	1.56	21.12
January	168,740	10,800	3,560	5,443	.938	1.08
February	887,370	56,000	8,400	30,600	5.28	5.69
March	535,030	29,700	8,400	17,260	2.98	3.43
April	463,120	26,100	5,710	15,440	2.66	2.97
May	150,180	8,550	3,320	4,845	.835	.96
June	111,080	7,220	2,720	3,703	.638	.71
July	164,410	13,100	2,390	5,304	.914	1.05
August	200,470	22,500	2,660	6,467	1.12	1.29
September	76,930	4,040	2,010	2,564	.442	.49
Water year 1947-48	3,123,060	56,000	1,380	8,533	1.47	20.02

Peak discharge (base, 35,000 sec.-ft.).- Feb. 17 (12 m.) 56,000 sec.-ft.

Coosa River near Cropwell, Ala.

Location.- Wire-weight gage, lat. 33°30', long. 86°14', in SE¼ sec. 33, T. 17 S., R. 4 E., at bridge on State Highway 48, 2 miles downstream from Poorhouse Branch and 4 miles southeast of Cropwell. Datum of gage is 420.68 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 7,690 square miles.

Records available.- March 1942 to September 1948. January 1892 to December 1899 (gage heights only) at site half a mile upstream, published as Coosa River at lock 5.

Extremes.- Maximum discharge during year, 79,500 second-feet Feb. 10 (gage height, 17.0 feet); minimum daily, 1,720 second-feet Oct. 1-5, 9, 11.

1942-48: Maximum discharge, 105,000 second-feet Jan. 21, 1947; minimum daily, that of Oct. 1-5, 9, 11, 1947.

Remarks.- Records good except those below 3,000 second-feet and those for periods of no gage-height record, which are fair. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Revisions (water years).- W 1032: 1943-44. W 1082: 1943, 1946.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.8	1,720	3.0	5,950	10.0	39,000
2.0	2,330	4.0	10,000	14.0	61,500
2.5	4,030	6.0	18,800	17.0	79,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,720	2,490	4,400	5,560	a22,000	11,300	32,500	7,540	10,000	3,670	6,740	3,150
2	1,720	2,650	4,030	6,740	a22,000	13,000	31,000	7,140	7,940	4,030	7,540	3,150
3	1,720	2,980	3,850	7,940	a20,000	20,200	34,000	7,140	6,740	4,030	9,160	2,980
4	1,720	2,820	3,670	7,540	a18,000	20,200	33,500	7,140	5,560	4,030	20,200	3,150
5	1,720	2,980	3,670	7,540	a16,000	18,800	32,000	7,140	5,170	3,670	31,000	3,320
6	1,750	3,500	3,670	7,940	a14,000	19,300	36,800	7,540	4,590	3,500	29,000	3,320
7	1,810	4,590	3,850	7,140	a15,000	a30,000	47,200	7,940	4,400	3,320	25,500	3,320
8	1,750	4,030	3,850	5,950	43,400	a35,000	41,200	7,940	4,400	3,150	20,600	3,320
9	1,720	4,220	4,220	5,560	65,100	a37,000	37,900	7,940	4,220	3,150	13,400	5,170
10	1,780	4,590	5,560	4,220	79,500	36,800	35,200	7,540	4,590	3,320	8,740	4,980
11	1,720	6,340	10,000	5,170	67,500	33,500	34,000	6,740	4,980	4,980	6,740	4,030
12	2,180	6,740	10,400	5,170	67,500	27,500	30,500	6,340	4,780	5,950	6,340	3,850
13	2,820	6,340	10,000	5,560	67,500	21,600	25,500	6,340	4,030	9,160	5,560	3,500
14	2,980	9,160	9,160	10,000	69,900	16,100	24,500	5,950	4,030	16,100	5,950	3,500
15	2,820	10,000	9,160	11,300	71,100	13,900	24,500	5,950	3,850	16,500	6,740	3,500
16	2,490	9,160	13,900	11,300	69,900	12,500	21,600	5,560	4,400	12,100	6,340	3,320
17	2,490	8,340	15,200	10,800	68,100	12,500	20,600	5,170	5,560	13,400	5,950	3,150
18	2,330	7,940	16,100	9,160	65,100	12,100	18,300	5,170	4,780	15,200	5,560	2,980
19	2,180	8,740	16,500	7,540	62,100	12,500	15,600	5,170	4,400	15,200	5,560	2,980
20	2,180	8,340	14,300	7,140	59,700	13,000	13,400	4,980	4,590	12,100	4,980	2,820
21	4,220	6,740	10,800	6,740	56,700	13,900	12,100	4,980	4,400	8,340	4,590	2,820
22	4,400	5,950	8,340	6,340	54,400	13,000	11,300	4,980	5,170	6,340	4,400	2,650
23	3,670	5,950	7,540	5,950	50,000	28,500	10,400	4,590	4,980	6,340	4,220	2,490
24	3,320	5,170	6,740	5,950	38,400	33,000	10,000	4,400	4,590	4,980	4,030	2,490
25	2,980	4,780	5,950	5,950	20,600	36,800	9,580	4,400	4,220	4,400	3,850	2,490
26	2,820	4,780	5,950	5,560	15,600	37,900	9,160	4,220	4,030	4,220	3,670	2,330
27	2,490	4,780	5,560	5,950	13,900	44,000	8,340	4,220	3,850	3,850	3,850	2,330
28	2,490	5,170	5,560	7,540	12,500	44,000	8,340	4,400	3,500	4,980	3,670	2,650
29	2,490	4,980	5,560	8,740	11,700	40,600	7,940	4,980	3,670	5,950	3,670	4,030
30	2,330	4,590	4,980	10,000	-	34,000	7,540	8,340	3,670	5,950	3,500	3,670
31	2,330	-	4,980	17,000	-	33,000	-	10,000	-	5,560	3,320	-

Month	Second-foot-days	Maximum	Mimimum	Mean	Per square mile	Runoff in inches
October	75,140	4,400	1,720	2,424	0.315	0.36
November	168,840	10,000	2,490	5,628	.732	.82
December	237,450	16,500	3,670	7,660	.996	1.15
Calendar year 1947	4,588,340	103,000	1,720	12,570	1.63	22.20
January	234,990	17,000	4,220	7,580	.986	1.14
February	1,257,200	79,500	11,700	43,350	5.64	6.08
March	775,500	44,000	11,300	25,020	3.25	3.75
April	684,500	47,200	7,540	22,820	2.97	3.31
May	191,880	10,000	4,220	6,190	.805	.93
June	145,090	10,000	3,500	4,836	.629	.70
July	217,470	16,500	3,150	7,015	.912	1.05
August	274,370	31,000	3,320	8,851	1.15	1.33
September	97,440	5,170	2,330	3,248	.422	.47
Water year 1947-48	4,359,870	79,500	1,720	11,910	1.55	21.09

Peak discharge (base, 50,000 sec.-ft.).- Feb. 10 (4 p.m.) 79,500 sec.-ft.

a No gage-height record; discharge computed on basis of records for other stations on Coosa River.

Coosa River at Childersburg, Ala.

Location.- Water-stage recorder, lat. 33°17', long. 86°22', in NE¼ sec. 18, T. 20 S., R. 3 E., at Central of Georgia Railway bridge, 700 feet upstream from bridge on State Highway 91, half a mile downstream from Tallaseehatchee Creek, and 1 mile northwest of Childersburg. Datum of gage is 382.45 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Alabama Power Co.).

Drainage area.- 8,390 square miles.

Records available.- February 1914 to September 1948.

Average discharge.- 31 years (1917-48), 13,740 second-feet.

Extremes.- Maximum discharge during year, 83,100 second-feet Feb. 10 (gage height, 19.9 feet); minimum, 1,960 second-feet Oct. 4, 6, 10 (gage height, 1.22 feet).

1914-48: Maximum discharge, 136,000 second-feet Apr. 9, 1938 (gage height, 30.03 feet); minimum, 1,300 second-feet in September 1925.

Remarks.- Records good.

Cooperation.- 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 1947-48 (gage height, in feet, and discharge, in second-feet)

1.2	1,920	3.0	6,300	10.0	31,800
1.6	2,770	5.0	12,500	14.0	50,600
2.0	3,700	7.0	19,800	20.0	83,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,020	2,660	4,680	6,440	22,500	13,200	36,200	8,600	10,500	4,180	6,300	3,680
2	2,050	2,700	4,310	8,000	23,300	16,100	32,200	8,300	9,540	4,440	8,000	3,510
3	2,020	2,950	4,180	8,300	22,500	22,900	33,500	8,000	8,000	4,180	9,220	3,440
4	2,000	3,050	4,060	8,600	20,200	23,600	34,000	8,000	6,720	4,440	17,900	3,460
5	2,130	3,000	4,060	8,900	17,900	21,700	31,800	8,000	6,020	4,310	28,900	3,700
6	2,050	3,090	3,940	8,600	16,100	24,400	38,000	8,300	5,480	4,060	28,900	3,940
7	2,070	4,440	3,940	8,000	16,600	37,500	46,600	8,600	5,200	3,820	25,200	3,700
8	2,090	4,310	3,940	7,140	40,600	40,800	43,600	8,900	4,940	3,700	22,100	3,700
9	2,090	3,940	4,180	6,440	69,600	40,300	38,400	8,900	4,680	3,820	16,100	4,680
10	2,070	4,310	6,080	6,020	81,900	38,400	35,700	8,600	4,680	4,180	10,800	5,480
11	2,020	9,020	11,200	5,740	77,300	34,800	36,600	8,000	5,340	5,080	8,300	4,940
12	2,090	8,300	11,800	5,480	73,800	30,100	32,700	7,560	5,200	6,020	7,140	4,180
13	2,510	7,000	11,500	6,580	72,700	24,400	28,400	7,140	4,820	8,600	6,580	3,940
14	2,860	8,300	10,800	9,860	75,000	19,400	28,400	6,720	4,440	13,900	6,440	3,940
15	2,770	10,500	11,800	12,200	76,100	16,400	27,600	6,580	4,680	17,200	7,700	3,940
16	2,570	9,860	17,600	12,500	73,800	15,000	25,200	6,300	5,200	13,900	7,280	3,700
17	2,420	8,900	17,600	12,200	71,000	15,400	22,900	6,160	5,740	12,900	6,860	3,540
18	2,360	8,900	17,900	10,800	67,700	14,300	20,600	6,020	5,610	15,400	6,300	3,320
19	2,340	9,220	18,300	9,220	64,400	14,300	18,300	5,740	5,080	15,400	6,160	3,230
20	2,300	9,220	16,100	8,000	61,200	15,000	16,100	5,610	5,340	13,900	5,740	3,210
21	3,050	8,000	12,900	7,420	57,900	15,400	14,300	5,480	5,080	10,500	5,200	3,090
22	4,440	6,860	10,200	7,140	55,200	15,400	12,900	5,340	5,200	7,700	4,940	3,020
23	3,820	6,300	8,600	7,000	51,600	36,500	12,200	5,200	6,300	6,580	4,680	2,930
24	3,370	6,160	7,700	6,860	40,500	40,800	11,500	5,200	5,610	5,740	4,680	2,820
25	3,160	5,880	7,140	6,860	25,200	37,500	10,800	4,940	4,820	5,200	4,440	2,770
26	2,880	5,480	6,720	6,580	18,300	38,000	10,500	4,940	4,680	4,940	4,180	2,750
27	2,700	5,340	6,300	6,720	16,100	43,200	10,200	4,940	4,560	4,560	4,060	2,770
28	2,660	5,480	6,020	8,300	14,600	47,600	9,540	4,940	4,180	4,440	4,060	3,140
29	2,510	5,480	6,020	10,200	13,600	41,700	9,220	5,340	4,060	5,480	4,060	3,700
30	2,490	5,080	6,020	11,500	-	37,500	8,900	7,140	4,180	6,440	4,060	4,180
31	2,490	-	5,740	17,900	-	35,700	-	9,540	-	6,160	3,820	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	78,400	4,440	2,000	2,529	0.301	0.35
November	183,730	10,500	2,660	6,124	.730	.81
December	271,330	18,300	3,940	8,753	1.04	1.20
Calendar year 1947	5,056,540	126,000	2,000	13,850	1.65	22.40
January	265,500	17,900	5,480	8,565	1.02	1.18
February	1,337,200	81,900	13,600	46,110	5.50	5.93
March	867,300	47,600	13,200	27,980	3.33	3.84
April	736,860	46,600	8,900	24,560	2.93	3.27
May	213,030	9,540	4,940	6,872	.819	.94
June	165,880	10,500	4,060	5,529	.659	.74
July	231,170	17,200	3,700	7,457	.889	1.02
August	290,100	28,900	3,820	9,358	1.12	1.29
September	108,400	5,480	2,750	3,613	.431	.48
Water year 1947-48	4,748,900	81,900	2,000	12,980	1.55	21.05

Peak discharge (base, 55,000 sec.-ft.).- Feb. 10 (2:20 p.m.) 83,100 sec.-ft.

Coosa River at Jordan Dam, near Wetumpka, Ala.

Location.- Water-stage recorder, lat. 32°37', long. 86°16', in S½ sec. 22, T. 19 N., R. 18 E., half a mile downstream from Jordan Dam, 4 miles upstream from Corn Creek, 5½ miles northwest of Wetumpka, and 12 miles upstream from confluence with Tallapoosa River. Datum of gage is 141.6 feet above mean sea level (levels by Alabama Power Co.).

Drainage area.- 10,200 square miles.

Records available.- July 1912 to September 1914, December 1925 to September 1948.

Average discharge.- 24 years (1912-14, 1926-48), 15,910 second-feet.

Extremes.- Maximum discharge during year, 102,000 second-feet Feb. 9 (gage height, 25.1 feet); minimum daily, 103 second-feet Sept. 26.

1912-14, 1925-48: Maximum discharge, 298,000 second-feet Apr. 8, 1938 (gage height, 46.4 feet), computed on basis of power-plant records and flow over spillway; minimum daily, 54 second-feet Oct. 15, 1938.

Remarks.- Records good. Flow regulated by hydroelectric plants and reservoirs at Lay, Mitchell, and Jordan Dams (see p. 418).

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

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.0	98	4.0	862	6.5	3,460	12.0	21,800		
2.4	151	4.5	1,180	7.0	4,400	15.0	37,600		
2.7	230	5.0	1,580	8.0	6,690	20.0	68,100		
3.0	343	5.5	2,080	9.0	9,540	25.0	101,000		
3.5	579	6.0	2,700	10.0	12,700				

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,350	1,920	7,840	7,880	25,900	19,800	52,100	10,200	9,090	4,800	4,310	4,340
2	2,050	4,500	5,090	11,300	29,100	20,800	42,600	7,780	10,400	6,320	10,800	4,100
3	1,750	3,760	3,670	10,400	27,600	26,800	a38,800	10,900	7,320	6,120	16,600	2,080
4	f1,260	2,020	2,540	7,460	26,600	38,200	a39,700	11,500	7,200	5,630	20,300	2,970
5	4,540	1,750	5,020	12,000	26,600	30,700	38,600	9,760	7,180	5,220	35,200	3,740
6	4,640	1,500	5,860	13,000	23,800	37,500	40,200	8,730	7,160	4,830	36,300	7,320
7	2,840	5,830	4,530	12,000	22,500	56,100	49,400	11,700	7,540	4,230	32,100	6,670
8	2,090	5,080	5,680	10,500	59,100	53,600	51,300	11,000	5,550	1,520	27,700	6,030
9	1,880	4,090	7,150	6,940	92,800	49,200	47,000	6,300	4,770	6,240	24,100	5,950
10	3,900	6,270	9,800	8,680	96,700	46,800	39,400	8,280	3,410	12,300	20,300	4,960
11	1,400	14,500	13,200	6,870	92,100	42,600	47,100	10,500	5,740	9,140	17,600	f261
12	3,930	23,300	14,200	9,360	85,200	38,700	42,300	10,100	3,700	6,840	12,800	f4,730
13	3,310	19,000	17,300	11,200	87,100	30,700	36,600	9,590	7,540	9,420	10,300	6,890
14	2,260	15,300	11,400	13,600	91,500	25,300	40,800	10,600	6,180	11,300	7,360	6,490
15	2,240	13,000	17,400	12,300	86,900	21,800	38,400	9,980	7,600	17,500	5,010	4,710
16	3,160	8,000	29,500	12,200	83,100	20,700	33,100	5,010	6,490	14,800	8,440	4,670
17	4,050	9,310	24,800	8,970	73,800	24,500	28,300	7,090	7,350	19,000	7,740	3,190
18	f1,070	14,400	24,500	11,800	73,700	19,200	26,600	4,890	6,090	19,300	7,260	f144
19	4,140	14,100	21,200	12,100	68,500	19,600	22,700	6,160	6,020	18,700	7,950	f3,490
20	4,680	13,600	20,600	13,200	65,000	19,700	23,100	5,290	5,090	17,500	6,480	6,380
21	2,770	13,200	20,800	14,200	60,900	19,400	20,300	5,610	7,440	15,900	5,450	5,890
22	2,350	11,900	17,900	11,100	60,000	19,100	19,800	4,190	6,530	10,200	5,810	5,080
23	2,670	6,890	16,000	9,860	56,200	65,100	19,300	5,010	5,030	8,600	8,110	5,250
24	2,460	6,680	10,700	9,940	48,900	58,400	14,500	6,570	6,020	6,510	6,500	3,670
25	2,900	8,920	10,100	7,290	36,100	43,400	11,600	7,840	6,360	4,560	4,110	f170
26	3,650	8,760	6,880	7,810	25,300	44,400	14,400	7,340	5,040	6,300	4,020	a103
27	4,610	5,270	8,060	9,760	23,500	45,800	12,300	5,760	4,880	6,000	4,510	a6,190
28	2,990	7,500	7,780	7,290	22,100	54,100	10,700	7,340	6,050	4,540	1,830	a4,790
29	1,990	5,980	6,020	11,500	18,800	50,300	10,700	11,200	5,460	4,650	7,550	a5,780
30	2,160	5,750	11,000	14,800	-	44,100	9,810	6,780	3,820	6,500	7,420	3,160
31	1,420	-	7,840	21,300	-	49,400	-	8,180	-	6,690	5,970	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	87,510	4,680	1,070	2,823	-	-
November	262,080	23,300	1,500	8,736	-	-
December	374,360	29,500	2,540	12,080	-	-
Calendar year 1947	6,307,522	198,000	169	17,280	1.69	23.00
January	336,610	21,300	6,870	10,860	-	-
February	1,589,400	96,700	18,800	54,810	-	-
March	1,135,800	65,100	19,100	36,640	-	-
April	921,510	52,100	9,810	30,720	-	-
May	251,180	11,700	4,190	8,103	-	-
June	188,050	10,400	3,410	6,268	-	-
July	281,160	19,300	1,520	9,070	-	-
August	379,930	36,300	1,830	12,260	-	-
September	129,198	7,320	103	4,307	-	-
Water year 1947-48	5,936,788	96,700	103	16,220	1.59	21.65

a No gage-height record; discharge computed from records of Jordan Dam hydroelectric plant.
f Computed on basis of partly estimated gage-height record.

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. Datum of gage is 97.90 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Drainage area.- 15,100 square miles.

Records available.- October 1927 to September 1948. January 1899 to December 1903 (gage heights only) at Montgomery, 9 miles upstream. Gage-height records collected at Montgomery since December 1890 are contained in reports of U. S. Weather Bureau.

Average discharge.- 21 years (1927-48), 23,630 second-feet.

Extremes.- Maximum discharge during year, 101,000 second-feet Feb. 12-15; maximum gage height, 37.5 feet Feb. 15; minimum discharge, 3,790 second-feet Sept. 27 (gage height, -0.3 foot); minimum daily, 4,490 second-feet Sept. 27.

1927-48: Maximum discharge, 230,000 second-feet Mar. 17, 1929 (gage height, 59.6 feet); minimum, 2,180 second-feet Nov. 24, 1941 (gage height, -2.1 feet); minimum daily, 2,420 second-feet Nov. 24, 1941.

Remarks.- Records good. Flow regulated by hydroelectric plants and reservoirs on Coosa and Tallapoosa Rivers (see p. 418).

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

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.2	4,380	10.0	25,800
1.0	5,480	15.0	39,800
3.0	8,750	20.0	53,800
5.0	12,800	30.0	80,800
7.0	17,700	38.0	102,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,220	7,560	9,110	g14,000	33,100	24,200	64,800	17,200	11,500	12,200	10,600	11,500
2	7,730	7,220	9,290	g12,200	34,200	27,800	70,600	14,600	13,100	12,000	8,580	10,400
3	7,560	7,390	10,600	g14,000	35,400	38,200	72,200	13,300	12,800	12,200	18,400	9,650
4	7,390	7,390	10,200	g13,300	33,700	49,600	69,200	17,700	11,800	9,110	26,700	8,580
5	6,260	7,060	9,470	g14,000	30,900	g55,200	64,600	18,200	11,800	6,740	45,400	7,730
6	6,900	7,390	11,500	g15,100	29,800	g50,200	59,000	18,200	10,200	5,940	59,200	7,060
7	7,560	8,360	9,030	g17,400	28,100	g64,100	58,200	17,400	8,930	6,100	59,800	7,730
8	8,070	12,000	6,420	16,400	35,600	78,200	63,000	19,300	10,000	5,480	49,600	8,930
9	7,730	8,210	9,110	13,500	67,100	80,600	68,400	15,600	11,500	7,850	37,300	10,900
10	7,900	6,100	15,400	13,500	87,100	79,000	67,400	11,300	11,500	15,200	29,800	11,500
11	8,240	12,000	23,400	12,400	96,200	74,100	63,300	14,000	10,200	26,400	28,100	10,200
12	6,260	28,900	30,300	10,400	101,000	67,400	63,000	17,400	11,800	22,000	24,400	6,100
13	6,500	29,200	35,900	12,600	101,000	58,400	57,600	17,400	10,200	18,600	20,400	7,390
14	6,480	22,000	34,500	18,000	101,000	45,200	51,800	16,900	10,000	19,000	17,200	8,750
15	7,560	20,100	30,000	19,000	101,000	36,500	52,200	17,400	9,110	21,800	14,800	11,100
16	7,900	15,400	39,600	18,200	98,700	32,000	48,200	14,200	14,200	23,900	11,500	10,400
17	8,410	12,400	44,600	16,900	96,000	35,100	42,400	9,850	12,800	24,400	13,300	10,200
18	9,110	15,400	40,100	g12,200	91,100	37,900	35,400	11,800	12,600	25,000	16,600	9,110
19	6,260	18,200	35,400	g17,200	86,800	38,700	31,200	13,100	11,500	23,100	16,800	6,100
20	6,740	18,500	30,000	g14,900	82,200	38,200	29,200	13,700	10,000	24,200	15,400	6,580
21	6,900	18,000	26,100	g18,800	77,600	34,500	29,200	13,100	7,390	23,600	14,400	8,930
22	7,390	18,000	22,800	17,700	74,600	30,900	27,500	13,100	9,290	21,200	12,200	11,100
23	7,730	13,500	21,500	16,100	72,500	41,000	27,000	11,500	11,500	15,400	10,000	10,900
24	8,240	9,850	19,300	16,400	69,500	69,200	25,800	10,400	11,100	15,100	11,800	10,900
25	8,240	12,800	13,300	14,900	63,000	76,800	21,200	11,500	11,500	10,600	12,600	9,290
26	7,060	14,600	10,600	12,600	49,400	77,600	18,500	13,700	12,400	9,110	11,100	5,410
27	5,940	13,700	9,290	14,400	36,500	74,900	21,200	13,700	9,110	10,200	11,300	4,490
28	7,390	9,650	9,290	15,600	31,200	70,900	19,000	12,800	7,220	12,800	11,300	10,100
29	8,070	10,600	9,470	16,100	27,200	68,800	19,000	17,200	9,650	12,000	9,110	11,100
30	7,730	9,110	10,200	20,100	-	66,000	18,800	14,200	12,800	12,200	9,650	10,700
31	7,730	-	14,000	29,200	-	60,300	-	9,850	-	13,300	10,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	230,200	9,110	5,940	7,426	-	-
November	400,590	29,200	6,100	13,350	-	-
December	608,780	44,600	6,420	19,670	-	-
Calendar year 1947	9,194,430	138,000	5,110	25,190	1.67	22.65
January	487,100	29,200	10,400	15,710	-	-
February	1,871,500	101,000	27,200	64,530	-	-
March	1,682,500	80,600	24,200	54,270	-	-
April	1,359,100	72,200	18,500	45,300	-	-
May	449,600	19,300	9,850	14,500	-	-
June	327,500	14,200	7,220	10,920	-	-
July	476,130	26,400	5,480	15,360	-	-
August	648,140	59,800	8,580	20,910	-	-
September	272,830	11,500	4,490	9,094	-	-
Water year 1947-48	8,814,970	101,000	4,490	24,080	1.59	21.71

g Computed from graph based on gage readings at Montgomery steam plant, 10 miles upstream.

Alabama River at Selma, Ala.

Location.- Water-stage recorder, lat. 32°24', long. 87°01', in T. 17 N., R. 10 E., at Edmond Pettus Bridge on U. S. Highway 80, in Selma, 1 mile upstream from Valley Creek. Datum of gage is 61.80 feet above mean sea level, datum of 1929.

Drainage area.- 17,100 square miles.

Records available.- January 1899 to December 1913 (gage heights only prior to January 1900), June 1928 to September 1948. Gage-height records since December 1890 are contained in reports of U. S. Weather Bureau.

Average discharge.- 33 years (1900-1913; 1928-48), 26,530 second-feet.

Extremes.- Maximum discharge during year, 111,000 second-feet Feb. 15 (gage height, 40.7 feet); minimum, 5,640 second-feet Sept. 28 (gage height, 1.0 foot); minimum daily, 6,090 second-feet Sept. 28.

1899-1913, 1928-48: Maximum discharge, 204,000 second-feet Mar. 19, 1929 (gage height, 55.5 feet); minimum observed, 2,660 second-feet Nov. 1, 1904 (gage height, -2.20 feet).

Maximum stage known, 57.0 feet Apr. 8, 1886, from floodmarks established by Corps of Engineers (discharge, 221,000 second-feet).

Remarks.- Records good. Discharge above 17,000 second-feet computed by using rate of change of stage as a factor. Flow regulated by hydroelectric plants and reservoirs on Coosa and Tallapoosa River (see p. 418).

Revisions.- W 662: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,720	9,130	11,400	16,000	g39,000	29,700	67,100	18,600	11,000	12,700	13,800	11,900
2	8,230	9,490	10,600	16,400	40,200	30,700	72,500	17,500	11,600	12,700	12,100	12,900
3	8,950	9,130	11,200	16,400	40,200	43,600	74,600	15,000	12,900	12,100	11,600	12,100
4	8,770	8,770	12,100	16,900	37,900	55,900	72,800	14,800	12,700	12,100	21,600	11,800
5	8,410	8,590	11,900	15,800	35,800	66,400	69,400	18,200	11,900	9,850	34,000	10,800
6	7,710	8,770	11,400	15,200	34,600	77,700	63,000	19,100	11,800	7,540	50,700	9,850
7	7,880	9,670	12,900	16,600	33,400	86,100	59,500	18,600	10,800	6,560	56,700	9,130
8	7,410	12,700	11,200	18,600	35,600	94,300	61,300	18,600	9,670	6,240	52,800	9,310
9	9,310	14,400	8,950	18,000	58,900	95,800	66,300	18,800	10,200	6,720	44,800	10,400
10	9,130	11,400	13,800	15,600	82,300	95,100	68,300	15,800	11,400	8,950	35,800	12,500
11	9,130	11,000	27,000	15,000	95,800	87,600	66,300	12,900	11,400	18,200	31,100	13,100
12	9,310	24,700	37,100	14,000	105,000	80,500	65,900	14,800	10,800	25,800	28,500	11,900
13	7,710	35,900	44,700	12,700	110,000	70,300	63,100	17,100	11,400	22,200	25,200	8,590
14	7,540	31,900	46,400	15,000	110,000	57,500	60,300	17,300	10,600	20,200	21,800	8,590
15	7,200	28,700	42,300	20,000	111,000	46,400	57,600	16,900	10,200	20,900	18,900	10,200
16	8,590	26,700	44,100	21,300	110,000	39,100	55,800	16,900	10,600	23,200	16,400	12,300
17	8,950	21,100	49,900	20,400	106,000	39,500	50,600	13,800	14,200	25,500	14,000	12,100
18	9,670	17,700	48,400	18,600	103,000	42,200	44,400	11,000	13,500	27,200	15,400	11,800
19	10,000	21,100	43,100	16,000	98,200	42,900	36,200	12,100	12,900	26,000	18,000	10,600
20	7,880	22,700	37,600	16,600	90,000	43,200	31,100	13,300	11,900	24,300	g17,700	8,050
21	7,710	22,200	32,100	17,100	85,900	41,100	30,100	13,600	10,600	24,600	g16,900	7,710
22	7,710	21,300	28,700	20,900	82,800	37,600	28,500	13,300	8,230	23,600	g15,600	9,850
23	8,410	20,000	25,700	20,900	80,400	40,100	27,700	13,100	9,130	20,300	g13,800	12,100
24	8,950	16,400	24,600	19,500	76,500	62,300	26,900	11,800	11,200	16,400	g12,300	12,300
25	9,310	14,200	21,600	19,700	70,100	76,600	24,800	10,800	11,200	15,400	g12,300	12,100
26	9,490	16,200	17,100	18,200	60,900	82,000	21,100	11,900	11,600	12,300	13,600	10,600
27	8,590	17,300	13,800	15,800	47,600	81,300	19,300	13,800	11,900	10,200	12,900	7,370
28	7,710	15,800	11,900	18,000	38,400	76,500	20,400	13,600	9,670	11,000	13,100	6,090
29	8,590	12,500	11,800	19,500	33,000	73,400	19,300	14,000	7,880	13,300	12,700	10,400
30	9,490	12,300	11,800	g23,600	-	71,500	19,300	17,100	9,850	12,900	11,200	12,700
31	9,130	-	13,300	g32,000	-	68,100	-	14,600	-	13,300	11,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	263,590	10,000	6,720	8,503	-	-
November	511,750	35,900	8,590	17,060	-	-
December	748,450	49,900	8,950	24,140	-	-
Calendar year 1947	10,605,390	151,000	6,660	29,060	1.70	23.07
January	560,300	32,000	12,700	18,070	-	-
February	2,052,500	111,000	33,000	70,780	-	-
March	1,935,000	95,800	29,700	62,420	-	-
April	1,443,500	74,600	19,300	48,120	-	-
May	468,700	19,100	10,800	15,120	-	-
June	332,730	14,200	7,880	11,090	-	-
July	502,260	27,200	6,240	16,200	-	-
August	686,500	56,700	11,200	22,150	-	-
September	319,140	13,100	6,090	10,640	-	-
Water year 1947-48	9,824,420	111,000	6,090	26,840	1.57	21.37

Peak discharge (base, 80,000 sec.-ft.).- Feb. 15 (4 p.m.) 111,000 sec.-ft.; Mar. 9 (5 a.m.) 96,800 sec.-ft.; Mar. 26 (5 p.m.) 82,400 sec.-ft.

g Computed from graph based on once-daily readings of wire-weight gage by U. S. Weather Bureau and recorded range in stage.

Alabama River near Millers Ferry, Ala.

Location.- Wire-weight 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 and 2¼ miles northwest of Millers Ferry. Datum of gage is 26.85 feet above mean sea level, datum of 1929 (levels by Corps of Engineers). Auxiliary staff gage at site 9¾ miles downstream at different datum.

Drainage area.- 20,700 square miles.

Records available.- October 1937 to September 1948. Gage-height records collected at same site since 1931 are contained in reports of U. S. Weather Bureau.

Average discharge.- 11 years, 30,440 second-feet.

Extremes.- Maximum discharge during year, 129,000 second-feet Feb. 15 (gage height, 45.4 feet); minimum observed, 6,770 second-feet Oct. 2 (gage height, 4.65 feet); minimum daily, 6,980 second-feet Oct. 2.

1937-48: Maximum discharge, 237,000 second-feet Apr. 14, 1938 (gage height, 56.6 feet); minimum observed, 4,700 second-feet Oct. 23, 1941 (gage height, 3.02 feet); minimum daily, 5,260 second-feet Oct. 23, 1941.

Flood in March 1929 reached a stage of 56.8 feet, from floodmarks. Flood in April 1886 reached a stage of from 1 to 5 feet higher than that of March 1929.

Remarks.- Records good. Gages read twice daily. Discharge computed using fall as determined from auxiliary staff gage as a factor. Flow regulated by hydroelectric plants and reservoirs on Coosa and Tallapoosa Rivers (see p. 418).

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,850	9,710	14,000	15,800	47,700	39,200	80,600	22,200	16,300	12,600	14,900	11,300
2	6,980	9,610	13,300	21,100	50,000	41,600	83,200	21,900	13,200	14,800	13,600	11,800
3	8,170	9,890	12,700	22,000	49,900	59,700	86,100	20,300	13,400	14,200	14,100	12,700
4	8,790	10,000	11,800	22,000	48,000	66,400	85,600	20,000	14,600	13,800	14,800	12,200
5	8,860	9,890	13,300	21,500	45,200	78,200	83,400	20,000	14,200	13,200	25,600	12,400
6	8,540	9,450	13,300	19,800	42,500	98,700	78,900	22,400	13,600	11,400	39,300	11,200
7	8,080	9,890	13,100	18,800	42,400	114,000	75,000	22,400	13,400	9,160	53,900	10,500
6	8,240	11,800	14,000	20,000	43,100	118,000	71,100	22,200	12,400	7,830	57,600	9,800
9	8,630	14,000	12,700	20,900	56,500	116,000	74,100	22,900	11,300	7,610	58,300	9,710
10	9,450	15,400	18,600	20,000	84,300	114,000	79,000	21,500	11,600	8,540	46,500	10,800
11	9,350	14,800	36,500	18,600	99,600	113,000	80,800	17,700	12,800	11,800	37,400	12,500
12	9,280	26,400	49,200	17,300	112,000	107,000	77,300	15,300	12,800	22,100	32,300	13,300
13	9,350	35,800	56,000	16,500	119,000	97,200	79,400	17,600	12,500	27,100	30,000	12,000
14	8,300	39,100	65,300	15,100	125,000	83,000	82,200	19,600	12,700	24,800	26,600	9,320
15	7,930	37,900	61,300	19,400	129,000	69,900	80,400	19,700	12,200	25,400	22,400	8,790
16	7,710	39,300	60,700	24,600	126,000	57,000	74,600	19,400	11,900	26,800	19,200	10,200
17	8,740	31,200	63,900	24,200	125,000	49,200	70,100	19,000	14,200	27,000	16,800	12,200
18	9,400	24,600	64,600	23,500	122,000	49,700	65,700	15,200	18,200	29,000	14,600	12,200
19	9,910	24,400	58,400	21,500	117,000	53,700	55,700	12,600	17,500	30,800	16,100	12,000
20	9,890	26,600	48,700	19,600	111,000	54,700	43,400	13,200	16,200	28,600	18,400	11,600
21	8,770	26,400	43,400	19,800	106,000	51,400	36,500	14,800	15,000	27,300	19,000	10,100
22	8,080	25,300	35,700	22,600	104,000	48,900	35,300	16,200	13,300	27,000	17,300	9,060
23	8,080	24,000	31,200	25,400	102,000	46,700	33,500	15,000	10,600	25,700	16,400	10,000
24	7,910	22,000	29,700	24,200	96,500	59,600	32,800	14,400	11,000	22,200	14,000	11,800
25	9,020	19,400	28,100	23,700	88,600	78,800	30,500	13,000	12,500	18,800	12,600	12,4000
26	9,450	18,000	24,200	22,600	81,200	87,800	27,900	11,900	12,600	16,400	13,100	12,400
27	9,450	19,600	19,700	22,200	71,600	94,000	24,300	14,200	13,100	13,900	13,800	10,700
28	9,190	19,200	16,600	26,100	54,600	92,500	25,300	15,300	13,200	14,100	13,000	9,570
29	8,630	17,000	15,000	26,300	45,400	89,300	23,600	15,700	11,500	13,300	12,600	8,260
30	9,230	15,000	13,800	30,600	-	87,600	22,600	17,600	9,570	14,600	12,100	10,600
31	10,100	-	13,200	44,900	-	86,200	-	19,500	-	15,200	11,100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	271,360	10,100	6,980	8,754	-	-
November	615,640	39,300	9,450	20,520	-	-
December	972,000	65,300	11,800	31,350	-	-
Calendar year 1947	12,587,780	170,000	6,980	34,490	1.67	22.62
January	690,600	44,900	15,100	22,280	-	-
February	2,445,100	129,000	42,400	84,310	-	-
March	2,403,000	118,000	39,200	77,520	-	-
April	1,798,900	86,100	22,600	59,960	-	-
May	552,700	22,900	11,900	17,830	-	-
June	397,370	18,200	9,570	13,250	-	-
July	575,040	30,800	7,610	18,550	-	-
August	727,400	58,300	11,100	23,460	-	-
September	331,410	13,300	8,260	11,050	-	-
Water year 1947-48	11,780,520	129,000	6,980	32,190	1.56	21.17

Peak discharge (base, 90,000 sec.-ft.).- Feb. 15 (5 p.m.) 129,000 sec.-ft.; Mar. 8 (6 a.m.) 118,000 sec.-ft.; Mar. 27 (12 p.m.) 95,400 sec.-ft.

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 U. S. Highway 84 at Claiborne and half a mile downstream from Limestone Creek. Datum of gage is 0.4 foot above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 22,000 square miles.

Records available.- April 1930 to September 1948.

Average discharge.- 18 years, 32,440 second-feet.

Extremes.- Maximum discharge during year, 128,000 second-feet Feb. 19 (gage height, 43.1 feet); minimum daily, 7,800 second-feet Oct. 3.
1930-48: Maximum discharge, 227,000 second-feet Apr. 16, 17, 1938; maximum gage height, 52.25 feet Apr. 17, 1938; minimum discharge, 5,260 second-feet Oct. 24, 1941.

Remarks.- Records good. Flow regulated by hydroelectric plants and reservoirs on Coosa and Tallapoosa Rivers (see following page).

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,610	10,100	17,400	17,000	47,300	59,900	90,000	23,000	18,400	11,200	14,300	12,300
2	8,570	10,700	16,000	19,200	50,000	50,800	89,000	22,100	17,000	11,400	14,900	11,900
3	a7,800	10,900	15,000	22,100	51,100	59,900	87,900	21,200	14,500	13,000	15,600	12,300
4	a8,100	10,900	14,300	23,200	51,100	75,500	87,900	19,900	13,700	13,600	14,900	12,800
5	8,740	10,900	14,300	23,400	49,300	83,400	87,900	18,200	14,100	13,400	15,400	13,200
6	9,080	10,700	14,700	23,000	47,300	97,500	87,400	18,800	14,100	13,000	22,100	13,200
7	9,080	11,000	14,700	21,600	45,300	112,000	84,900	20,800	13,700	11,900	34,200	12,500
8	8,910	12,500	14,900	21,000	43,800	119,000	80,500	21,900	13,400	10,100	45,300	11,800
9	8,740	13,400	16,400	21,200	48,300	123,000	76,900	21,600	12,800	8,910	52,200	11,200
10	8,910	14,500	30,900	22,100	63,000	124,000	78,000	21,900	11,900	8,400	52,600	10,900
11	9,430	21,600	44,400	21,600	77,300	125,000	78,900	21,000	11,800	8,570	47,300	11,400
12	9,780	25,600	54,100	20,300	90,000	124,000	77,800	18,400	12,300	10,500	40,700	12,700
13	9,960	28,900	59,900	19,900	99,800	121,000	77,800	16,200	12,500	17,600	35,400	13,700
14	9,960	34,900	65,000	19,200	109,000	116,000	82,500	16,800	12,300	23,200	31,400	13,900
15	9,260	39,300	68,600	18,800	116,000	108,000	86,400	18,200	12,500	24,600	27,500	12,500
16	8,740	42,900	71,200	20,800	121,000	94,800	85,400	18,800	12,300	25,800	23,700	11,000
17	8,570	41,200	70,300	24,100	125,000	80,500	81,500	19,000	13,000	26,300	20,300	11,400
18	8,910	35,700	67,800	25,600	127,000	68,600	76,400	18,200	14,700	26,800	17,600	12,500
19	9,610	30,900	65,400	25,100	128,000	62,200	70,300	16,000	16,400	28,000	15,400	13,200
20	10,300	28,400	61,800	23,700	127,000	59,900	61,800	12,100	16,400	28,900	15,600	13,000
21	10,900	28,400	56,000	22,500	126,000	58,000	51,100	13,600	15,800	28,200	16,800	12,300
22	10,100	28,200	49,000	22,800	125,000	54,900	43,500	14,300	15,000	27,000	17,600	10,900
23	9,260	27,200	42,600	24,100	121,000	53,000	39,300	14,700	31,700	26,000	17,200	9,780
24	8,910	26,800	38,000	25,800	118,000	53,700	36,700	14,700	11,900	24,800	16,200	9,960
25	9,080	25,800	34,400	26,300	113,000	61,500	34,700	14,300	11,400	22,300	14,900	11,600
26	9,610	23,200	31,400	26,000	107,000	71,600	33,200	13,600	11,900	19,400	13,400	12,500
27	9,960	21,200	28,000	25,600	99,800	80,500	31,200	12,800	12,500	17,200	13,200	12,500
28	10,100	20,800	24,100	25,600	89,000	86,400	27,200	13,400	12,700	15,200	13,600	11,900
29	9,960	20,800	20,500	27,200	74,600	89,500	25,100	15,200	13,000	13,400	13,400	10,500
30	9,610	19,400	18,400	31,600	-	90,500	24,100	15,800	12,300	13,000	13,200	a9,600
31	9,610	-	17,200	40,400	-	90,000	-	17,000	-	13,700	13,000	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	289,160	10,900	7,800	9,328	-	-
November	686,800	42,900	10,100	22,890	-	-
December	1,156,700	71,200	14,300	37,310	-	-
Calendar year 1947	14,056,940	163,000	7,760	38,510	1.75	23.76
January	730,800	40,400	17,000	23,570	-	-
February	2,590,000	128,000	43,800	89,310	-	-
March	2,654,600	125,000	50,800	85,630	-	-
April	1,971,300	90,000	24,100	65,710	-	-
May	543,500	23,000	12,100	17,530	-	-
June	408,000	18,400	11,400	13,600	-	-
July	555,380	28,900	8,400	17,920	-	-
August	718,900	52,600	13,000	23,190	-	-
September	358,940	13,900	9,600	11,960	-	-
Water year 1947-48	12,664,080	128,000	7,800	34,600	1.57	21.41

Peak discharge (base, 90,000 sec.-ft.).- Feb. 19 (12 m.) 128,000 sec.-ft.; Mar. 11 (8 a.m.) 125,000 sec.-ft.; Mar. 30 (12 m.) 90,500 sec.-ft.

a No gage-height record; discharge computed on basis of records for station near Millers Ferry.

Reservoirs in Mobile River Basin, Ala.

Lake Martin on Tallapoosa River, 10 miles north of Tallassee, completed in 1927 for power development, has usable capacity of 1,380,000 acre-feet. Capacity curve and gage-height record furnished by Alabama Power Co.

Coosa River reservoirs on Coosa River, used for power development, are the following: Lay Lake, 11 miles northeast of Clanton, completed in 1914, usable capacity, 48,000 acre-feet; Mitchell Lake, 11 miles southeast of Clanton, completed in 1923, usable capacity, 54,000 acre-feet; Lake Jordan, 5 miles northwest of Wetumpka, completed in 1929, usable capacity, 84,000 acre-feet. Capacity curves and gage-height record furnished by Alabama Power Co.

Monthly change in contents, in acre-feet, water year October 1947 to September 1948

Month	Lake Martin	Coosa River reservoirs
October	-238,700	+11,300
November	+108,300	+20,000
December	+75,500	+900
Calendar year 1947	+42,400	+7,500
January	+3,000	+36,900
February	+396,900	-19,500
March	+178,200	+47,000
April	-23,700	-62,400
May	-79,200	-7,900
June	-93,200	+6,900
July	+164,600	+10,000
August	-91,800	-17,800
September	-135,200	+3,300
Water year 1947-48	+264,700	+28,700

Conasauga River at Tilton, Ga.

Location.- Water-stage recorder, lat. 34°40', long. 84°56', 250 feet downstream from county bridge, a quarter of a mile downstream from Swamp Creek, half a mile northeast of Tilton, Whitfield County, and 12 miles upstream from confluence with the Coosawattee River. Datum of gage is 622.28 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 682 square miles.

Records available.- June 1937 to September 1948.

Average discharge.- 11 years (1937-48), 1,067 second-feet.

Extremes.- Maximum discharge during year, 20,800 second-feet Feb. 14; maximum gage height, 26.0 feet Feb. 14; minimum discharge, 94 second-feet Oct. 2, 7.
1937-48: Maximum discharge, 26,000 second-feet Jan. 21, 1947 (gage height, 27.7 feet); minimum discharge, 85 second-feet Oct. 26, 1941.

Remarks.- Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1947-48, except period of backwater from return of overbank flow (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-18, Apr. 18 to July 24, Aug. 14 to Sept. 30)

2.3	90	4.0	590	19.0	8,650
2.5	128	9.0	2,790	21.0	11,200
2.9	224	14.0	5,220	22.5	13,700
3.4	368	17.0	7,000	25.3	20,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	99	143	232	467	3,630	1,050	3,480	442	352	174	342	118
2	94	150	224	1,360	2,380	1,030	3,530	438	275	196	1,080	118
3	97	169	219	1,360	1,490	1,320	3,480	493	245	162	1,230	114
4	97	201	216	800	1,140	1,230	2,560	550	227	146	2,300	116
5	99	227	214	590	1,030	1,100	1,760	653	216	137	1,670	118
6	97	272	221	512	1,410	1,410	1,760	611	211	128	926	130
7	95	295	256	438	2,880	3,300	2,480	550	211	130	531	216
8	97	278	272	399	5,380	4,960	2,300	531	211	124	385	240
9	101	309	300	371	6,540	5,380	3,480	470	211	122	309	186
10	101	272	493	352	7,670	3,070	3,720	424	206	128	278	242
11	106	286	590	330	7,830	1,760	2,200	395	198	245	261	493
12	126	474	550	312	8,450	1,410	1,630	375	188	378	295	272
13	124	512	474	1,100	11,300	1,190	1,580	365	184	327	270	184
14	128	371	406	2,700	20,000	1,030	1,940	352	186	272	232	150
15	118	666	665	2,070	c18,500	947	2,880	346	186	333	211	146
16	106	2,120	2,480	968	c13,900	1,030	2,430	336	250	424	211	130
17	112	1,450	3,160	758	c9,500	2,790	1,670	330	267	342	224	124
18	139	570	1,540	653	c4,300	3,960	1,270	312	232	339	211	122
19	278	470	863	550	c2,000	2,880	1,100	292	214	229	193	116
20	622	493	674	470	1,670	1,670	905	281	198	193	186	108
21	362	416	550	474	1,710	1,360	800	272	203	179	169	108
22	211	362	474	493	1,850	1,230	758	261	388	164	162	108
23	169	339	438	474	2,300	3,960	695	245	224	152	155	108
24	150	333	402	449	1,710	5,550	632	240	198	143	152	104
25	143	321	382	402	1,360	6,120	590	234	176	a140	150	103
26	143	303	392	352	1,270	3,530	570	227	169	a130	155	97
27	146	281	402	399	1,410	2,790	531	221	157	a140	146	101
28	146	270	362	842	1,360	3,910	512	281	160	a320	139	128
29	152	256	333	1,010	1,270	3,160	470	449	162	a410	135	146
30	146	245	315	1,050	-	1,890	449	611	157	a300	128	139
31	146	-	306	2,930	-	2,120	-	590	-	a250	128	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,750	622	94	153	0.224	0.26
November	12,854	2,120	143	428	.628	.70
December	18,405	3,160	214	594	.871	1.00
Calendar year 1947	421,449	24,700	90	1,155	1.69	22.98
January	25,435	2,930	312	820	1.20	1.38
February	145,240	20,000	1,030	5,008	7.34	7.92
March	78,137	6,120	947	2,521	3.70	4.27
April	52,162	3,720	449	1,739	2.55	2.84
May	12,177	653	221	393	.576	.66
June	6,462	388	157	215	.315	.35
July	6,857	424	122	221	.324	.37
August	12,964	2,300	128	418	.613	.71
September	4,585	493	97	153	.224	.25
Water year 1947-48	380,028	20,000	94	1,038	1.52	20.71

Peak discharge (base, 5,000 sec.-ft.).- Feb. 14 (2 p.m.) 20,800 sec.-ft.; Mar. 9 (10 a.m.) 5,500 sec.-ft.; Mar. 25 (12 m.) 6,240 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

c Backwater from return of overbank flow; discharge computed from backwater curve.

Mill Creek at Dalton, Ga.

Location.- Water-stage recorder, lat. 34°48', long. 84°59', in Dalton, Whitfield County, 1,000 feet upstream from city pumping plant and 1½ miles upstream from Southern Railway bridge.

Drainage area.- 37 square miles.

Records available.- August 1943 to September 1948.

Extremes.- Maximum gage height during year, 7.67 feet Feb. 12 (discharge not determined); minimum daily discharge, 17 second-feet Aug. 31, Sept. 2, 3, 25.
1943-48: Maximum gage height, 8.0 feet Jan. 20, 1947 (discharge not determined); minimum daily discharge, 14 second-feet on several days in September 1943.

Remarks.- Records good except those above 500 second-feet, which are fair. Moderate diurnal fluctuation at medium flow caused by mill dams above station.

Cooperation.- Gage-height record collected in cooperation with city of Dalton.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	21	26	96	121	50	142	36	28	21	29	18
2	18	27	25	54	88	71	172	40	27	21	32	17
3	18	27	25	42	71	59	114	38	27	21	60	17
4	19	24	24	38	65	54	91	45	26	20	65	19
5	18	34	26	34	60	50	82	38	26	20	48	23
6	20	26	26	32	144	192	133	40	25	21	32	28
7	18	34	25	31	253	308	138	38	25	21	28	22
8	19	32	29	30	620	172	249	35	28	19	26	21
9	20	27	28	29	418	121	196	34	26	18	25	23
10	18	25	36	28	325	97	128	32	25	28	23	49
11	20	70	33	27	280	79	107	32	25	72	25	23
12	20	36	30	27	1,370	66	121	31	24	28	24	21
13	20	30	29	177	1,160	59	121	30	25	24	23	20
14	19	30	28	75	920	56	253	30	25	25	23	20
15	19	155	161	54	342	53	132	30	23	25	23	19
16	20	51	137	47	214	161	104	30	25	23	23	19
17	25	38	63	43	152	126	85	29	26	24	22	18
18	22	38	51	38	118	85	72	28	21	22	21	19
19	50	43	44	35	97	85	64	27	25	22	19	18
20	24	36	39	34	97	71	58	27	24	21	20	19
21	22	32	36	36	79	64	54	27	24	21	20	18
22	20	32	34	35	124	71	50	26	25	19	20	18
23	20	36	32	32	85	521	47	26	24	19	19	18
24	19	34	31	32	73	205	44	26	21	20	19	18
25	22	30	31	30	70	135	43	25	21	19	19	17
26	20	29	30	29	71	104	41	25	22	19	18	18
27	21	28	29	42	66	206	40	29	23	32	18	19
28	26	28	28	54	60	110	38	70	22	177	18	38
29	21	27	28	42	55	91	37	39	21	30	18	22
30	20	26	27	139	-	79	36	61	23	26	18	19
31	19	-	27	200	-	215	-	30	-	26	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	655	50	18	21.1	0.570	0.66
November	1,106	155	21	36.9	.997	1.11
December	1,218	161	24	39.3	1.06	1.22
Calendar year 1947	23,035	2,000	17	63.1	1.71	23.14
January	1,642	200	27	53.0	1.43	1.65
February	7,598	1,370	55	262	7.08	7.64
March	3,816	521	50	123	3.32	3.83
April	2,992	253	36	99.7	2.69	3.00
May	1,054	70	25	34.0	.919	1.06
June	732	28	21	24.4	.659	.74
July	704	177	18	29.2	.789	.91
August	795	65	17	25.6	.692	.80
September	638	49	17	21.3	.576	.64
Water year 1947-48	23,150	1,370	17	63.3	1.71	23.26

Etowah River near Dawsonville, Ga.

Location.- Water-stage recorder, lat. 34°23', long. 84°04', half a mile upstream from Palmer Creek, 1 mile downstream from Russell Creek, 4 miles southeast of Dawsonville, Dawson County, and 7½ miles upstream from Shoal Creek.

Drainage area.- 103 square miles.

Records available.- March 1940 to September 1948.

Extremes.- Maximum discharge during year, 4,050 second-feet Aug. 4 (gage height, 14.4 feet); minimum daily, 65 second-feet Oct. 1, 2, 5, 6.
1940-48: Maximum discharge, 4,780 second-feet Jan. 7, 1946 (gage height, 15.8 feet), from rating curve extended above 3,800 second-feet; minimum daily, 55 second-feet Oct. 26, 1941.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Diurnal fluctuation during periods of low flow caused by mills above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 30 to July 10, July 16 to Aug. 2, Aug. 8 to Sept. 30)

0.8	54	2.0	295
1.0	80	8.0	1,870
1.3	133	10.0	2,430
1.7	220	11.3	2,830

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	96	143	202	225	258	594	265	220	164	188	131
2	65	272	139	245	199	373	503	268	204	149	250	129
3	67	190	135	179	182	318	451	298	193	139	607	131
4	67	143	133	166	177	290	412	295	188	135	2,810	182
5	65	218	143	160	186	265	399	285	184	129	620	248
6	65	173	153	153	235	483	425	280	179	125	373	211
7	66	202	133	147	373	1,390	451	305	225	122	303	168
8	126	232	164	145	893	594	477	260	197	118	275	157
9	200	160	175	143	594	a450	438	250	177	129	252	147
10	105	139	260	141	490	a370	399	242	168	192	238	143
11	93	598	290	137	399	a340	399	238	168	1,170	225	147
12	88	321	220	137	1,140	a320	386	232	164	656	238	135
13	83	208	193	242	919	a300	373	232	168	321	215	131
14	80	182	177	195	1,150	a300	399	225	157	615	213	135
15	80	425	337	153	659	a290	373	220	164	438	208	129
16	126	305	633	166	516	a300	360	218	168	288	222	125
17	360	220	334	153	438	a290	347	213	157	240	202	124
18	199	197	260	149	399	a280	334	206	171	213	190	118
19	129	222	225	143	360	a300	334	202	202	197	182	118
20	110	193	206	141	a340	a290	321	197	162	190	177	114
21	101	175	195	143	a330	a270	321	195	151	175	168	112
22	94	166	184	143	a350	a270	311	188	186	168	168	110
23	90	184	175	137	a320	a1,300	305	186	173	164	184	110
24	94	211	168	147	a290	a700	298	186	155	157	225	114
25	109	208	175	135	a290	a450	295	184	145	147	182	109
26	100	182	175	137	a280	a400	290	184	139	147	166	107
27	96	166	164	145	a270	815	282	193	141	143	157	105
28	143	155	160	184	265	529	278	438	149	155	153	133
29	125	151	153	171	248	438	272	399	288	162	147	129
30	105	147	151	186	-	399	270	285	230	151	141	118
31	98	-	149	268	-	646	-	242	-	157	137	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,394	360	65	109	1.06	1.22
November	6,441	598	96	215	2.09	2.33
December	6,302	633	133	203	1.97	2.27
Calendar year 1947	82,049	3,070	65	225	2.18	29.64
January	5,093	268	135	164	1.59	1.83
February	12,517	1,150	177	432	4.19	4.52
March	14,018	1,390	258	452	4.39	5.06
April	11,097	594	270	370	3.59	4.00
May	7,611	438	184	246	2.39	2.76
June	5,373	288	139	179	1.74	1.94
July	7,456	1,170	118	241	2.34	2.70
August	9,816	2,810	137	317	3.08	3.55
September	4,070	248	105	136	1.32	1.47
Water year 1947-48	93,188	2,810	65	255	2.48	33.65

Peak discharge (base, 1,800 sec.-ft.).- Mar. 7 (6 a.m.) 1,870 sec.-ft.; Mar. 23 (about 1 p.m.) 1,820 sec.-ft.; July 11 (10 p.m.) 2,180 sec.-ft.; Aug. 4 (2 p.m.) 4,050 sec.-ft.

a No gage-height record; discharge computed on basis of records for nearby stations.

Etowah River at Canton, Ga.

Location.- Water-stage recorder, 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 1¾ miles downstream from Hickory Log Creek. Datum of gage is 844.55 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 605 square miles.

Records available.- March 1892 to December 1905 (prior to 1895, gage heights only) and March 1937 to September 1948. Gage-height records collected at same site since 1891 are contained in reports of U. S. Weather Bureau.

Average discharge.- 11 years (1937-48), 1,050 second-feet.

Extremes.- Maximum discharge during year, 8,500 second-feet Aug. 5 (gage height, 16.1 feet); minimum, 257 second-feet Oct. 7.

1896-1905, 1937-48: Maximum discharge, 29,800 second-feet Jan. 7, 1946 (gage height, 26.7 feet), from rating curve extended above 18,000 second-feet on basis of slope-area determination at gage height 26.7 feet; minimum observed, 190 second-feet several days in September and October 1904.

Maximum stage known prior to 1946, 26.3 feet Dec. 10, 1919, present datum.

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	275	390	620	728	1,340	1,160	3,580	1,160	960	747	728	533
2	269	1,090	584	1,080	1,080	1,430	2,750	1,160	880	602	1,700	499
3	269	1,200	584	880	960	1,660	2,250	1,200	823	533	2,250	499
4	272	728	567	766	880	1,480	2,020	1,250	785	516	5,370	533
5	269	842	584	728	900	1,340	1,880	1,300	766	499	7,670	710
6	263	1,040	674	692	1,040	1,380	2,020	1,200	728	465	2,250	804
7	260	880	620	674	1,560	4,390	1,920	1,380	823	465	1,560	692
8	355	1,560	638	656	5,300	3,520	2,200	1,200	920	448	1,340	656
9	550	940	823	656	5,200	2,250	2,450	1,120	785	448	1,200	602
10	516	710	940	638	3,620	1,880	1,970	1,080	710	584	1,080	567
11	358	2,410	1,520	620	2,600	1,700	1,880	1,040	692	3,630	1,000	567
12	326	2,750	1,160	602	3,930	1,560	1,840	1,040	674	3,280	1,000	550
13	311	1,340	960	804	6,880	1,480	1,740	1,040	674	1,970	960	516
14	302	940	842	1,040	5,760	1,380	1,840	1,040	656	1,560	880	516
15	293	1,160	960	766	4,060	1,340	1,840	1,000	638	4,320	861	533
16	326	1,610	2,750	692	2,700	1,340	1,700	960	728	2,060	861	499
17	1,740	1,080	1,880	710	2,250	1,480	1,610	920	728	1,840	842	482
18	1,250	900	1,250	674	1,920	1,340	1,520	900	638	1,430	842	465
19	674	900	1,080	656	1,740	1,300	1,480	880	692	1,040	747	465
20	516	880	940	638	1,660	1,340	1,430	861	692	980	710	448
21	448	785	880	656	1,560	1,250	1,430	842	638	880	674	448
22	410	728	823	674	1,660	1,250	1,380	842	900	823	656	432
23	387	766	785	656	1,560	5,110	1,380	823	747	766	747	448
24	381	920	747	692	1,430	4,420	1,340	804	656	728	692	448
25	416	1,080	766	674	1,340	2,300	1,300	804	602	692	804	432
26	432	880	823	638	1,300	1,920	1,300	785	567	656	674	432
27	403	766	766	674	1,300	3,460	1,250	842	567	656	638	410
28	465	747	710	785	1,250	3,100	1,200	1,700	567	747	602	465
29	516	674	692	880	1,200	2,200	1,200	2,020	728	785	584	567
30	448	638	674	861	-	1,920	1,180	1,660	1,120	728	567	516
31	397	-	656	1,340	-	2,700	-	1,120	-	710	533	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,097	1,740	260	455	0.752	0.87
November	31,334	2,750	390	1,044	1.73	1.93
December	28,298	2,750	567	913	1.51	1.74
Calendar year 1947	359,736	13,200	260	986	1.63	22.13
January	23,230	1,340	602	749	1.24	1.43
February	68,180	6,880	880	2,351	3.89	4.20
March	64,380	5,110	1,160	2,077	3.43	3.95
April	52,860	3,580	1,160	1,762	2.91	3.25
May	33,973	2,020	785	1,096	1.81	2.09
June	22,104	1,120	567	737	1.22	1.36
July	35,588	4,320	448	1,148	1.90	2.19
August	41,022	7,670	533	1,323	2.19	2.52
September	15,734	804	410	524	.866	.97
Water year 1947-48	430,800	7,670	260	1,177	1.95	26.50

Peak discharge (base, 6,500 sec.-ft.).- Feb. 8 (9 p.m.) 6,880 sec.-ft.; Feb. 13 (7 a.m.) 7,860 sec.-ft.; Mar. 23 (9 p.m.) 6,600 sec.-ft.; Aug. 5 (6 a.m.) 8,500 sec.-ft.

Etowah River above Cartersville, Ga.

Location.- Water-stage recorder, lat. 34°10', long. 84°44', 1¼ miles downstream from Allatoona Creek, 2 miles downstream from McKaskey Creek, 2 miles upstream from Nashville, Chattanooga & St. Louis Railway bridge, and 3 miles east of Cartersville, Bartow County. Datum of gage is 686.92 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 1,110 square miles.

Records available.- September 1938 to September 1948.

Average discharge.- 10 years, 1,693 second-feet.

Extremes.- Maximum discharge during year, 13,500 second-feet Feb. 9 (gage height, 12.6 feet); minimum, 315 second-feet Oct. 7, 8 (gage height, 1.25 feet).

1938-48: Maximum discharge, 40,400 second-feet Jan. 8, 1946 (gage height, 20.8 feet), from rating curve extended above 26,000 second-feet; minimum, 270 second-feet Oct. 8, 9, 26, 27, 1941 (gage height, 1.18 feet).

Remarks.- Records good. Moderate diurnal fluctuation at times caused by mills above station.

Revisions (water years).- W 1032: 1944.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 16 to July 10, July 20 to Aug. 1, Aug. 7 to Sept. 30)

1.2	270	1.7	910	6.0	5,660
1.3	360	2.0	1,560	10.0	9,880
1.4	470	2.6	2,460	12.0	12,500
1.6	740	3.5	3,420		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	342	561	954	1,150	2,460	1,830	6,760	1,560	1,610	1,290	1,200	842
2	333	1,050	932	1,680	1,960	2,340	5,070	1,610	1,440	893	2,670	791
3	333	2,040	893	1,580	1,710	2,920	3,780	1,680	1,340	740	8.140	757
4	333	1,400	876	1,310	1,590	2,520	3,220	1,890	1,270	698	7,240	825
5	324	1,090	893	1,220	1,560	2,190	2,920	2,040	1,220	670	9,550	1,180
6	324	1,580	998	1,150	1,660	2,520	3,870	1,810	1,150	642	5.590	1,400
7	333	1,540	998	1,110	3,190	5,860	3,510	1,960	1,130	614	2,260	1,240
8	723	2,640	1,020	1,060	10,300	6,260	3,420	1,840	1,400	587	1,960	1,060
9	1,220	1,860	1,270	1,040	12,200	3,870	4,270	1,640	1,290	574	1,680	1,020
10	932	1,240	1,810	1,040	8,990	3,020	3,600	1,560	1,110	1,020	1,560	954
11	628	4,300	2,460	1,020	5,360	2,580	3,120	1,520	1,040	5,330	1,500	932
12	522	5,660	2,040	954	6,920	2,330	2,920	1,480	1,020	6,030	1,460	910
13	483	3,060	1,660	1,180	11,000	2,120	2,700	1,460	998	4,660	1,420	859
14	459	1,640	1,460	1,680	10,100	1,960	2,760	1,460	976	4,340	1,360	825
15	437	1,730	2,210	1,400	7,400	1,890	2,810	1,420	976	7,110	1,560	825
16	459	2,330	4,620	1,180	4,440	1,960	2,520	1,380	1,020	6,000	1,640	825
17	1,980	1,790	3,560	1,180	3,600	2,260	2,260	1,360	1,130	8,250	1,400	757
18	2,580	1,500	2,040	1,130	3,120	2,120	2,120	1,290	1,020	3,400	1,310	726
19	1,240	1,520	1,750	1,060	2,760	1,960	2,040	1,270	954	2,050	1,240	698
20	791	1,480	1,590	1,060	2,580	1,960	1,960	1,240	1,060	1,580	1,150	698
21	670	1,340	1,460	1,060	2,400	1,960	1,960	1,200	1,020	1,420	1,060	684
22	600	1,200	1,380	1,110	2,580	1,960	1,870	1,150	1,200	1,290	1.040	670
23	548	1,220	1,310	1,110	2,520	8,550	1,840	1,130	1,150	1,150	1,130	656
24	535	1,460	1,240	1,180	2,190	8,120	1,830	1,090	1,020	1,110	1,150	698
25	548	1,750	1,270	1,200	2,040	4,280	1,810	1,090	893	1,020	1,200	656
26	600	1,540	1,420	1,110	2,040	3,020	1,760	1,060	808	932	1,200	642
27	587	1,310	1,340	1,180	2,040	5,580	1,750	1,060	774	910	1,040	614
28	600	1,150	1,220	1,360	1,960	5,760	1,700	2,160	774	998	976	656
29	684	1,060	1,150	1,520	1,890	3,690	1,660	3,360	774	1,270	954	791
30	670	1,020	1,110	1,640	-	3,020	1,630	2,860	1,340	1,130	910	808
31	574	-	1,060	2,580	-	4,580	-	1,960	-	1,180	876	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	21,392	2,580	324	690	0.622	0.72
November	53,061	5,860	561	1,769	1.59	1.77
December	47,994	4,620	876	1,548	1.39	1.60
Calendar year 1947	583,803	20,600	324	1,599	1.44	19.53
January	39,234	2,580	954	1,266	1.14	1.31
February	122,560	12,200	1,560	4,226	3.81	4.11
March	104,990	8,550	1,830	3,387	3.05	3.52
April	83,440	6,760	1,630	2,781	2.51	2.80
May	49,590	3,360	1,060	1,600	1.44	1.66
June	32,907	1,610	774	1,097	.988	1.10
July	68,888	8,250	574	2,222	2.00	2.31
August	67,426	9,550	876	2,175	1.96	2.26
September	24,999	1,400	614	833	.750	.84
Water year 1947-48	716,481	12,200	324	1,958	1.76	24.00

Peak discharge (base, 9,500 sec.-ft.).- Feb. 9 (11 a.m.) 13,500 sec.-ft.; Feb. 14 (1 a.m.) 11,700 sec.-ft.; Mar. 23 (1 p.m.) 11,300 sec.-ft.; July 17 (1 a.m.) 12,800 sec.-ft.; Aug. 3 (6 a.m.) 10,000 sec.-ft.; Aug. 5 (6 p.m.) 9,770 sec.-ft.

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, 1¾ miles upstream from Connesena Creek, and 2½ miles southwest of Kingston, Bartow County. Datum of gage is 609.97 feet above mean sea level (Dixie Construction Co. bench mark).

Drainage area.- 1,630 square miles.

Records available.- July 1928 to December 1931, November 1936 to September 1948.

Average discharge.- 14 years (1928-31, 1937-48), 2,331 second-feet.

Extremes.- Maximum discharge during year, 20,300 second-feet Feb. 9 (gage height, 17.3 feet); minimum daily, 430 second-feet Oct. 5.

1928-31, 1936-48: Maximum discharge, 42,700 second-feet Apr. 9, 1938 (gage height, 27.7 feet); minimum, 201 second-feet Oct. 19, 1931 (gage height, 2.76 feet).

Maximum stage known, about 31 feet Dec. 11, 1919, from information by local resident (discharge, 52,000 second-feet.).

Remarks.- Records good. Moderate diurnal fluctuation at low flow caused by power plant at Cartersville.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.1	405	7.0	3,770
3.7	750	9.0	6,400
4.5	1,300	13.0	12,400
5.5	2,150	17.0	19,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	482	750	1,220	1,380	3,530	2,350	9,450	2,020	2,020	1,580	1,540	1,040
2	482	848	1,190	1,790	2,760	2,980	7,800	2,060	1,790	1,220	2,350	1,010
3	477	2,060	1,150	1,970	2,250	3,890	5,310	2,100	1,620	1,080	13,400	978
4	546	1,740	1,150	1,620	2,020	3,650	4,400	2,200	1,580	945	9,600	1,010
5	430	1,220	1,120	1,500	1,920	3,090	3,890	2,760	1,500	945	10,500	1,260
6	472	1,500	1,150	1,420	2,020	3,090	5,700	2,450	1,420	912	8,100	2,870
7	472	1,580	1,220	1,380	3,180	7,800	7,100	2,500	1,420	880	3,310	2,100
8	510	2,600	1,220	1,300	14,100	8,850	6,120	2,450	1,540	880	2,550	1,540
9	1,350	2,400	1,380	1,300	18,900	5,440	5,840	2,150	1,580	848	2,300	1,300
10	1,150	1,500	1,840	1,300	17,000	4,140	4,920	2,020	1,420	1,140	2,020	1,220
11	912	3,930	3,310	1,260	9,000	3,650	4,140	1,920	1,340	6,190	1,970	1,190
12	732	6,960	2,870	1,220	9,900	3,310	3,770	1,880	1,300	7,520	1,880	1,150
13	660	4,140	2,150	1,380	15,500	2,980	3,530	1,840	1,260	5,570	1,790	1,120
14	630	2,150	1,840	1,970	15,200	2,870	3,530	1,840	1,300	4,790	1,660	1,040
15	630	1,880	1,860	1,790	11,000	2,760	3,530	1,790	1,340	7,380	1,660	1,040
18	582	2,600	5,570	1,460	6,680	2,650	3,310	1,740	1,540	7,240	2,200	1,040
17	1,200	2,350	5,050	1,460	5,050	3,200	3,090	1,700	1,540	9,600	1,740	1,010
18	2,980	1,790	2,980	1,380	4,270	3,090	2,870	1,660	1,380	4,530	1,620	945
19	1,700	1,740	2,250	1,340	3,770	2,700	2,760	1,620	1,340	2,870	1,580	945
20	1,080	1,740	1,970	1,300	3,420	2,650	2,700	1,580	1,340	2,020	1,420	912
21	912	1,580	1,790	1,300	3,200	2,600	2,650	1,540	1,340	1,790	1,380	945
22	815	1,460	1,660	1,340	3,310	2,500	2,550	1,540	1,340	1,660	1,300	912
23	750	1,420	1,580	1,340	3,420	10,400	2,550	1,500	1,460	1,540	1,300	880
24	720	1,580	1,500	1,380	2,980	11,900	2,500	1,460	1,300	1,460	1,380	912
25	720	1,970	1,500	1,460	2,760	6,400	2,450	1,460	1,190	1,380	1,300	880
26	750	1,880	1,660	1,380	2,650	4,140	2,350	1,420	1,080	1,300	1,420	848
27	782	1,620	1,620	1,420	2,650	7,230	2,300	1,420	1,040	1,260	1,260	848
28	782	1,420	1,500	1,580	2,550	8,550	2,250	2,550	1,040	1,300	1,220	945
29	848	1,340	1,420	1,790	2,450	5,310	2,150	3,530	1,010	1,540	1,150	1,120
30	848	1,260	1,380	1,880	-	4,010	2,150	3,530	1,260	1,500	1,120	1,080
31	815	-	1,340	3,310	-	5,440	-	2,650	-	1,460	1,120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	26,219	2,980	430	846	0.519	0.60
November	61,008	6,960	750	2,034	1.25	1.40
December	59,440	5,570	1,120	1,917	1.18	1.36
Calendar year 1947	791,024	29,300	430	2,167	1.33	18.05
January	47,700	3,310	1,220	1,539	.944	1.09
February	177,440	18,900	1,920	6,119	3.75	4.04
March	143,620	11,900	2,350	4,633	2.84	3.27
April	117,660	9,450	2,150	3,922	2.41	2.69
May	62,880	3,530	1,420	2,028	1.24	1.43
June	41,630	2,020	1,010	1,388	.852	.95
July	84,330	9,600	848	2,720	1.67	1.92
August	87,140	13,400	1,120	2,811	1.72	1.98
September	34,090	2,870	848	1,136	.697	.78
Water year 1947-48	943,157	18,900	430	2,577	1.58	21.51

Peak discharge (base, 13,000 sec.-ft.).- Feb. 9 (9 p.m.) 20,300 sec.-ft.; Feb. 14 (9 a.m.) 16,100 sec.-ft.; Mar. 23 (8 p.m.) 15,500 sec.-ft.; Aug. 3 (12 m.) 15,500 sec.-ft.

Etowah River at Rome, Ga.

Location.- Water-stage recorder, lat. 34°15', long. 85°09', at Southern Railway bridge in Rome, Floyd County, 2 miles upstream from confluence with Oostanaula River. Auxiliary water-stage recorder at Second Avenue Bridge, 1 mile downstream. Datum of each gage is 561.70 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 1,810 square miles.

Records available.- July to December 1903, May 1939 to September 1948. August 1904 to June 1921 at site at Freemans Ferry, 5 miles upstream, published as Etowah River near Rome.

Extremes.- Maximum discharge during year, 22,200 second-feet Feb. 10; maximum gage height, 28.9 feet Feb. 14; minimum daily discharge, 514 second-feet Oct. 5.

1904-21, 1939-48: Maximum discharge, 55,000 second-feet Dec. 11, 1919 (gage height, over 28 feet at former site at Freemans Ferry), computed from data at upstream stations; minimum daily, 360 second-feet Oct. 10, 24, 1904.

Maximum stage known, that of Dec. 11, 1919. Flood of Apr. 9, 1938, reached a stage of 37.5 feet (discharge, 46,500 second-feet), from gage reading and discharge measurement by Corps of Engineers.

Remarks.- Records good except those for period of no gage-height record, which are fair. Discharge during periods of backwater computed by using fall as determined by auxiliary water-stage recorder as a factor. Moderate diurnal fluctuation during low flow caused by power plant at Cartersville.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	526	850	1,310	1,520	3,500	2,850	10,600	2,300	2,230	1,730	1,670	1,130
2	544	900	1,280	1,810	3,000	3,200	9,340	2,230	1,940	1,440	2,450	1,070
3	538	1,620	1,260	2,120	2,500	4,520	6,250	2,300	1,780	1,230	13,000	1,040
4	555	1,890	1,230	1,840	2,200	4,400	5,050	2,420	1,670	1,100	11,200	1,130
5	514	1,380	1,230	1,720	2,000	3,790	4,590	2,840	1,620	1,070	11,500	1,180
6	520	1,380	1,230	1,620	2,200	3,490	6,190	2,770	1,570	1,040	10,100	2,490
7	526	1,670	1,340	1,570	2,700	7,270	8,160	2,630	1,570	990	4,220	2,230
8	580	2,110	1,340	1,520	10,000	9,890	7,530	2,700	1,620	930	2,770	1,780
9	1,130	2,490	1,380	1,470	17,000	6,760	6,370	2,420	1,780	900	2,360	1,440
10	1,260	1,730	1,730	1,440	20,500	4,860	5,620	2,230	1,570	1,070	2,170	1,340
11	1,130	2,380	2,840	1,410	11,600	4,330	4,770	2,110	1,470	5,030	2,050	1,310
12	900	6,610	3,000	1,380	9,960	3,920	4,320	2,050	1,440	8,100	2,000	1,310
13	770	4,720	2,300	1,480	17,700	3,600	4,270	2,050	1,380	6,500	1,940	1,230
14	746	2,420	1,940	1,850	18,000	3,340	4,230	2,000	1,470	4,820	1,830	1,150
15	716	1,890	1,890	2,000	14,100	3,240	4,150	1,940	1,730	6,830	1,780	1,100
18	710	2,420	4,990	1,800	8,220	3,160	3,820	1,890	1,620	8,220	2,230	1,100
17	820	2,620	5,780	1,600	6,170	3,550	3,540	1,890	1,620	9,710	1,890	1,070
18	2,490	1,970	3,270	1,500	5,190	3,470	3,460	1,830	1,570	5,320	1,730	1,020
19	1,940	1,830	2,380	1,500	4,660	2,930	3,300	1,780	1,470	3,240	1,670	960
20	1,310	1,830	2,140	1,400	4,480	2,930	3,220	1,730	1,440	2,170	1,570	960
21	1,130	1,730	2,000	1,400	4,030	3,020	3,080	1,670	1,470	1,940	1,520	930
22	990	1,570	1,830	1,400	3,990	2,930	3,000	1,670	1,440	1,780	1,410	930
23	880	1,520	1,730	1,400	4,130	8,910	2,920	1,620	1,570	1,670	1,380	900
24	800	1,570	1,670	1,500	3,620	14,200	2,840	1,620	1,440	1,570	1,440	880
25	800	1,830	1,620	1,500	3,280	7,970	2,770	1,570	1,360	1,520	1.410	900
26	820	1,940	1,730	1,500	3,250	4,890	2,700	1,570	1,230	1,410	1,470	850
27	880	1,670	1,730	1,500	3,210	7,090	2,630	1,620	1,180	1,380	1,380	850
26	850	1,520	1,620	1,700	3,090	10,500	2,560	2,230	1,180	1,470	1,280	930
29	880	1,440	1,570	1,900	2,930	6,470	2,420	3,400	1,180	1,670	1,260	1,070
30	990	1,360	1,520	2,000	-	4,890	2,360	4,030	1,230	1,730	1,200	1,150
31	900	-	1,470	2,600	-	5,680	-	3,000	-	1,570	1,180	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	28,145	2,490	514	908	0.502	0.58
November	60,860	6,610	850	2,029	1.12	1.25
December	62,350	5,780	1,230	2,011	1.11	1.28
Calendar year 1947	858,863	28,400	514	2,353	1.30	17.65
January	50,950	2,600	1,380	1,644	.908	1.05
February	197,210	20,500	2,000	6,800	3.76	4.06
March	162,050	14,200	2,850	5,227	2.89	3.33
April	136,060	10,600	2,360	4,535	2.51	2.80
May	68,110	4,030	1,570	2,197	1.21	1.40
June	45,840	2,230	1,180	1,528	.844	.94
July	89,150	9,710	900	2,876	1.59	1.83
August	95,060	13,000	1,180	3,066	1.69	1.95
September	35,430	2,490	850	1,181	.652	.73
Water year 1947-48	1,031,215	20,500	514	2,818	1.56	21.20

Peak discharge (base, 13,000 sec.-ft.).- Feb. 10 (7 a.m.) 22,200 sec.-ft.; Feb. 14 (12 m.) 18,600 sec.-ft.; Mar. 23 (11:30 p.m.) 16,700 sec.-ft.; Aug. 3 (8 p.m.) 17,000 sec.-ft.

Note.- No gage-height record Jan. 15 to Feb. 9; discharge computed on basis of records for station near Kingston.

Amicalola Creek near Dawsonville, Ga.

Location.- Water-stage recorder, lat. 34°26', long. 84°13', at bridge on State Highway 53, 5 miles upstream from mouth and 5½ miles west of Dawsonville, Dawson County. Datum of gage is 1,203.87 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 84.7 square miles.

Records available.- May 1939 to September 1948. June 1907 to December 1908 (fragmentary) and June 1910 to December 1913 (in 1913, gage heights only) at site 1½ miles upstream.

Extremes.- Maximum discharge during year, 5,650 second-feet Aug. 4 (gage height, 5.86 feet); minimum daily, 54 second-feet Oct. 6.

1939-48: Maximum discharge, 7,450 second-feet (revised) Feb. 17, 1942 (gage height, 7.0 feet; minimum daily, 54 second-feet Sept. 6, Oct. 6, 1947.

Revisions.- The figures of maximum discharge for some water years have been revised as shown in the following table. They supersede those published in the water-supply papers indicated.

Water-Supply Paper	Water year	Date	Gage height (feet)	Discharge (second-feet)
872.........	†1939	Aug. 17	2.37	1,280
892.........	1939-40	Aug. 13	3.48	2,500
922.........	1940-41	July 5	5.64	5,200
952.........	1941-42	Feb. 17	7.0	7,450
972.........	1942-43	Dec. 29	3.65	2,680
1002........	1943-44	Mar. 19	4.30	3,460
1052........	1945-46	Feb. 10	5.50	5,050
1082........	1946-47	Jan. 20	5.30	4,770

† Period May to September 1939.

Remarks.- Records good. Moderate diurnal fluctuation at low flow caused by mills above station.

Revisions.- Revised figures of discharge for high-water periods in the water years 1940-44, 1946-47 are given herewith. They supersede those published in Water-Supply Papers 892, 922, 952, 972, 1002, 1052, and 1082.

Day (water year)	Discharge (second-feet)	Day (water year)	Discharge (second-feet)
1939-40		1945-46	
Aug. 13......	1,430	Jan. 6.....	2,100
		7.....	2,390
1940-41		8.....	1,740
July 5.......	2,000	31.....	1,650
		Feb. 9.....	1,550
1941-42		10.....	3,320
Feb. 16......	1,650	Mar. 8.....	1,440
17......	2,110	28.....	1,630
		29.....	2,210
1942-43			
Dec. 29......	2,150	1946-47	
		Jan. 20.....	2,990
1943-44			
Mar. 19......	1,750		

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
August 1940...........	5,211	1,430	81	168	1.98	2.28
Water year 1939-40..	50,929	1,430	63	139	1.64	22.37
Calendar year 1940..	54,369	1,430	66	149	1.76	23.87
July 1941.............	8,823	2,000	119	285	3.36	3.87
Water year 1940-41..	49,745	2,000	58	136	1.61	21.80
Calendar year 1941..	49,509	2,000	58	136	1.61	21.74
February 1942.........	9,777	2,110	137	349	4.12	4.29
Water year 1941-42..	70,528	2,110	59	193	2.28	30.94
December 1942.........	11,339	2,150	159	366	4.32	4.98
Calendar year 1942..	79,400	2,150	97	218	2.57	34.84
Water year 1942-43..	89,124	2,150	76	244	2.88	39.12
March 1944............	18,370	1,750	305	593	7.00	8.07
Water year 1943-44..	84,249	1,750	68	230	2.72	37.05
Calendar year 1944..	83,761	1,750	62	229	2.70	36.83
January 1946..........	20,715	2,390	242	668	7.89	9.10
February..............	19,164	3,320	390	684	8.08	8.41
March.................	19,063	2,210	360	615	7.26	8.37
Water year 1945-46..	130,852	3,320	65	358	4.23	57.50
Calendar year 1946..	126,718	3,320	88	347	4.10	55.67
January 1947..........	14,916	2,990	180	481	5.68	6.55
Water year 1946-47..	69,031	2,990	54	189	2.23	30.31

Revised peak discharge (water years).- 1941-42: Feb. 17 (1 a.m.) 7,450 sec.-ft.; June 11 (2 a.m.) 2,740 sec.-ft.; July 1 (1 a.m.) 2,860 sec.-ft.; Sept. 27 (11 a.m.) 1,610 sec.-ft. 1945-46: Jan. 6 (12 m.) 2,740 sec.-ft.; Jan. 6 (11 p.m.) 4,770 sec.-ft.; Jan. 8 (6 a.m.) 2,680 sec.-ft.; Feb. 9 (2 p.m.) 2,980 sec.-ft.; Feb. 10 (12 m.) 5,050 sec.-ft.; Mar. 29 (2 a.m.) 4,910 sec.-ft.

Discharge, in second-feet, of Amicalola Creek near Dawsonville, Ga., water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	82	127	162	209	239	495	234	181	127	196	108
2	56	262	124	173	185	315	430	243	173	118	266	108
3	58	162	121	152	170	285	370	276	166	115	400	105
4	56	127	121	144	166	262	305	262	162	108	2,270	118
5	56	213	134	138	181	243	300	243	158	105	481	158
6	54	182	130	134	222	426	315	252	162	102	310	148
7	56	202	121	130	360	954	340	271	204	102	252	127
8	114	200	170	127	912	467	400	234	173	96	270	121
9	110	148	162	127	565	376	358	222	158	108	209	121
10	77	127	289	127	436	335	330	217	152	174	192	115
11	74	539	252	124	364	310	330	213	148	1,020	185	115
12	69	281	200	124	1,180	290	320	209	144	335	185	108
13	67	196	181	200	867	276	305	209	144	252	173	105
14	65	177	162	158	1,110	271	376	204	141	452	162	105
15	65	364	356	136	608	266	330	204	148	388	162	102
16	215	252	436	134	460	271	315	200	148	252	162	99
17	528	200	266	134	400	266	300	192	141	217	158	93
18	170	185	222	130	358	252	290	185	138	189	152	93
19	121	200	200	127	325	271	281	185	148	173	144	93
20	102	177	181	124	315	266	276	185	138	162	141	88
21	91	162	173	127	300	252	276	181	134	148	174	88
22	82	155	162	127	315	242	271	177	158	148	157	85
23	80	170	158	124	285	809	266	177	152	138	144	88
24	91	192	148	130	266	430	262	177	134	134	155	88
25	93	185	158	124	262	340	257	173	124	124	144	85
26	82	162	152	124	257	315	257	181	121	124	130	82
27	85	152	144	138	252	602	252	185	118	121	127	82
28	127	141	141	170	248	406	243	290	118	138	124	118
29	96	134	138	155	239	346	239	266	185	134	118	112
30	85	130	130	185	-	325	234	226	152	141	115	96
31	80	-	130	243	-	534	-	200	-	130	112	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,161	528	54	102	1.20	1.38
November	5,839	539	82	195	2.30	2.57
December	5,589	436	121	180	2.12	2.44
Calendar year 1947	72,737	2,990	54	199	2.35	31.92
January	4,474	243	124	144	1.70	1.96
February	11,817	1,180	166	407	4.80	5.18
March	11,252	954	239	363	4.28	4.93
April	9,323	495	234	311	3.67	4.10
May	6,673	290	173	215	2.54	2.93
June	4,523	204	118	151	1.78	1.99
July	6,075	1,020	96	196	2.31	2.66
August	7,890	2,270	112	254	3.00	3.46
September	3,154	158	82	105	1.24	1.38
Water year 1947-48	79,770	2,270	54	218	2.57	34.98

Peak discharge (base, 1,500 sec.-ft.).- Feb. 12 (2 p.m.) 1,760 sec.-ft.; July 11 (6 a.m.) 2,150 sec.-ft.; Aug. 4 (5 a.m.) 5,650 sec.-ft.

Cedar Creek near Cedartown, Ga.

Location.- Water-stage recorder, lat. 34°04', long. 85°19', 700 feet downstream from bridge on State Highway 161, 4½ miles upstream from Lake Creek, and 4½ miles northwest of Cedartown, Polk County.

Drainage area.- 109 square miles.

Records available.- October 1942 to September 1948.

Extremes.- Maximum discharge during year, 3,200 second-feet Feb. 9 (gage height, 8.65 feet); minimum daily discharge, 30 second-feet Oct. 25.
1942-48: Maximum discharge, 11,400 second-feet Feb. 10, 1946 (gage height, 15.8 feet, from floodmark), from rating curve extended above 4,500 second-feet on basis of slope-conveyance studies; minimum daily, 29 second-feet Oct. 22, 23, Nov. 26, 1944.

Remarks.- Records good. Diurnal fluctuation and moderate regulations at low flow caused by power plants above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.6	26	1.3	111	4.0	860
.8	41	1.4	135	5.0	1,250
1.0	62	2.0	278	6.0	1,700
1.1	75	2.5	395	7.0	2,200
1.2	91	3.0	536	7.8	2,680

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Nar.	Apr.	May	June	July	Aug.	Sept.
1	37	43	52	59	174	123	491	91	81	58	47	44
2	38	61	47	66	140	364	382	91	74	55	125	52
3	39	49	47	59	121	278	289	88	72	49	356	39
4	39	41	46	56	111	248	253	169	71	52	330	47
5	35	40	46	56	109	196	241	111	66	54	231	55
6	39	40	43	52	121	446	974	105	66	53	99	50
7	39	46	41	55	765	845	745	97	70	52	83	55
8	39	54	51	52	2,560	448	434	86	70	52	75	53
9	38	36	50	51	2,680	345	345	85	67	53	72	47
10	37	47	177	49	1,520	278	278	81	65	91	67	48
11	35	241	145	49	730	239	266	81	62	107	66	40
12	35	70	91	53	1,490	203	239	78	59	74	65	45
13	43	56	75	86	955	179	213	77	60	95	62	50
14	39	51	68	75	1,010	172	196	72	65	78	150	45
15	39	70	147	65	506	160	184	72	60	71	70	41
16	39	62	198	62	395	182	172	71	63	66	68	39
17	39	55	113	60	334	257	160	72	60	72	63	46
18	34	58	93	60	278	174	150	71	66	60	61	39
19	34	71	81	59	244	162	138	67	67	65	56	37
20	44	61	75	56	215	150	130	67	59	59	54	48
21	38	55	72	58	203	140	128	66	62	58	55	43
22	37	51	70	59	248	142	123	65	78	55	50	43
23	38	53	66	56	198	1,290	118	65	61	56	54	40
24	36	61	63	56	172	421	111	67	56	49	54	43
25	30	62	65	55	162	311	109	65	55	53	50	43
26	35	56	65	56	155	255	105	63	54	59	48	34
27	43	50	62	63	150	1,070	103	71	49	53	48	50
28	39	54	60	89	142	421	97	123	59	51	45	75
29	36	46	60	86	130	311	97	170	60	53	48	53
30	39	48	59	145	-	257	91	155	62	51	55	45
31	39	-	56	253	-	554	-	93	-	49	47	-

Nonth	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,171	44	30	37.8	0.347	0.40
November	1,788	241	36	59.6	.547	.61
December	2,384	198	41	76.9	.706	.81
Calendar year 1947	57,114	5,480	30	156	1.43	19.46
January	2,156	253	49	69.5	.638	.74
February	16,018	2,680	109	552	5.06	5.46
March	10,621	1,290	123	343	3.15	3.63
April	7,362	974	91	245	2.25	2.51
May	2,735	170	63	88.2	.809	.93
June	1,919	81	49	64.0	.587	.65
July	1,903	107	49	61.4	.563	.65
August	2,754	356	45	88.8	.815	.94
September	1,389	75	34	46.3	.425	.47
Water year 1947-48	52,200	2,680	30	143	1.31	17.80

Peak discharge (base, 2,000 sec.-ft.).- Feb. 9 (4 p.m.) 3,200 sec.-ft.; Mar. 22 (8 a.m.) 2,200 sec.-ft.; Mar. 27 (1 p.m.) 2,260 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.

Drainage area.- 193 square miles.

Records available.- March 1937 to September 1948.

Average discharge.- 11 years, 323 second-feet.

Extremes.- Maximum discharge during year, 9,200 second-feet Feb. 13 (gage height, 16.8 feet, from floodmark); minimum daily, 45 second-feet Sept. 26.
1937-48: Maximum discharge, 16,600 second-feet Jan. 8, 1946 (gage height, 18.8 feet, from floodmark), from rating curve extended above 10,000 second-feet by logarithmic plotting; minimum daily, 38 second-feet Oct. 17, 1937, Nov. 9, 12, 1937.

Remarks.- Records good except those for period of no gage-height record, which are fair. Low and medium flow regulated by power plant at Trion, 6 miles above station.

**Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 11-27, Aug. 12 to Sept. 30)**

1.7	37	7.0	1,120	14.0	4,030
2.2	104	9.5	1,860	14.5	4,640
3.4	298	11.5	2,600	15.5	6,310
4.6	530	13.0	3,290	16.4	8,220

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	94	141	273	644	298	836	180	182	110	100	87
2	84	83	128	400	498	352	812	180	145	108	112	84
3	76	117	123	256	418	390	597	180	166	93	250	82
4	78	98	110	222	380	380	509	500	139	96	498	58
5	71	103	120	208	380	325	468	350	136	90	272	94
6	91	120	101	190	597	698	1,300	300	134	101	212	104
7	68	100	75	190	984	2,100	1,100	250	134	93	152	139
8	102	106	132	169	2,980	1,150	900	220	330	66	124	104
9	108	100	126	169	2,840	788	700	210	198	93	157	103
10	84	109	156	166	2,040	620	600	190	144	113	131	103
11	87	220	240	120	1,490	520	550	182	142	230	119	94
12	48	212	208	176	4,190	438	500	176	139	182	113	56
13	105	160	177	597	8,220	390	450	180	134	137	122	112
14	62	132	158	478	6,120	352	400	177	118	131	84	89
15	107	595	411	334	2,430	334	370	158	119	130	131	97
16	92	328	909	281	1,320	390	350	142	130	122	128	82
17	89	220	405	272	984	552	330	169	128	110	114	90
18	77	192	313	214	764	390	300	158	107	110	113	49
19	103	193	268	230	620	371	280	155	124	134	112	77
20	123	185	234	201	574	362	260	142	126	104	110	84
21	97	172	212	177	498	334	250	171	124	108	110	82
22	90	161	211	211	541	352	250	142	128	98	100	103
23	70	154	175	190	478	2,150	240	140	98	104	110	94
24	97	160	174	182	418	1,280	230	140	113	63	98	87
25	64	160	167	147	390	740	220	142	104	91	84	82
26	83	146	161	185	380	574	210	142	98	126	107	45
27	98	146	155	171	362	788	210	257	83	101	93	110
28	100	127	148	247	343	574	200	409	119	118	89	124
29	85	112	172	230	307	478	200	307	101	163	84	110
30	83	121	154	360	-	428	190	230	119	119	96	131
31	82	-	132	860	-	860	-	203	-	116	82	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,695	123	48	86.9	0.450	0.52
November	4,926	595	83	164	.850	.95
December	6,396	909	75	206	1.07	1.23
Calendar year 1947	127,372	8,420	45	349	1.81	24.54
January	8,106	860	120	261	1.35	1.56
February	42,170	8,220	307	1,454	7.53	8.12
March	19,758	2,150	298	637	3.30	3.80
April	13,812	1,300	190	460	2.38	2.66
May	6,482	500	140	209	1.08	1.24
June	4,062	330	83	135	.699	.78
July	3,560	230	63	115	.596	.69
August	4,207	498	82	136	.705	.81
September	2,756	139	45	91.9	.476	.53
Water year 1947-48	118,930	8,220	45	325	1.68	22.89

Peak discharge (base, 3,000 sec.-ft.).- Feb. 8 (11 p.m.) 4,030 sec.-ft.; Feb. 13 (12 m.) 9,200 sec.-ft.

Note.- No gage-height record Apr. 6 to May 10; discharge computed on basis of recorded range in stage and records for nearby stations.

Chattooga River at Gaylesville, Ala.

Location.- Wire-weight gage, lat. 34°16', long. 85°34', in SW¼ sec. 11, T. 9 S., R. 10 E., at bridge on county road to Cedar Bluff, 0.2 mile southwest of Gaylesville and 9 miles upstream from Little River. Datum of gage is 549.56 feet above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Drainage area.- 377 square miles.

Records available.- June 1937 to September 1948.

Average discharge.- 11 years, 616 second-feet.

Extremes.- Maximum discharge during year, 12,100 second-feet Feb. 14 (gage height, 20.6 feet, from graph based on gage readings); minimum daily, 122 second-feet Oct. 1, Sept. 27.

1937-48: Maximum discharge observed, 18,100 second-feet Feb. 11, 1946 (gage height, 22.17 feet); minimum daily, 74 second-feet Oct. 21, 1940.

Remarks.- Records good. Some regulation at low flow by power plant 27 miles above station. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Revisions (water years).- W 1052: 1938, 1943, 1944.

Rating table, water year 1947-48, except period of backwater
(gage height, in feet, and discharge, in second feet)

3.9	122	6.0	489	12.0	2,480	18.0	6,400
4.2	164	6.5	617	15.0	3,720	19.0	7,950
5.0	290	7.0	754	16.0	4,290	20.0	10,300
5.5	379	8.0	1,070	17.0	5,170	20.2	10,900

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	179	241	358	1,470	565	1,880	379	360	257	241	157
2	157	194	241	840	1,100	811	2,440	360	360	225	194	157
3	164	179	225	489	870	840	1,470	399	290	209	290	150
4	150	194	225	420	782	754	1,170	399	307	194	726	164
5	143	241	209	399	754	644	1,070	399	290	194	514	150
6	143	209	241	360	1,030	1,390	1,700	399	273	186	342	186
7	157	209	209	342	1,880	3,320	2,440	442	273	194	307	186
8	143	225	225	324	4,190	3,000	2,050	379	472	179	273	209
9	225	241	241	324	5,520	1,770	3,520	342	489	172	241	179
10	186	194	360	307	5,880	1,400	2,050	324	324	209	257	179
11	164	379	539	307	3,940	1,130	1,530	324	273	324	241	172
12	164	465	442	257	4,700	970	1,270	324	257	324	209	164
13	129	290	324	1,020	7,600	754	1,070	307	257	360	225	143
14	172	194	342	1,200	10,900	698	1,470	307	273	257	225	179
15	129	887	717	644	c8,000	671	1,300	307	470	241	179	164
16	172	870	1,740	539	c4,300	644	1,000	290	342	241	225	157
17	172	442	930	489	c2,000	811	870	257	307	420	209	143
18	164	360	644	442	1,670	698	754	290	273	225	209	150
19	157	379	539	379	1,740	644	698	273	307	225	194	129
20	179	360	442	420	1,200	644	617	273	290	225	194	150
21	194	342	420	399	1,100	565	591	257	257	241	194	150
22	164	307	379	342	1,070	617	539	290	290	225	194	150
23	157	307	342	360	1,030	3,000	514	257	257	186	194	172
24	143	290	342	342	840	3,160	489	241	209	194	186	157
25	164	290	324	324	900	1,670	465	241	225	172	172	150
26	150	273	307	324	754	1,230	442	241	209	179	143	150
27	150	273	290	342	698	1,740	442	257	225	209	172	122
28	179	273	273	442	671	1,470	420	1,130	209	209	172	257
29	164	241	273	465	591	1,070	399	930	290	257	172	209
30	157	241	257	674	-	870	379	754	307	225	164	186
31	150	-	257	1,740	-	1,370	-	420	-	225	172	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,964	225	122	160	0.424	0.49
November	9,528	887	179	318	.844	.94
December	12,540	1,740	209	405	1.07	1.24
Calendar year 1947	261,841	13,800	122	717	1.90	25.84
January	15,614	1,740	257	504	1.34	1.54
February	77,180	10,900	591	2,661	7.06	7.61
March	38,920	3,320	565	1,255	3.33	3.84
April	35,049	3,520	379	1,168	3.10	3.46
May	11,792	1,130	241	380	1.01	1.16
June	8,965	489	209	299	.793	.88
July	7,183	420	172	232	.615	.71
August	7,430	726	143	240	.637	.73
September	4,971	257	122	166	.440	.49
Water year 1947-48	234,136	10,900	122	640	1.70	23.09

Peak discharge (base, 5,000 sec.-ft.).- Feb. 10 (6 a.m.) 6,140 sec.-ft.; Feb. 14 (1 p.m.) 12,100 sec.-ft.

c Backwater from return of over-bank flow.

Little River near Jamestown, Ala.

Location.- Water-stage recorder, lat. 34°24', long. 85°38', in NE¼ sec. 30, T. 7 S., R. 10 E., at highway bridge a quarter of a mile upstream from Yellow Creek and 2½ miles west of Jamestown. Datum of gage is 1,177.4 feet above mean sea level (Alabama Power Co. bench mark).

Drainage area.- 121 square miles.

Records available.- October 1928 to April 1932, May 1935 to September 1948.

Average discharge.- 16 years (1928-31, 1935-48), 251 second-feet.

Extremes.- Maximum discharge during year, 7,650 second-feet Feb. 12, 14 (gage height, 7.7 feet); minimum, 0.4 second-foot Oct. 1-7 (gage height, 0.55 foot).

1928-32, 1935-48: Maximum discharge, 19,700 second-feet Dec. 28, 1942 (gage height, 12.20 feet); no flow on several days during July and September 1930 and for period Sept. 17 to Nov. 29, 1931.

Remarks.- Records good above 20 second-feet and fair below.

Revisions (water years).- W 802: 1929(M), 1930(M), 1932(M).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 28 to Sept. 30)

0.5	0.3	1.0	21	1.8	190	3.5	1,320
.6	.5	1.1	32	2.0	270	4.0	1,820
.7	2.2	1.2	46	2.3	421	5.0	3,080
.8	6.2	1.4	83	2.6	606	6.0	4,570
.9	12	1.6	129	3.0	900	6.5	5,380

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	14	65	190	800	183	733	45	61	6.2	96	2.8
2	.4	32	58	394	606	311	814	45	42	6.2	92	2.5
3	.4	25	53	331	485	421	627	67	29	5.2	311	2.2
4	.4	16	49	253	444	421	479	77	22	3.8	606	5.4
5	.4	23	53	213	498	362	410	112	17	2.8	367	8.6
6	.4	32	61	180	747	809	831	117	14	2.2	224	12
7	.4	42	63	154	1,230	1,760	1,140	183	11	1.4	146	14
8	.5	71	73	137	3,500	1,460	1,320	143	49	1.0	105	16
9	1.6	71	110	129	2,110	754	1,460	110	43	1.0	83	16
10	1.2	48	338	117	1,510	574	892	85	33	7.8	71	22
11	2.2	198	529	103	1,230	450	661	71	21	50	67	19
12	2.8	224	378	96	5,360	352	504	56	15	71	54	17
13	1.9	146	284	537	4,240	293	498	46	11	53	45	15
14	1.6	112	224	640	4,720	249	1,000	39	8.6	46	48	14
15	1.2	588	555	444	1,610	213	807	33	8.0	65	40	12
16	1.9	479	900	342	1,030	236	593	28	11	60	60	9.3
17	5.2	279	593	279	747	394	450	24	12	53	58	6.8
18	4.2	220	427	228	567	326	336	28	9.3	43	45	5.2
19	5.2	241	321	194	456	321	257	18	14	30	36	4.7
20	5.7	217	257	174	410	302	213	7.4	15	23	26	3.8
21	3.8	177	217	177	352	266	177	5.2	17	16	25	3.1
22	2.8	149	183	180	405	263	151	5.7	15	14	19	2.8
23	2.2	146	160	154	367	1,810	129	8.6	9.9	11	16	2.5
24	1.6	146	140	149	321	1,040	117	7.4	7.4	8.6	12	1.9
25	1.6	137	124	132	307	697	101	6.8	8.0	6.8	9.9	1.9
26	1.6	122	112	122	279	522	90	4.7	6.2	5.2	8.0	1.4
27	2.2	103	101	146	275	640	69	3.4	5.2	4.7	6.8	1.4
28	2.8	94	92	326	249	560	71	5.2	6.6	8.0	6.2	8.6
29	2.2	83	85	298	213	444	58	58	9.3	39	5.7	8.6
30	2.2	73	77	522	-	362	51	198	6.2	39	5.2	25
31	1.9	-	77	1,100	-	567	-	101	-	46	3.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	62.9	5.7	0.4	2.03	0.017	0.02
November	4,308	588	14	144	1.19	1.32
December	6,759	900	49	218		
Calendar year 1947	87,967.8	7,050	.4	241	1.99	27.05
January	8,441	1,100	96	272	2.25	2.59
February	35,068	5,360	213	1,209	9.99	10.78
March	17,362	1,810	183	560	4.63	5.34
April	15,039	1,460	51	501	4.14	4.62
May	1,738.4	198	3.4	56.1	.464	.53
June	536.7	61	5.2	17.9	.148	.16
July	729.9	71	1.0	23.5	.194	.22
August	2,697.6	606	3.8	87.0	.719	.83
September	265.5	25	1.4	8.85	.073	.08
Water year 1947-48	93,008.0	5,360	.4	254	2.10	28.57

Peak discharge (base, 4,000 sec.-ft.).- Feb. 8 (10 a.m.) 4,730 sec.-ft.; Feb. 12 (7 p.m.) 7,650 sec.-ft.; Feb. 14 (4 a.m.) 7,650 sec.-ft.

Terrapin Creek near Piedmont, Ala.

Location.- Water-stage recorder, lat. 33°57', long. 85°34', in SE¼ sec. 27, T. 12 S., R. 10 E., at bridge on State Highway 74, 500 feet upstream from Southern Railway bridge, half a mile upstream from Ladiga Creek, and 3 miles northeast of Piedmont.

Drainage area.- 115 square miles.

Records available.- June 1944 to September 1948.

Extremes.- Maximum discharge during year, 3,830 second-feet Feb. 7 (gage height, 8.3 feet); minimum, 2.9 second-feet Oct. 2, 6.

1945-48: Maximum discharge, 14,600 second-feet Mar. 28, 1946 (gage height, 12.03 feet); minimum, 2.9 second-feet Sept. 28-30, Oct. 2, 6, 1947.

Remarks.- Records good except those below 20 second-feet, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 5-30)

Oct. 1 to Feb. 7

0.7	2.1	1.2	44	3.0	555
.8	6.0	1.4	75	4.0	1,020
.9	12	1.7	134	5.0	1,520
1.0	20	2.0	207		
1.1	31	2.5	366		

Feb. 8 to Sept. 30

0.9	11	1.4	71	2.6	444
1.0	19	1.6	109	3.0	635
1.1	29	1.8	155	5.0	1,600
1.2	41	2.0	210	7.0	2,680
1.3	55	2.3	315	7.5	3,050

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	18	31	61	248	76	779	80	55	40	115	17
2	3.2	53	31	97	162	296	496	76	48	33	154	16
3	3.2	39	31	67	126	296	336	76	41	27	766	15
4	3.6	21	31	56	107	260	266	87	39	21	577	22
5	3.6	17	32	52	111	187	242	131	39	19	246	37
6	3.2	15	32	46	119	774	1,120	109	35	25	133	45
7	3.2	18	34	43	1,460	1,330	755	118	34	35	89	34
8	4.0	50	40	40	2,950	472	458	82	39	19	69	28
9	5.0	35	56	39	2,450	300	616	71	49	17	58	25
10	6.6	20	543	39	1,200	229	417	66	39	186	55	23
11	6.6	278	270	36	539	187	336	65	34	339	57	23
12	12	105	128	35	1,200	150	277	58	31	285	54	21
13	12	53	88	94	779	131	226	57	29	641	52	20
14	9.0	35	69	115	827	120	207	55	26	252	57	19
15	7.2	50	143	75	430	116	184	55	28	207	51	18
16	7.8	69	309	64	288	129	171	52	80	135	55	17
17	9.7	47	139	62	223	226	155	51	57	145	55	16
18	12	43	93	56	181	143	141	48	42	84	47	15
19	13	91	73	48	155	131	131	47	85	63	40	13
20	12	65	61	52	136	120	124	42	199	55	36	12
21	10	48	53	52	122	109	120	41	123	49	33	11
22	9.0	44	50	56	148	124	118	41	360	44	31	10
23	8.4	40	44	52	124	1,870	109	40	80	41	30	10
24	8.4	46	44	54	107	525	107	39	52	39	30	10
25	7.8	70	46	44	103	292	103	37	41	36	28	9.0
26	8.4	54	46	44	101	223	97	35	36	29	28	9.0
27	9.0	44	43	61	101	1,440	97	39	35	28	26	10
28	12	40	40	136	95	539	91	127	47	31	23	78
29	13	36	39	126	85	311	84	176	47	47	21	66
30	13	34	39	242	-	239	82	174	41	37	20	33
31	12	-	36	494	-	826	-	82	-	30	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	252.4	13	3.2	8.14	0.071	0.08
November	1,578	278	15	52.6	.457	.51
December	2,714	543	31	87.5	.761	.88
Calendar year 1947	53,859.5	6,860	3.2	148	1.92	17.41
January	2,538	494	35	81.9	.712	.82
February	14,677	2,950	85	506	4.40	4.75
March	12,171	1,870	76	393	3.42	3.94
April	8,445	1,120	82	282	2.45	2.73
May	2,257	176	35	72.8	.633	.73
June	1,891	360	26	63.0	.548	.61
July	3,039	641	17	98.0	.852	.98
August	3,054	766	18	98.5	.857	.99
September	682.0	78	9.0	22.7	.197	.22
Water year 1947-48	53,298.4	2,950	3.2	146	1.27	17.24

Peak discharge (base, 2,000 sec.-ft.).- Feb. 7 (9 p.m.) 3,830 sec.-ft.; Mar. 7 (12:30 a.m.) 2,280 sec.-ft.; Mar. 23 (8 a.m.) 2,820 sec.-ft.; Mar. 27 (10 a.m.) 2,820 sec.-ft.

Big Wills Creek near Crudup, Ala.

Location.- Wire-weight gage, lat. 34°06', long. 86°02', in SE¼ sec. 6, T. 11 S., R. 6 E., at highway bridge 1 mile upstream from Fisher Creek, 2 miles west of Crudup, and 4 miles downstream from Little Duck Creek.

Drainage area.- 189 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 5,480 second-feet Feb. 14 (gage height, 11.0 feet, from graph based on gage readings); minimum observed, 46 second-feet Oct. 30, Nov. 1.

1943-48: Maximum discharge observed, 9,530 second-feet Feb. 10, 1946 (gage height, 13.04 feet); minimum observed, 30 second-feet Dec. 6, 1943.

Flood in December 1942 reached a stage of 13.9 feet, from information by local residents.

Remarks.- Records good except those for periods of doubtful gage-height record, which are fair. Gage read twice daily.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 16

1.4	40	3.0	219
1.7	66	3.5	312
2.0	95	4.0	427
2.5	149		

Dec. 17 to Sept. 30

1.5	43	3.5	312	9.0	2,390
1.7	59	4.0	427	9.5	2,840
2.0	88	6.0	950	10.0	3,650
2.5	147	6.5	1,120	10.7	4,910
3.0	219	7.0	1,340		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	46	70	147	607	236	633	154	160	88	355	59
2	54	80	66	174	477	477	633	d140	218	83	633	55
3	53	75	66	147	427	452	607	d130	116	83	477	68
4	52	66	66	122	427	427	581	d120	110	78	896	94
5	53	70	66	d110	477	378	607	110	110	73	414	88
6	56	70	70	104	529	333	789	167	110	73	203	73
7	54	75	80	d97	763	1,340	923	167	104	68	167	73
8	57	80	85	d93	1,690	659	842	160	110	68	154	68
9	62	85	80	d90	2,630	503	923	154	174	64	147	68
10	52	95	100	d86	2,460	477	789	154	167	167	134	68
11	55	126	188	83	1,740	427	555	147	167	219	134	68
12	51	149	149	78	1,790	378	503	147	174	203	128	64
13	56	149	149	435	4,420	355	555	134	188	236	128	59
14	66	149	132	555	4,910	333	789	128	203	333	122	59
15	70	149	188	292	3,920	312	763	128	203	312	116	55
16	75	161	427	203	1,740	312	555	122	292	292	110	55
17	85	126	236	174	896	402	427	122	313	292	110	55
16	70	110	134	154	789	378	402	122	122	188	110	55
19	62	120	122	147	607	355	378	116	104	154	104	55
20	62	110	116	134	427	355	333	110	99	122	99	51
21	57	105	104	d130	273	355	333	110	99	99	94	48
22	55	100	99	d120	219	333	292	110	188	99	88	50
23	56	95	99	d110	219	1,140	273	110	167	94	83	49
24	50	85	99	d110	292	1,740	254	104	134	83	78	48
25	50	85	99	99	292	815	236	104	116	78	78	49
26	56	75	94	110	273	581	236	99	104	78	73	47
27	54	70	94	110	273	477	219	99	94	203	68	51
28	53	70	83	364	254	427	219	110	78	254	68	78
29	47	70	83	273	254	402	203	219	78	273	73	78
30	46	70	83	378	-	378	174	236	99	292	64	73
31	49	-	78	607	-	607	-	188	-	292	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
tober	1,772	85	46	57.2	0.303	0.35
ovember	2,916	161	46	97.2	.514	.57
ecember	3,605	427	66	116	.614	.71
Calendar year 1947	108,605	6,240	46	298	1.58	21.37
nuary	5,836	607	78	188	.995	1.15
bruary	34,075	4,910	219	1,175	6.22	6.71
rch	16,144	1,740	236	521	2.76	3.18
pril	15,026	923	174	501	2.65	2.96
y	4,221	236	99	136	.720	.83
ne	4,311	313	78	144	.762	.85
July	5,041	333	64	163	.862	.99
gust	5,572	896	64	180	.952	1.10
ptember	1,861	94	47	62.0	.328	.37
Water year 1947-48	100,380	4,910	46	274	1.45	19.77

Peak discharge (base, 3,600 sec.-ft.).- Feb. 14 (4 a.m.) 5,480 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.

Big Canoe Creek near Gadsden, Ala.

Location.- Wire-weight gage, lat. 33°54', long. 86°07', in SW¼ sec. 15, T. 13 S., R. 5 E., at bridge on U. S. Highway 11, 400 feet downstream from Rock Creek, 5 miles upstream from mouth, and 10 miles southwest of Gadsden. Datum of gage is 490.56 feet above mean sea level, datum of 1929 (levels by Corps of Engineers). Auxiliary staff gage on Coosa River at Greensport Ferry, 2.4 miles downstream from mouth of Big Canoe Creek, at datum 9.81 feet lower.

Drainage area.- 238 square miles.

Records available.- January 1938 to September 1948.

Extremes.- Maximum discharge during year, 5,840 second-feet Feb. 9 (gage height, 15.2 feet, from graph based on gage readings); minimum daily, 14 second-feet Oct. 1-4.

1938-48: Maximum discharge, 37,900 second-feet Dec. 29, 1942 (gage height, 29.1 feet, from high-water mark), from rating curve extended above 18,000 second-feet on basis of runoff for stations on nearby streams; minimum daily since Oct. 1, 1945, 14 second-feet Sept. 28-30, Oct. 1-4, 1947; minimum not determined prior to Oct. 1, 1945.

Remarks.- Records fair. Discharge for period of backwater from Coosa River computed by using relationship between gage heights at base gage and auxiliary gage as a factor. Gages read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating table, water year 1947-48, except period of backwater
(gage height, in feet, and discharge, in second-feet)

2.0	12	3.2	136	7.0	1,220
2.2	19	3.5	215	8.0	1,550
2.4	31	4.0	400	10.0	2,400
2.6	46	4.5	575	12.0	3,450
2.8	67	5.0	725	14.0	4,700
3.0	96	6.0	960	15.0	5,600

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	d14	48	32	631	1,420	305	1,190	115	d52	d68	991	d27
2	d14	27	26	600	745	1,530	1,550	113	d48	d55	505	d27
3	d14	28	29	320	605	2,000	1,080	126	d46	d50	895	d26
4	d14	23	37	201	605	1,410	575	126	d44	d47	665	d26
5	d15	23	37	163	725	895	748	109	d43	d45	470	32
6	45	24	34	148	912	1,200	4,120	98	d42	d44	320	34
7	d47	d26	29	126	2,330	2,920	3,000	80	d42	d43	163	115
8	d40	30	29	121	4,440	2,270	2,260	64	42	d42	93	42
9	d35	29	274	113	5,240	1,310	1,320	60	d40	62	d69	d30
10	31	27	1,190	d110	5,330	935	775	d57	d38	143	59	67
11	26	42	1,220	d99	4,120	935	605	d54	36	d100	51	d25
12	d18	72	732	d96	3,690	725	605	d51	d34	d80	49	d22
13	d17	90	300	921	2,960	435	863	d48	d33	76	51	d21
14	d16	74	245	1,060	4,180	360	2,900	d46	d32	106	53	d20
15	16	138	871	568	3,870	340	2,750	d44	33	68	55	d19
16	16	300	1,630	d300	3,450	340	1,910	d43	d45	109	51	d18
17	16	150	1,100	245	c1,900	340	850	d42	d43	86	53	d18
18	15	71	505	184	c900	d300	575	d41	40	d80	47	d17
19	16	94	385	174	c700	d260	435	d40	d38	d75	d44	17
20	15	126	262	174	c600	230	380	d39	37	72	d42	d17
21	17	74	215	176	c580	215	360	d38	d36	50	d39	d17
22	17	53	187	168	c640	225	300	d37	d36	39	d37	d16
23	d16	53	174	153	c500	1,770	300	d36	d36	34	d36	d16
24	d16	51	153	143	418	1,540	262	d36	d36	39	d35	d16
25	d16	46	146	153	340	725	230	d35	d36	35	d34	d16
26	d16	42	126	143	320	745	230	d35	49	35	d33	d16
27	d16	d39	d110	210	320	2,230	174	d35	55	39	d32	d17
28	19	d37	d100	944	262	1,540	143	d35	40	60	d31	201
29	21	34	94	1,110	245	725	126	d39	227	168	31	59
30	20	34	94	1,410	-	750	115	44	100	47	d29	37
31	d18	-	120	2,040	-	1,140	-	57	-	58	d28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	632	47	14	20.4	0.086	0.10
November	1,905	300	23	63.5	.267	.30
December	10,486	1,630	26	338	1.42	1.64
Calendar year 1947	168,891	8,160	14	463	1.95	26.40
January	13,004	2,040	96	419	1.76	2.03
February	52,347	5,330	245	1,805	7.58	8.18
March	30,645	2,920	215	989	4.16	4.79
April	30,731	4,120	115	1,024	4.30	4.80
May	1,823	126	35	58.8	.247	.28
June	1,459	227	32	48.6	.204	.23
July	2,055	168	34	66.3	.279	.32
August	5,091	991	28	164	.689	.80
September	1,031	201	16	34.4	.145	.16
Water year 1947-48	151,209	5,330	14	413	1.74	23.63

Peak discharge (base, 4,000 sec.-ft.).- Feb. 9 (11 p.m.) 5,840 sec.-ft.; Apr. 6 (5 p.m.) 5,510 sec.-ft.

c Backwater from Coosa River.

d Doubtful gage-height record: discharge computed on basis of weather records and records for stations on nearby streams.

Choccolocco Creek near Jenifer, Ala.

Location.- Water-stage recorder, lat. 33°34', long. 85°56', on line between secs. 5 and 8, T. 17 S., R. 7 E., at Louisville & Nashville Railroad bridge, three-quarters of a mile upstream from Salt Creek and 1½ miles north of Jenifer. Datum of gage is 554.15 feet above mean sea level, adjustment of 1903.

Drainage area.- 275 square miles.

Records available.- August 1903 to February 1908, May 1929 to March 1932, May 1935 to September 1948.

Average discharge.- 19 years (1903-7, 1929-31, 1935-48), 394 second-feet.

Extremes.- Maximum discharge during year, 6,310 second-feet Feb. 9 (gage height, 9.5 feet); minimum daily, 79 second-feet Oct. 2-4.

1903-8, 1929-32, 1935-48: Maximum discharge, 25,800 second-feet Feb. 4, 1936 (gage height, 17.2 feet), from rating curve extended above 11,000 second-feet on basis of runoff at nearby stations and velocity-area studies; minimum daily, 30 second-feet Oct. 10, 1931.

Remarks.- Records good. Some diurnal fluctuation caused by mill dams above station. An average of about 12 second-feet diverted from Coldwater Spring for municipal water supply for city of Anniston.

Revisions (water years).- W 782: Drainage area. W 952: 1904(m).

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 11-28)

1.6	72	3.0	451	7.0	3,150
1.7	86	3.5	661	8.0	4,270
1.9	120	4.0	921	9.0	5,600
2.1	163	5.0	1,540		
2.5	278	6.0	2,250		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	96	132	220	811	340	2,090	281	184	136	281	136
2	79	115	130	291	593	638	1,880	278	168	134	306	132
3	79	132	126	278	459	838	1,220	275	158	124	615	130
4	79	113	124	238	400	811	865	357	156	120	1,010	134
5	82	104	126	211	421	661	785	392	154	122	1,340	181
6	80	100	126	200	425	838	1,890	360	149	214	839	189
7	82	118	126	184	797	1,880	3,350	340	152	156	447	166
8	83	113	138	179	2,300	2,330	2,580	300	152	124	343	145
9	82	126	142	176	5,180	1,700	1,410	269	152	120	304	136
10	83	115	330	173	5,320	950	1,040	256	147	399	266	134
11	83	438	661	166	3,570	734	980	244	140	550	259	132
12	83	474	661	163	2,850	615	811	238	138	1,090	253	130
13	82	241	368	238	2,580	529	685	226	138	970	235	126
14	85	161	291	278	2,580	489	661	217	134	661	476	124
15	83	161	340	262	1,880	459	615	211	142	615	350	122
16	82	176	615	235	1,280	451	550	209	217	493	317	120
17	86	173	571	217	921	493	509	206	189	333	317	120
18	83	171	382	206	759	470	474	200	168	364	284	118
19	88	214	307	192	638	425	440	189	152	250	238	116
20	89	223	266	184	571	403	418	189	171	200	214	115
21	88	181	241	192	525	382	403	189	195	179	209	111
22	83	152	229	192	550	410	389	186	163	163	192	111
23	82	149	209	192	525	1,810	371	184	142	156	186	109
24	83	163	200	192	459	2,090	360	179	138	147	176	106
25	80	200	200	189	425	1,670	350	171	134	142	168	100
26	82	195	200	189	410	811	340	168	128	132	161	102
27	82	171	186	217	400	1,190	326	166	126	122	156	106
28	85	149	184	310	382	1,410	310	189	124	148	152	203
29	86	140	179	360	364	1,570	300	214	122	350	145	223
30	86	136	173	432	-	811	294	229	130	232	142	166
31	86	-	168	734	-	1,348	-	214	-	228	138	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,578	89	79	83.2	0.303	0.35
November	5,200	474	96	173	.629	.70
December	8,131	661	124	262	.953	1.10
Calendar year 1947	165,012	9,940	79	452	1.64	22.31
January	7,490	734	163	242	.880	1.01
February	38,375	5,320	364	1,323	4.81	5.19
March	29,556	2,330	340	953	3.47	4.00
April	26,696	3,350	294	890	3.24	3.61
May	7,326	392	166	236	.858	.99
June	4,563	217	122	152	.553	.62
July	9,174	1,090	120	296	1.08	1.24
August	10,519	1,340	138	339	1.23	1.42
September	4,043	223	100	135	.491	.55
Water year 1947-48	153,651	5,320	79	420	1.53	20.78

Peak discharge (base, 2,000 sec.-ft.).- Feb. 9 (11 p.m.) 6,310 sec.-ft.; Mar. 8 (5 p.m.) 2,330 sec.-ft.; Mar. 24 (2:30 a.m.) 2,250 sec.-ft.; Apr. 1 (11 a.m.) 2,090 sec.-ft.; Apr. 7 (4 p.m.) 3,570 sec.-ft.

Choccolocco Creek near Lincoln, Ala.

Location.- Water-stage recorder, lat. 33°34', long. 86°08', in SW¼ sec. 9, T. 17 S., R. 5 E., at bridge on State Highway 102, three-eighths of a mile downstream from Schmidt's mill, 4 miles south of Lincoln, 6 miles upstream from mouth, and 8 miles north of Talladega.

Drainage area.- 491 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 684 second-feet.

Extremes.- Maximum discharge during year, 9,800 second-feet Feb. 9 (gage height, 14.4 feet); minimum daily, 168 second-feet Oct. 2, 26.

1938-48: Maximum discharge, 21,800 second-feet Jan. 7, 1946 (gage height, 21.9 feet); minimum, 66 second-feet (result of unusual regulation) Oct. 1, 1941 (gage height, 0.28 foot); minimum daily, 151 second-feet Oct. 10, 12, 1938.

Maximum stage known, about 27.5 feet in 1886, from floodmarks, at original site 1,000 feet upstream.

Remarks.- Records good. Diurnal fluctuation with occasional regulation at low flow caused by small mills and diversion for municipal water supply for city of Anniston above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 31 to June 20)

Oct. 1 to Feb. 9

0.8	149	4.0	1,450
1.0	198	6.0	2,660
1.5	334	8.0	4,150
2.0	499	10.0	5,800
3.0	953	15.0	10,400

Feb. 10 to Sept. 30

1.0	192	3.0	940
1.5	303	4.0	1,440
2.0	470	6.0	2,660

Note.- Same as preceding table above 6.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	171	190	259	378	1,350	646	3,360	537	320	288	511	266
2	168	203	248	495	1,080	1,260	2,870	520	300	262	478	257
3	171	221	243	480	833	1,490	2,020	511	290	251	1,920	255
4	171	224	240	414	739	1,440	1,490	568	290	244	2,140	278
5	171	203	243	382	786	1,220	1,390	741	286	253	2,800	385
6	176	193	240	360	786	1,780	3,590	670	286	303	1,540	362
7	176	206	238	346	1,510	3,220	4,790	670	300	328	890	323
8	178	232	256	328	5,190	3,220	3,910	568	298	260	646	286
9	a180	219	273	326	8,410	2,660	2,380	499	290	251	550	269
10	a180	221	477	317	7,690	1,660	1,720	470	288	466	490	264
11	a180	953	857	309	5,030	1,340	1,840	458	286	499	450	260
12	a170	809	1,000	300	5,190	1,140	1,490	447	280	1,290	443	255
13	173	492	625	420	4,070	990	1,340	431	276	1,660	427	251
14	176	323	488	523	4,310	890	1,440	420	278	990	741	246
15	176	292	648	477	3,080	840	1,220	406	276	915	766	242
16	178	289	1,100	424	2,200	815	1,090	399	346	865	766	235
17	176	298	953	394	1,660	1,060	990	395	365	766	766	233
18	176	306	693	375	1,390	915	915	378	306	578	564	231
19	173	378	539	354	1,240	815	865	369	280	499	470	227
20	178	372	469	348	1,090	766	815	362	515	431	420	225
21	178	343	427	354	990	717	766	356	346	372	388	216
22	176	300	401	357	1,090	790	741	350	325	382	369	216
23	173	286	382	357	1,020	5,300	693	346	288	359	356	214
24	173	309	360	366	865	3,220	693	343	271	337	340	212
25	173	363	360	357	790	2,590	670	331	262	331	325	212
26	168	357	357	354	766	1,540	646	331	255	306	311	206
27	173	326	340	401	741	2,140	623	325	253	298	298	214
28	173	292	328	603	717	1,900	591	359	248	445	293	303
29	173	273	326	670	670	2,140	568	424	255	1,350	283	340
30	176	264	317	739	-	1,490	537	427	260	454	278	314
31	178	-	312	1,350	-	2,660	-	353	-	369	273	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,412	180	168	175	0.356	0.41
November	9,737	953	190	325	.662	.74
December	13,999	1,100	238	452	.921	1.06
Calendar year 1947	293,782	18,300	168	805	1.64	22.24
January	13,658	1,350	300	441	.898	1.03
February	65,283	8,410	670	2,251	4.58	4.94
March	52,654	5,300	646	1,699	3.46	3.99
April	46,053	4,790	537	1,535	3.13	3.49
May	13,764	741	325	444	.904	1.04
June	8,919	515	248	297	.605	.68
July	16,402	1,660	244	529	1.08	1.24
August	21,292	2,800	273	687	1.40	1.61
September	7,797	385	206	260	.530	.59
Water year 1947-48	274,970	8,410	168	751	1.53	20.82

Peak discharge (base, 5,000 sec.-ft.).- Feb. 9 (6 p.m.) 9,800 sec.-ft.; Mar. 23 (3 p.m.) 7,960 sec.-ft.; Apr. 7 (5:30 a.m.) 5,270 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for station near Jenifer.

Talladega Creek at Alpine, Ala.

Location.- Water-stage recorder, lat. 33°21', long. 86°14', in SE¼ sec. 21, T. 19 S., R. 4 E., at county highway bridge half a mile downstream from Southern Railway bridge, 1 mile north of Alpine, 9 miles southwest of Talladega, and 11 miles upstream from mouth. Datum of gage is 431.24 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 158 square miles.

Records available.- January 1939 to September 1948. August 1900 to December 1904 at site half a mile upstream, published as Talladega Creek at Nottingham.

Average discharge.- 13 years, 235 second-feet.

Extremes.- Maximum discharge during year, 5,560 second-feet Mar. 23 (gage height, 13.64 feet); minimum daily, 61 second-feet Oct. 25, 26.

1900-1904, 1939-48: Maximum discharge, 14,300 second-feet Mar. 21, 1942 (gage height, 15.21 feet); minimum daily, 20 second-feet June 18, 1904.

Remarks.- Records good. Some diurnal fluctuation caused by gristmill above station.

Revisions (water years).- W 952: 1902-3.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	62	117	169	434	252	1,010	239	139	114	164	99
2	72	69	114	229	331	524	676	232	132	110	177	97
3	71	71	112	164	277	562	536	224	130	105	859	98
4	70	67	111	147	252	524	473	277	128	102	1,130	103
5	70	65	111	139	277	434	486	287	126	99	703	305
6	70	65	112	135	279	624	1,380	260	125	98	379	182
7	72	72	111	132	406	1,280	1,450	252	123	111	247	132
8	73	83	114	126	1,860	757	812	221	123	167	198	115
9	72	71	130	125	2,670	562	599	208	118	111	159	108
10	72	69	327	126	1,700	473	549	203	114	285	157	105
11	72	983	406	121	840	420	676	196	112	337	155	104
12	71	499	263	120	924	365	536	190	111	238	145	103
13	72	196	219	276	703	334	486	186	111	284	132	100
14	71	147	226	326	1,010	320	562	180	111	190	151	98
15	70	141	356	219	784	306	473	178	175	149	164	97
16	71	147	650	183	574	343	434	176	252	189	268	98
17	71	128	365	169	499	434	406	173	200	139	234	93
18	72	141	268	155	434	343	379	166	141	126	166	91
19	73	268	221	147	406	320	354	157	181	132	145	91
20	72	178	193	147	365	301	337	155	262	114	132	91
21	70	145	173	153	351	285	326	151	145	111	126	91
22	64	132	160	169	379	365	317	149	126	107	125	90
23	62	128	153	155	343	3,590	304	147	121	107	121	91
24	62	173	145	166	309	1,770	298	141	117	104	114	91
25	61	208	143	157	298	676	287	139	112	108	112	91
26	61	157	143	169	287	536	274	135	111	103	110	90
27	63	139	133	226	282	549	268	132	110	99	108	92
28	65	132	130	331	274	499	258	149	111	150	107	135
29	67	123	128	304	258	434	247	193	120	216	105	137
30	65	118	125	345	-	406	242	160	132	155	103	108
31	62	-	123	624	-	1,230	-	147	-	135	99	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,129	73	61	68.7	0.435	0.50
November	4,977	983	62	166	1.05	1.17
December	6,082	650	111	196	1.24	1.43
Calendar year 1947	99,800	8,690	61	273	1.73	23.49
January	6,154	624	120	199	1.26	1.45
February	17,806	2,670	252	614	3.89	4.19
March	19,818	3,590	252	639	4.04	4.66
April	15,435	1,450	242	514	3.25	3.63
May	5,803	287	132	187	1.18	1.37
June	4,119	262	110	137	.867	.97
July	4,595	337	98	148	.937	1.08
August	7,105	1,130	99	229	1.45	1.67
September	3,324	305	90	111	.703	.78
Water year 1947-48	97,347	3,590	61	266	1.68	22.90

Peak discharge (base, 2,500 sec.-ft.).- Feb. 9 (4:30 p.m.) 3,160 sec.-ft.; Mar. 23 (6 p.m.) 5,560 sec.-ft.

Hatchet Creek near Rockford, Ala.

Location.- Water-stage recorder, lat. 32°57', long. 86°13', in NW¼ sec. 31, T. 23 N., R. 19 E., at bridge on county highway half a mile downstream from State Highway 11, 1½ miles downstream from Socapatoy Creek, and 4 miles north of Rockford.

Drainage area.- 225 square miles.

Records available.- October 1944 to September 1948.

Extremes.- Maximum discharge during year, 8,960 second-feet Mar. 23 (gage height, 16.8 feet); minimum, 31 second-feet Oct. 5.
1944-48: Maximum discharge, 22,800 second-feet Jan. 6, 1946 (gage height, 24.9 feet); minimum observed, 27 second-feet Oct. 30, Nov. 3, 4, 6, 7, 1944.

Remarks.- Records good except those for periods of rapidly changing stage and those for periods of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 16 to Mar. 23)

Oct. 1 to Mar. 23						Mar. 24 to Sept. 30			
1.1	29	2.5	258	10.0	2,850	1.2	74	3.0	480
1.3	48	3.0	370	12.0	4,200	1.4	105	4.0	756
1.5	73	4.0	620	14.0	5,900	1.7	158	6.0	1,400
1.7	102	6.0	1,190	15.0	6,900	2.0	224	9.0	2,580
2.0	156	8.0	1,830						

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	53	121	234	606	358	1,620	304	174	125	394	110
2	33	86	117	273	452	1,060	1,160	296	156	103	1,010	107
3	33	60	114	204	382	1,130	904	286	148	89	2,420	103
4	33	55	112	184	336	1,010	785	370	141	82	2,500	156
5	32	81	112	174	382	728	713	402	136	74	2,170	441
6	34	69	110	164	370	1,740	1,090	376	127	343	785	250
7	41	298	109	158	801	1,920	966	342	158	164	520	187
8	59	196	132	152	3,110	1,070	785	294	141	202	402	143
9	49	102	146	150	3,300	839	727	274	124	433	350	132
10	45	86	543	148	a2,200	728	713	259	115	2,410	322	129
11	42	2,320	540	139	a1,100	620	997	246	107	643	294	132
12	47	553	370	141	a1,000	540	756	232	103	415	269	125
13	44	260	404	382	a900	489	657	234	103	494	244	120
14	41	192	416	382	a1,100	476	844	219	107	520	219	124
15	39	273	1,060	269	a940	452	699	207	122	657	214	124
16	40	226	1,160	233	811	527	615	198	346	520	324	115
17	44	182	580	216	a680	1,130	574	196	288	494	342	107
18	43	501	416	204	a600	688	520	187	174	302	244	102
19	41	514	336	190	a540	580	494	178	204	605	202	99
20	40	291	291	194	a500	527	467	170	268	482	182	91
21	39	212	256	216	a470	476	454	168	166	274	238	86
22	37	184	235	226	a520	489	428	160	405	217	205	84
23	35	182	216	212	476	6,770	415	158	158	196	174	84
24	35	233	202	241	440	2,300	402	152	134	222	158	82
25	34	220	198	235	416	1,090	389	148	117	180	154	76
26	35	182	192	260	404	844	363	141	105	158	141	74
27	38	156	178	271	393	997	329	147	103	139	139	92
28	48	141	170	393	393	814	342	317	99	147	136	296
29	45	132	162	370	358	685	319	316	152	162	137	168
30	41	124	158	701	-	629	314	224	162	395	120	127
31	39	-	154	923	-	2,690	-	191	-	284	120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,239	59	32	40.0	0.178	0.20
November	8,164	2,320	53	272	1.21	1.35
December	9,310	1,160	109	300	1.33	1.54
Calendar year 1947	145,723	10,500	32	399	1.77	24.08
January	8,239	923	139	266	1.18	1.36
February	23,980	3,300	336	827	3.68	3.96
March	34,396	6,770	358	1,110	4.93	5.69
April	19,841	1,620	314	661	2.94	3.28
May	7,392	402	141	238	1.06	1.22
June	4,843	405	99	161	.716	.80
July	11,531	2,410	74	372	1.65	1.91
August	15,129	2,500	120	488	2.17	2.50
September	4,066	441	74	136	.604	.67
Water year 1947-48	148,130	6,770	32	405	1.80	24.48

Peak discharge (base, 3,500 sec.-ft.).- Nov. 11 (9:30 a.m.) 4,060 sec.-ft.; Feb. 9 (10 a.m.) 3,920 sec.-ft.; Mar. 23 (1 p.m.) 8,960 sec.-ft.; Mar. 31 (1 p.m.) 4,170 sec.-ft.; July 10 (7 a.m.) 3,540 sec.-ft.; Aug. 3 (8 p.m.) 6,500 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.

Tallapoosa River near Ofelia, Ala.

Location.- Water-stage recorder, lat. 33°20', long. 85°35', in SW¼ sec. 34, T. 19 S., R. 10 E., at county highway bridge 1 mile northeast of Ofelia, 1½ miles upstream from Little Tallapoosa River, and 9 miles east of Lineville.

Drainage area.- 787 square miles.

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge during year, 14,500 second-feet Mar. 23 (gage height, 11.9 feet); minimum, 52 second-feet Oct. 6, 7; minimum daily, 70 second-feet Oct. 6.

1939-48: Maximum discharge, 22,100 second-feet Jan. 20, 1947; minimum, 52 second-feet Sept. 30, Oct. 6, 7, 1947 (gage height, 0.64 foot); minimum daily, 63 second-feet Oct. 26, 1941.

Maximum stage known, about 21 feet in December 1919, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Diurnal fluctuation and occasional regulation at low flow by mill dam 22 miles above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 5-30)

0.6	38	1.6	577	4.0	2,890
.8	112	2.0	889	6.0	5,150
1.0	199	2.5	1,330	8.0	7,790
1.3	370	3.0	1,820	11.0	12,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	230	464	651	1,970	973	6,480	939	713	450	891	370
2	112	345	443	889	1,380	1,720	5,850	914	592	370	1,610	351
3	112	396	443	840	1,080	2,450	3,550	889	548	308	3,870	339
4	108	410	416	674	948	2,180	2,280	990	519	285	5,260	339
5	108	327	423	607	999	1,720	2,020	1,150	484	235	5,030	491
6	70	291	443	577	982	2,780	5,120	1,150	470	512	1,920	a560
7	92	622	410	548	1,470	5,610	7,490	1,110	457	383	1,130	a700
8	104	674	477	527	6,090	5,150	5,970	1,010	457	285	881	a900
9	104	705	541	527	10,200	2,780	3,660	897	505	314	775	a1,000
10	89	450	1,560	527	10,600	1,970	2,890	848	484	2,910	728	a550
11	146	3,850	2,720	512	8,910	1,720	2,560	807	429	2,450	713	450
12	129	3,880	1,720	498	5,080	1,470	2,120	775	403	4,320	674	436
13	120	1,670	1,120	1,080	4,800	1,330	1,920	752	377	2,890	644	410
14	141	823	914	1,150	5,850	1,240	1,770	720	383	2,230	2,140	383
15	120	697	1,440	948	4,690	1,200	1,720	705	403	2,560	1,870	377
16	137	720	2,620	752	2,670	1,420	1,620	682	607	1,620	1,240	384
17	154	674	2,070	674	1,920	1,920	1,520	666	736	1,470	1,040	339
18	154	783	1,280	636	1,620	1,670	1,420	644	577	1,420	799	314
19	141	1,020	939	607	1,420	1,380	1,330	621	512	990	682	302
20	154	881	815	607	1,330	1,240	1,280	607	768	705	614	296
21	154	713	728	629	1,240	1,150	1,240	584	812	636	a580	285
22	146	607	682	644	1,380	1,280	1,240	570	592	584	a650	273
23	141	577	851	644	1,380	12,000	1,200	555	484	570	a740	267
24	141	744	629	644	1,240	8,430	1,150	541	429	563	a600	267
25	137	889	629	636	1,120	6,180	1,130	505	364	484	a530	256
26	150	799	636	659	1,090	2,450	1,100	498	351	484	a490	250
27	129	651	651	690	1,060	2,180	1,070	491	383	429	a460	266
28	168	570	614	864	1,040	2,890	1,060	607	370	450	436	1,030
29	168	519	577	956	999	1,920	999	873	351	799	416	1,130
30	168	470	555	1,130	-	1,620	965	1,240	370	651	423	823
31	168	-	541	2,120	-	4,570	-	1,020	-	644	383	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,077	168	70	132	0.168	0.19
November	25,987	3,880	230	866	1.10	1.23
December	28,151	2,720	410	908	1.15	1.33
Calendar year 1947	435,131	19,600	66	1,192	1.51	20.56
January	23,447	2,120	498	756	.961	1.11
February	84,558	10,600	948	2,916	3.71	4.00
March	86,593	12,000	973	2,793	3.55	4.09
April	73,724	7,490	965	2,457	3.12	3.48
May	24,360	1,240	491	786	.999	1.15
June	14,930	812	351	498	.633	.71
July	33,001	4,320	235	1,065	1.35	1.56
August	38,219	5,260	383	1,233	1.57	1.81
September	14,118	1,130	250	471	.598	.67
Water year 1947-48	451,165	12,000	70	1,233	1.57	21.33

Peak discharge (base, 7,000 sec.-ft.).- Feb. 10 (2 a.m.) 10,900 sec.-ft.; Mar. 23 (7 a.m.) 14,500 sec.-ft.; Apr. 7 (1 a.m.) 8,430 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for Little Tallapoosa River near Wedowee.

Tallapoosa River at Wadley, Ala.

Location.- Staff gage, lat. 33°08', long. 85°34', in sec. 12, T. 22 S., R. 10 E., at Wadley, a quarter of a mile upstream from bridge on State Highway 63 and three-quarters of a mile downstream from Beaverdam Creek. Datum of gage is 601.33 feet above mean sea level, datum of 1929 (levels by Alabama Power Co.).

Drainage area.- 1,660 square miles.

Records available.- September 1923 to September 1948.

Average discharge.- 25 years, 2,469 second-feet.

Extremes.- Maximum discharge during year, 33,000 second-feet Mar. 23 (gage height, 21.2 feet, from graph based on gage readings); minimum daily, 231 second-feet Oct. 1, 3-5, 10.

1923-48: Maximum discharge observed, 52,800 second-feet Feb. 5, 1936 (gage height, 27.9 feet); minimum daily, 60 second-feet at times during September 1925.

Remarks.- Records good except those for period of doubtful gage-height record, which are fair. Gage read twice daily. Some diurnal fluctuation during extreme low flow caused by small mills above station.

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

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.6	191	3.0	565	7.0	5,870
2.7	251	3.5	1,180	10.0	10,600
2.8	332	4.0	1,800	15.0	19,300
2.9	440	5.0	3,080	18.0	25,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	231	428	1,060	1,680	4,720	2,420	13,100	2,050	1,680	922	1,680	896
2	244	552	995	2,300	3,750	3,660	11,100	2,050	1,430	896	5,000	847
3	231	799	995	2,050	2,940	5,870	8,640	2,050	1,240	835	11,300	823
4	231	922	995	1,680	2,420	5,720	6,170	2,420	1,120	702	11,300	1,060
5	231	799	995	1,490	2,420	4,720	5,290	2,820	1,060	651	9,920	1,800
6	244	775	995	1,360	2,420	5,890	9,220	2,680	1,060	2,180	5,270	1,490
7	244	1,120	995	1,300	3,000	11,800	15,400	2,820	1,060	1,240	3,480	1,680
8	258	2,820	995	1,300	12,400	9,920	11,400	2,560	1,060	775	2,680	2,820
9	244	1,680	1,180	1,240	17,500	6,930	8,480	2,050	995	763	1,920	2,300
10	231	1,240	2,700	1,240	17,500	5,580	7,400	1,920	1,180	8,880	1,800	1,920
11	d300	8,660	5,000	1,180	15,700	4,580	6,320	1,800	1,060	8,640	1,680	1,300
12	d550	8,640	4,300	1,120	12,300	3,880	5,290	1,800	909	9,440	1,610	1,060
13	d350	5,720	2,940	2,050	8,960	3,480	4,580	1,610	935	8,640	1,550	995
14	d320	3,340	2,560	2,940	13,000	3,210	4,300	1,550	935	4,860	5,940	922
15	312	2,680	3,530	2,420	10,600	3,080	4,020	1,490	896	5,140	5,440	896
16	303	2,050	7,400	1,920	6,620	3,350	3,880	1,490	1,240	5,000	4,580	871
17	312	1,800	5,580	1,680	5,140	7,240	3,620	1,430	1,490	3,480	2,940	823
18	322	1,800	3,880	1,550	4,440	5,000	3,340	1,360	1,360	3,210	2,050	811
19	286	3,210	2,820	1,490	3,750	3,880	3,210	1,360	1,060	2,680	1,800	751
20	286	2,560	2,300	1,490	3,340	3,620	3,080	1,360	1,550	1,800	1,490	676
21	286	1,800	1,920	1,490	3,210	3,340	2,940	1,300	1,490	1,550	1,430	663
22	279	1,550	1,800	1,550	3,480	3,500	2,820	1,240	2,180	1,800	1,800	676
23	279	1,490	1,550	1,550	3,480	23,600	2,820	1,240	1,180	1,360	1,680	663
24	272	1,490	1,550	1,550	3,210	19,100	2,680	1,180	1,120	1,550	1,610	651
25	258	1,800	1,550	1,550	2,820	12,100	2,680	1,120	922	1,240	1,240	639
26	251	1,920	1,490	1,550	2,820	7,400	2,560	1,120	835	1,060	1,120	615
27	258	1,610	1,550	1,800	2,680	7,080	2,420	1,120	1,360	995	1,060	689
28	342	1,360	1,490	2,050	2,680	6,780	2,420	1,300	1,060	1,550	935	2,300
29	352	1,240	1,430	2,180	2,560	5,000	2,300	1,920	823	1,610	896	2,680
30	294	1,180	1,360	2,560	-	4,300	2,180	3,080	859	1,920	871	2,050
31	286	-	1,240	4,580	-	9,150	-	2,300	-	1,430	935	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	8,887	550	231	287	0.173	0.20
November	67,035	8,660	428	2,234	1.35	1.50
December	69,145	7,400	995	2,230	1.34	1.55
Calendar year 1947	946,785	33,700	231	2,594	1.56	21.21
January	55,890	4,580	1,120	1,803	1.09	1.25
February	179,860	17,500	2,420	6,202	3.74	4.03
March	205,180	23,600	2,420	6,619	3.99	4.60
April	163,660	15,400	2,180	5,455	3.29	3.67
May	55,590	3,080	1,120	1,793	1.08	1.25
June	35,149	2,180	823	1,172	.706	.79
July	86,799	9,440	651	2,800	1.69	1.94
August	97,007	11,300	871	3,129	1.88	2.17
September	36,367	2,820	615	1,212	.730	.81
Water year 1947-48	1,060,569	23,600	231	2,898	1.75	23.76

Peak discharge (base, 20,000 sec.-ft.).- Feb. 9 (7 p.m.) 20,100 sec.-ft.; Mar. 23 (6 p.m.) 33,000 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of records for upstream stations.

Tallapoosa River below Tallassee, Ala.

Location.- Water-stage recorder, lat. 32°31', long. 85°53', in E½ sec. 30, T. 18 N., R. 22 E., 1½ miles downstream from Benjamin Fitzpatrick Highway Bridge and Thurlow Dam at Tallassee and 3½ miles upstream from Uphapee Creek. Datum of gage is 162.03 feet above mean sea level (levels by Alabama Power Co.).

Drainage area.- 3,320 square miles.

Records available.- July 1928 to September 1948.

Average discharge.- 20 years, 4,825 second-feet (unadjusted).

Extremes.- Maximum discharge during year, 41,600 second-feet Mar. 24 (gage height, 30.1 feet, computed on basis of power-plant records and flow over spillway; minimum daily, 77 second-feet May 30.

1928-48: Maximum discharge, 115,000 second-feet Mar. 15, 1929 (gage height, 51.35 feet, from floodmarks), computed on basis of power-plant records and flow over spillway; minimum daily, 10 second-feet June 3, 1930, May 17, 1931.

Remarks.- Records fair. Flow regulated by Lake Martin (see p. 418) and hydroelectric plants above station.

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

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,480	3,170	5,130	634	200	4,380	27,000	1,040	2,830	5,380	103	6,050
2	5,430	2,120	6,530	2,470	3,440	6,080	21,500	1,510	2,680	3,980	3,490	6,150
3	5,560	a4,870	6,520	2,520	3,400	7,200	13,700	5,750	3,710	96	8,780	6,140
4	3,180	a5,080	6,300	771	2,880	7,690	10,600	6,460	4,040	82	30,200	2,150
5	755	a5,440	6,610	4,390	3,730	6,070	9,460	6,350	138	78	18,000	164
6	5,520	4,860	851	4,860	4,130	5,990	9,110	6,120	183	880	13,000	117
7	5,720	5,330	489	3,700	2,060	5,620	17,600	5,360	4,440	2,820	8,280	4,780
8	5,540	573	5,860	4,350	4,640	7,980	17,700	2,960	5,880	3,760	4,810	5,820
9	5,650	99	5,860	5,810	7,500	9,230	13,400	547	6,200	2,520	5,930	5,550
10	4,100	3,790	5,200	2,760	7,010	7,950	9,600	5,330	5,720	5,920	6,940	6,030
11	3,940	5,750	4,370	876	6,410	8,910	8,770	5,880	5,860	4,700	6,210	3,540
12	1,010	1,500	4,030	5,360	4,710	8,440	9,830	5,820	3,170	1,200	7,630	135
13	5,330	1,090	1,880	5,170	5,180	6,770	9,610	5,710	102	3,100	7,890	5,000
14	5,510	3,930	480	5,150	3,000	4,490	9,090	5,470	5,090	1,260	7,570	5,920
15	5,080	1,010	3,400	4,160	1,110	6,440	9,000	2,010	5,040	4,520	1,090	5,980
16	5,530	1,130	4,200	4,430	3,680	7,810	7,270	862	4,170	4,430	5,880	6,200
17	5,740	2,040	4,610	3,210	3,930	9,480	3,850	6,410	4,240	2,250	9,490	6,570
18	3,260	3,650	3,460	561	3,570	10,200	3,220	6,670	5,350	1,270	9,010	4,150
19	751	3,520	1,990	3,660	4,900	10,000	5,880	6,750	297	6,000	7,710	234
20	4,440	3,430	1,510	4,720	4,400	8,910	5,810	6,010	273	6,770	8,310	5,760
21	5,360	3,700	1,420	3,550	3,520	6,100	5,540	6,190	3,370	5,990	5,850	6,290
22	5,590	1,860	4,880	3,410	2,120	7,060	5,280	5,400	4,980	4,480	656	6,140
23	5,650	1,920	3,830	4,980	6,560	19,400	5,740	856	4,300	4,400	5,700	6,610
24	5,900	4,600	882	2,450	6,310	38,100	5,260	5,600	4,810	4,780	6,740	5,890
25	2,840	4,510	520	930	6,480	18,800	1,440	5,820	5,350	200	6,720	3,520
26	902	4,690	600	5,070	5,200	14,200	5,400	4,910	401	5,710	6,960	2,770
27	5,720	884	618	4,990	4,310	10,300	6,110	5,610	125	6,320	8,250	5,680
28	5,640	4,400	789	5,100	2,700	10,600	5,930	5,720	6,090	6,270	6,250	6,100
29	5,500	1,940	5,310	3,780	830	9,300	5,320	1,220	6,850	6,060	867	5,990
30	5,860	531	3,620	4,310	-	8,220	5,860	77	6,720	4,560	5,560	6,150
31	6,230	-	4,320	1,410	-	9,540	-	1,620	-	1,110	6,410	-

Month	Observed				Change in contents in Lake Martin (acre-feet)	Adjusted for change in reservoir contents		
	Second-foot-days	Maximum	Minimum	Mean		Mean	Per square mile	Runoff in inches
October	142,718	6,230	751	4,604	-	-	-	-
November	91,417	5,750	99	3,047	-	-	-	-
December	106,069	6,610	480	3,422	-	-	-	-
Calendar year 1947	1,851,319	19,700	78	5,072	+42,400	5,131	1.55	20.98
January	109,542	5,810	561	3,534	-	-	-	-
February	117,910	7,500	200	4,066	-	-	-	-
March	301,260	38,100	4,380	9,718	-	-	-	-
April	273,880	27,000	1,440	9,129	-	-	-	-
May	136,042	6,750	77	4,388	-	-	-	-
June	112,409	6,850	102	3,747	-	-	-	-
July	110,896	6,770	78	3,577	-	-	-	-
August	230,286	30,200	103	7,429	-	-	-	-
September	141,580	6,610	117	4,719	-	-	-	-
Water year 1947-48	1,874,009	38,100	77	5,120	+264,700	5,485	1.65	22.47

a No gage-height record; discharge computed on basis of records for Thurlow hydroelectric plant.

Note.- Stage-discharge relation indefinite Nov. 11-26, Dec. 10-23, 30, 31, Jan. 19-22, Jan. 26 to Apr. 16, July 9-30, Aug. 2-10; discharge computed on basis of records for hydroelectric plants above station.

Little Tallapoosa River at Carrollton, Ga.

Location.- Staff gage, lat. 33°36', long. 85°05', at city 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. Datum of gage is 971.25 feet above mean sea level, datum of 1929, supplementary adjustment of 1936.

Drainage area.- 89 square miles.

Records available.- March 1937 to September 1948.

Average discharge.- 11 years (1937-48), 134 second-feet.

Extremes.- Maximum discharge during year, 1,930 second-feet Feb. 9 (gage height, 11.2 feet, from graph based on gage readings); minimum observed, 6.7 second-feet Oct. 7.
1937-48: Maximum discharge observed, 5,370 second-feet Apr. 8, 1938 (gage height, 16.66 feet); minimum observed, 5.4 second-feet Oct. 17, 18, 1938.
Maximum stage known, 18.15 feet about Feb. 1, 1936, from floodmark.

Remarks.- Records good below 200 second-feet and fair above.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 7, May 31 to July 10)

2.8	6.0	5.2	119	7.8	428
3.0	13	5.8	160	8.6	660
3.3	25	6.4	216	9.8	1,210
3.6	38	7.0	284	10.6	1,620
4.2	66	7.4	342		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.2	30	81	107	326	125	1,300	86	76	36	60	28
2	8.4	107	76	113	272	248	1,120	86	57	28	71	24
3	8.8	119	76	119	177	342	454	81	50	23	308	24
4	8.4	91	76	102	145	380	272	102	45	22	660	30
5	9.5	71	76	91	145	284	216	131	43	19	630	86
6	8.1	66	76	86	145	326	630	152	40	18	342	684
7	10	109	76	86	222	600	1,210	138	38	17	152	1,400
8	16	206	86	81	570	785	1,030	119	40	14	96	491
9	21	236	96	81	1,620	428	600	96	43	17	76	138
10	19	119	226	81	1,510	284	360	81	36	104	66	107
11	17	744	248	81	830	236	310	76	32	284	71	96
12	17	1,400	326	76	482	186	236	71	32	326	71	86
13	16	800	216	160	404	160	206	71	30	226	62	62
14	15	236	152	168	510	152	196	66	28	570	301	52
15	13	152	241	160	600	138	186	62	32	830	342	52
16	14	145	482	113	380	186	168	62	36	785	119	47
17	17	138	600	102	272	296	152	60	36	404	86	45
18	23	168	326	96	206	310	138	54	32	196	71	40
19	21	186	168	91	186	216	131	52	91	125	60	40
20	18	196	138	91	168	168	125	50	102	91	54	38
21	17	145	131	96	160	152	119	50	81	96	66	36
22	14	113	119	102	196	145	113	47	119	119	60	34
23	14	113	113	96	196	930	113	45	91	71	50	34
24	14	138	107	125	168	1,260	107	43	50	54	45	32
25	17	145	119	119	145	510	107	43	36	50	40	30
26	19	145	125	125	138	260	102	40	30	43	38	30
27	20	119	125	125	138	272	102	40	32	40	36	28
28	34	96	107	138	138	310	96	71	28	40	34	145
29	28	91	96	145	131	260	91	145	38	160	34	177
30	21	86	96	186	-	177	86	145	52	125	32	119
31	19	-	91	284	-	448	-	119	-	71	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	506.4	34	8.1	16.3	0.183	0.21
November	6,510	1,400	30	217	2.44	2.72
December	5,071	600	76	164	1.84	2.12
Calendar year 1947	52,839.4	3,060	8.1	145	1.63	22.09
January	3,626	284	76	117	1.31	1.51
February	10,580	1,620	131	365	4.10	4.42
March	10,574	1,260	125	341	3.83	4.42
April	10,076	1,300	86	336	3.78	4.22
May	2,484	152	40	80.1	.900	1.04
June	1,476	119	28	49.2	.553	.62
July	5,004	830	14	161	1.81	2.09
August	4,163	660	30	134	1.51	1.74
September	4,235	1,400	24	141	1.58	1.76
Water year 1947-48	64,305.4	1,620	8.1	176	1.98	26.87

Peak discharge (base, 1,500 sec.-ft.).- Nov. 12 (6 p.m.) 1,510 sec.-ft.; Feb. 9 (8 p.m.) 1,930 sec.-ft.; Apr. 2 (1 a.m.) 1,620 sec.-ft.; Sept. 7 (5 a.m.) 1,670 sec.-ft.

Little Tallapoosa River near Wedowee, Ala.

Location.- Water-stage recorder, lat. 33°21', long. 85°33', in NE¼ sec. 25, T. 19 S., R. 10 E., at highway bridge 4½ miles northwest of Wedowee and 5½ miles upstream from mouth.

Drainage area.- 592 square miles.

Records available.- August 1913 to June 1914 (gage heights only), October 1939 to September 1948.

Extremes.- Maximum discharge during year, 16,400 second-feet Mar. 23 (gage height, 18.9 feet); minimum daily, 61 second-feet Oct. 6.

1939-48: Maximum discharge, 19,800 second-feet Mar. 21, 1942 (gage height, 20.4 feet); minimum, 36 second-feet Sept. 23, 1941 (gage height, 2.85 feet); minimum daily, 53 second-feet Oct. 23, 1941.

Remarks.- Records good. Diurnal fluctuation and occasional regulation at low flow by small mills above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.1	63	4.5	538	12.0	6,080
3.2	84	5.0	763	15.0	9,650
3.4	135	6.0	1,260	16.0	11,100
3.6	195	7.0	1,840		
4.0	338	9.0	3,300		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	205	431	836	1,480	860	4,720	693	560	334	929	315
2	96	415	419	885	1,210	1,660	3,640	693	484	304	1,600	296
3	76	447	403	740	1,060	2,020	2,980	670	427	263	3,560	289
4	89	357	392	603	910	1,900	2,440	885	399	238	2,820	315
5	84	365	388	560	885	1,540	1,720	985	376	260	2,230	471
6	61	330	392	521	885	2,430	3,910	985	357	1,390	1,450	625
7	82	1,160	380	500	1,400	3,640	4,810	1,010	372	293	1,160	960
8	98	1,180	419	488	4,630	2,660	3,460	836	372	235	836	1,160
9	103	693	496	480	6,380	2,160	2,820	716	484	335	648	1,280
10	147	509	1,140	476	4,810	1,900	2,580	670	407	4,680	581	716
11	474	5,340	1,450	463	3,910	1,480	2,090	625	338	2,940	581	463
12	202	2,900	1,140	455	3,380	1,260	1,660	603	327	6,290	581	415
13	152	2,020	1,040	1,040	2,900	1,140	1,450	581	311	2,970	530	376
14	147	1,660	985	1,060	3,910	1,080	1,360	560	304	1,540	4,480	353
15	141	1,210	1,810	811	2,660	1,040	1,280	534	330	2,460	2,370	334
16	135	763	2,820	693	2,020	1,590	1,210	521	560	1,900	1,660	319
17	141	625	1,900	648	1,720	2,440	1,160	500	361	1,780	1,010	300
18	183	935	1,360	603	1,420	1,540	1,080	484	346	1,390	740	282
19	158	1,280	1,160	560	1,240	1,310	1,040	463	708	885	625	267
20	144	935	860	560	1,140	1,240	985	451	625	693	560	263
21	158	740	716	560	1,080	1,080	960	439	902	693	517	260
22	144	625	693	581	1,180	1,060	935	427	560	560	811	252
23	144	581	648	581	1,160	11,000	885	411	538	538	590	246
24	127	740	603	625	1,060	5,880	885	399	447	538	494	238
25	127	836	603	670	1,010	3,640	860	392	357	447	443	238
26	127	716	648	693	960	2,660	836	380	311	403	415	228
27	127	603	625	693	935	3,140	811	376	670	376	376	228
28	205	538	581	740	960	2,020	787	496	342	427	350	1,210
29	173	488	560	763	910	1,600	740	1,080	346	581	323	960
30	158	455	530	910	-	1,390	716	910	384	581	332	625
31	161	-	517	1,660	-	4,480	-	693	-	560	334	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,460	474	61	144	0.243	0.28
November	29,651	5,340	205	988	1.67	1.86
December	26,109	2,820	380	842	1.42	1.64
Calendar year 1947	332,763	12,200	61	912	1.54	20.91
January	21,458	1,660	455	692	1.17	1.35
February	57,205	6,380	885	1,973	3.33	3.59
March	72,840	11,000	860	2,350	3.97	4.58
April	54,810	4,810	716	1,827	3.09	3.44
May	19,468	1,080	376	628	1.06	1.22
June	13,305	902	304	444	.750	.84
July	36,884	6,290	235	1,190	2.01	2.32
August	34,006	4,480	323	1,097	1.85	2.14
September	14,284	1,280	228	476	.804	.90
Water year 1947-48	384,480	11,000	61	1,050	1.77	24.16

Peak discharge (base, 9,000 sec.-ft.).- Mar. 23 (12 m.) 16,400 sec.-ft.; July 12 (6 a.m.) 9,370 sec.-ft.

Uphapee Creek near Tuskegee, Ala.

Location.- Water-stage recorder, lat. 32°28', long. 85°42', on east line of sec. 12, T. 17 N., R. 23 E., at bridge on State Highway 81, 1 mile upstream from Red Creek, 1¼ miles upstream from bridge of Western Railway of Alabama, and 4 miles north of Tuskegee. Datum of gage is 223.65 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 331 square miles.

Records available.- October 1939 to September 1948.

Extremes.- Maximum discharge during year, 7,000 second-feet July 11 (gage height, 16.5 feet); minimum daily, 17 second-feet Oct. 24, 25.

1939-48: Maximum discharge, 29,600 second-feet Mar. 21, 1943 (gage height, 27.33 feet); minimum daily, 10 second-feet Oct. 28-31, 1941, Oct. 17, 22-26, 1941.

Flood in March 1929 reached a stage about 2 feet higher than that of Mar. 21, 1943.

Remarks.- Records fair. Occasional diurnal fluctuation at low flow caused by small plants above station.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used below 800 second-feet May 7 to Sept. 30)

2.7	16	3.7	142	6.0	800
2.9	34	4.0	199	7.0	1,190
3.1	55	4.5	314	9.0	2,130
3.3	80	5.0	450	13.0	4,320
3.5	109	5.5	611	15.5	6,100

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	25	247	436	1,680	558	895	f181	48	87	260	70
2	23	34	231	575	1,270	1,980	1,680	f162	44	71	240	68
3	22	40	220	593	762	2,560	1,630	f149	41	72	f1,390	67
4	21	36	216	394	630	3,160	1,110	f142	40	53	f2,560	97
5	21	38	210	335	667	2,080	705	139	38	40	f2,670	265
6	20	54	207	299	686	f1,980	705	f177	36	35	1,980	319
7	20	74	203	284	724	f3,550	990	164	37	31	1,070	235
8	24	87	220	272	1,350	f4,450	952	144	34	36	f593	146
9	23	81	367	272	2,770	2,670	1,190	120	32	350	f525	114
10	34	70	933	267	3,440	1,980	1,390	106	30	4,460	541	98
11	30	914	1,530	260	3,490	1,730	914	97	29	5,860	450	98
12	25	686	2,030	247	2,280	1,270	525	93	29	4,320	367	97
13	24	724	f2,080	479	2,130	971	450	87	30	f2,720	g327	88
14	22	450	2,080	743	2,450	800	408	81	65	1,730	g279	81
15	21	394	2,030	525	1,980	724	408	77	140	2,500	g263	80
16	20	525	2,340	367	1,580	838	380	74	200	2,000	394	77
17	22	479	2,180	332	1,070	2,230	327	70	f140	1,500	422	70
18	20	367	1,630	367	914	2,450	296	67	98	1,000	g319	65
19	23	450	952	367	800	1,730	272	64	86	540	g249	60
20	25	509	743	354	724	1,110	258	60	71	450	g210	57
21	23	464	648	479	724	857	249	58	63	350	g183	54
22	20	367	541	705	1,270	838	247	56	50	300	g162	53
23	19	367	494	558	1,350	1,680	242	54	42	250	g140	48
24	17	464	450	819	1,030	2,080	240	53	f35	500	g125	46
25	17	686	450	1,110	724	1,880	235	52	32	400	g112	45
26	18	667	464	933	593	971	231	50	72	320	g106	42
27	19	f575	422	541	558	1,270	222	49	91	279	98	g65
28	23	367	380	611	593	1,270	214	50	93	354	93	g408
29	24	302	354	686	611	876	205	110	97	630	86	g509
30	22	267	340	895	-	667	197	84	179	593	80	g304
31	20	-	332	1,580	-	686	-	67	-	436	76	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	685	34	17	22.1	0.067	0.08
November	10,563	914	25	352	1.06	1.19
December	25,524	2,340	203	823	2.49	2.87
Calendar year 1947	178,127	4,770	16	488	1.47	20.04
January	16,685	1,580	247	538	1.63	1.87
February	38,850	3,490	558	1,340	4.05	4.37
March	51,896	4,450	558	1,674	5.06	5.83
April	17,767	1,680	197	592	1.79	2.00
May	2,937	181	49	94.7	.286	.33
June	2,022	200	29	67.4	.204	.23
July	32,267	5,860	31	1,040	3.15	3.63
August	16,370	2,670	76	528	1.60	1.84
September	3,826	509	42	128	.387	.43
Water year 1947-48	219,392	5,860	17	599	1.81	24.67

Peak discharge (base, 5,000 sec.-ft.).- Mar. 8 (7 a.m.) 5,190 sec.-ft.; July 11 (9 a.m.) 7,000 sec.-ft.

f Computed on basis of partly estimated gage-height record.

g Computed from graph based on gage readings.

Note.- No gage-height record May 15 to June 16, July 15-26; discharge computed on basis of weather records and records for stations on nearby streams.

Autauga Creek at Prattville, Ala.

Location.- Water-stage recorder in concrete channel, lat. 32°27'30", long. 86°28'30", in N½ sec. 17, T. 17 N., R. 16 E., at Bridge Street Bridge in Prattville, 500 feet downstream from dam and 5 miles upstream from mouth. Datum of gage is 164.38 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 119 square miles.

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge during year, 968 second-feet May 29 (gage height, 2.65 feet); minimum daily, 78 second-feet Oct. 26.

1939-48: Maximum discharge, 21,800 second-feet Aug. 16, 17, 1939 (gage height, 18.35 feet, present datum, prior to major channel improvement); minimum, 3 second-feet June 1, 1941; minimum daily, 51 second-feet Nov. 9, 1941.

Maximum stage known, 18.85 feet, present datum, Dec. 9, 1919.

Remarks.- Records good except those for Nov. 15 to Dec. 16, which are fair. Extensive diurnal fluctuation and occasional regulation caused by small plant 500 feet above station.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 15 to Dec. 16)

Oct. 1 to Nov. 14				Nov. 15 to Sept. 30			
0.6	62	1.4	257	0.6	78	1.6	379
.7	80	1.8	393	.8	120	2.0	57
.8	101	2.2	560	1.0	170	2.3	74
1.0	148	2.5	710	1.3	260		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	176	170	218	313	212	379	147	218	200	165	92
2	99	269	175	240	260	329	508	149	167	175	170	90
3	103	245	175	221	212	513	350	147	144	127	167	94
4	83	203	167	192	203	523	293	184	139	111	192	f116
5	97	170	154	175	250	419	260	264	111	105	432	157
6	103	184	139	170	247	608	247	282	127	98	423	162
7	106	318	142	162	260	671	247	257	137	98	297	139
8	108	385	162	160	379	560	240	197	144	109	173	f116
9	103	310	192	162	730	446	234	170	125	223	147	116
10	110	263	301	170	654	397	218	154	120	432	165	212
11	103	520	401	167	523	337	224	149	116	414	184	f224
12	101	673	362	165	469	305	224	147	107	282	167	f130
13	103	437	383	181	446	275	221	144	109	221	139	132
14	101	146	354	194	446	253	333	139	109	227	125	107
15	97	392	354	184	392	247	329	134	125	371	120	107
16	101	401	410	170	329	271	293	134	160	286	147	109
17	108	321	379	165	293	345	237	134	212	197	162	107
18	103	282	321	170	264	258	203	132	194	175	147	f96
19	106	282	253	170	247	388	194	132	173	157	130	96
20	138	286	221	175	264	301	189	127	202	178	130	96
21	143	267	209	194	301	260	184	122	147	165	120	92
22	a120	221	203	200	371	253	181	120	134	132	142	f90
23	a110	200	194	192	341	544	178	120	125	118	134	90
24	101	212	189	194	290	460	178	113	113	122	111	88
25	97	230	192	184	244	358	175	109	105	147	109	f86
26	78	212	192	181	234	305	173	109	116	134	107	f86
27	101	189	186	184	227	282	165	113	152	127	102	f98
28	136	181	181	209	221	275	160	166	142	127	98	f152
29	148	173	178	215	212	278	157	705	149	154	98	162
30	153	170	175	297	-	257	152	560	230	175	98	132
31	134	-	175	350	-	264	-	298	-	203	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,395	153	78	110	0.924	1.06
November	8,31s	673	146	277	2.33	2.60
December	7,289	410	139	235	1.97	2.28
Calendar year 1947	86,426	1,660	78	237	1.99	27.00
January	6,011	350	160	194	1.63	1.88
February	9,622	730	203	332	2.79	3.01
March	11,194	671	212	361	3.03	3.50
April	7,126	508	152	238	2.00	2.23
May	5,858	705	109	189	1.59	1.83
June	4,352	230	105	145	1.22	1.36
July	5,790	432	98	187	1.57	1.81
August	4,995	432	94	161	1.35	1.56
September	3,574	224	86	119	1.00	1.12
Water year 1947-48	77,524	730	78	212	1.78	24.24

a No gage-height record; discharge computed on basis of records for Mulberry River at Jones.
f Computed on basis of partly estimated gage-height record.

Big Swamp Creek near Lowdesboro, Ala.

Location.- Wire-weight gage, lat. 32°16', long. 86°42', in NE¼ sec. 19, T. 15 N., R. 14 E., at bridge on U. S. Highway 80, 1 mile downstream from Panther Creek, 5 miles west of Lowndesboro, and 12 miles upstream from mouth. Datum of gage is 127.95 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 242 square miles.

Records available.- December 1937 to April 1938, October 1940 to September 1948.

Extremes.- Maximum discharge during year, 7,890 second-feet Mar. 7 (gage height, 17.0 feet, from graph based on gage readings); minimum daily, 0.4 second-foot June 12-14.
1938, 1940-48: Maximum discharge observed, 27,400 second-feet Apr. 1, 1938 (gage height, 20.0 feet); no flow at times.

Remarks.- Records fair except those below 10 second-feet and those for periods of doubtful gage-height record, which are poor. Gage read once daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 1, Apr. 24 to June 18)

1.0	0.3	1.6	7.8	6.0	230	14.5	1,560
1.1	1.0	2.0	18	7.0	321	15.0	2,010
1.2	1.9	2.5	32	9.0	540	16.0	4,000
1.3	3.1	3.5	72	12.0	926	16.5	5,770
1.4	4.4	4.5	123	13.0	1,100	17.0	7,890
1.5	6.0	5.0	154	14.0	1,320		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.6	d50	70	2,430	117	206	7.1	0.9	32	18	d0.8
2	1.7	40	d44	283	1,900	752	699	6.7	.6	28	38	.8
3	1.6	18	38	361	1,170	3,370	459	5.7	.6	13	317	.8
4	1.3	6.7	34	311	382	4,630	382	4.6	.6	6.4	600	1.3
5	1.2	5.2	29	112	265	3,720	230	7.1	.5	3.9	624	3.4
6	1.1	9.1	26	77	274	4,990	123	7.6	d.6	2.2	612	3.1
7	1.1	342	28	60	238	7,460	107	7.3	d4.0	1.6	d450	14
8	1.0	600	42	52	448	3,460	97	6.2	d2.5	14	d300	11
9	1.0	393	143	50	818	2,010	358	6.2	d.9	13	194	5.8
10	.9	126	1,500	44	3,940	1,710	854	5.4	.5	50	42	3.6
11	.8	912	4,630	44	4,000	1,320	2,270	4.4	.5	129	72	1.8
12	.9	3,000	5,370	48	2,270	1,100	1,290	4.3	.4	112	77	2.0
13	1.0	1,670	2,430	56	2,010	597	d1,100	3.4	.4	92	30	1.5
14	.9	1,800	2,430	107	2,010	161	d1,500	2.7	.4	123	19	1.3
15	.9	1,710	2,270	161	1,400	135	d500	2.5	.8	163	12	1.8
16	.9	1,020	2,430	112	1,120	154	222	2.2	.6	504	8.9	1.4
17	1.0	751	2,130	97	842	777	97	1.6	4.0	393	9.8	1.2
18	1.1	738	1,800	77	504	404	60	1.0	4.1	341	28	.8
19	1.3	648	1,460	87	206	777	46	.9	32	292	18	.9
20	1.5	382	436	117	147	842	34	d.8	48	92	12	.8
21	1.7	214	198	206	199	1,140	29	.7	40	30	7.8	.8
22	1.8	135	135	470	1,300	1,010	26	.7	20	20	4.6	.9
23	1.9	135	112	504	1,900	790	22	.6	14	16	3.9	.8
24	2.0	209	97	504	2,010	725	19	.5	8.2	11	3.0	.8
25	2.1	516	82	504	1,310	648	19	.5	d4.5	12	2.2	.8
26	2.2	437	77	437	404	576	d17	.5	3.1	8.9	1.7	.8
27	2.5	238	68	361	214	274	15	.6	2.2	7.3	1.6	.8
28	6.2	129	64	654	161	182	13	.8	1.4	5.4	d1.3	1.8
29	5.8	82	60	612	141	182	11	1.2	7.4	9.7	d1.1	2.2
30	d3.5	60	52	1,420	-	97	8.7	1.6	16	32	d1.0	1.7
31	d2.5	-	52	3,720	-	92	-	1.5	-	29	d.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	55.3	6.2	0.8	1.78	0.0074	0.008
November	16,328.6	3,000	2.6	544	2.25	2.51
December	28,317	5,370	26	913	3.77	4.35
Calendar year 1947	170,206.9	5,550	.8	466	1.93	26.16
January	11,628	3,720	44	375	1.55	1.79
February	34,013	4,000	141	1,173	4.85	5.23
March	44,202	7,460	92	1,426	5.89	6.79
April	10,813.7	2,270	8.7	360	1.49	1.66
May	96.9	7.6	.5	3.13	.013	.01
June	219.7	48	.4	7.32	.030	.03
July	2,586.4	504	1.6	83.4	.345	.40
August	3,510.8	624	.9	113	.467	.54
September	69.5	14	.8	2.32	.0096	.01
Water year 1947-48	151,840.9	7,460	.4	415	1.71	23.33

Peak discharge (base, 6,000 sec.-ft.).- Mar. 7 (1 p.m.) 7,890 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for nearby streams.

Mulberry River at Jones, Ala.

Location.- Water-stage recorder, lat. 32°35', long. 86°54', in E½ sec. 31, T. 19 N., R. 12 E., at bridge on county highway 0.4 mile west of Jones, 6 miles upstream from Buck Creek, and 11 miles upstream from mouth. Datum of gage is 165.23 feet above mean sea level, datum of 1929, supplementary adjustment of 1943.

Drainage area.- 205 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 363 second-feet.

Extremes.- Maximum discharge during year, 7,020 second-feet Mar. 23 (gage height, 12.4 feet); minimum, 52 second-feet Sept. 24, 25.

1938-48: Maximum discharge, 32,800 second-feet Aug. 16, 1939 (gage height, 30.4 feet); minimum, that of Sept. 24, 25, 1948.

Maximum stage known, 33.6 feet in April 1938, from information by local residents.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Occasional diurnal fluctuation at low flow.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	185	a230	407	550	340	1,980	270	149	103	350	74
2	76	236	a250	503	465	1,040	1,230	264	134	95	334	72
3	76	144	a260	321	417	1,680	895	258	130	90	309	70
4	76	123	a250	302	421	1,620	796	284	128	86	207	123
5	80	187	a230	247	612	870	748	364	126	81	565	202
6	89	204	a210	236	555	2,130	748	360	119	80	331	151
7	94	338	h192	220	791	2,680	725	391	121	80	171	105
8	102	414	a250	214	2,900	1,200	634	272	123	80	140	94
9	123	199	a350	214	2,750	920	702	247	114	136	126	89
10	105	199	a600	222	1,920	820	612	233	108	272	125	117
11	95	1,860	a900	202	1,200	725	725	236	105	267	125	115
12	92	882	a700	190	1,170	612	656	255	103	155	125	98
13	89	414	a800	585	1,020	555	656	217	102	134	121	87
14	84	374	a700	478	1,290	516	1,620	207	103	270	108	90
15	81	800	a1,300	306	870	503	870	197	171	217	107	97
16	80	572	1,050	267	725	612	702	192	341	233	128	89
17	86	391	612	267	679	1,050	612	194	390	241	171	75
18	87	923	533	238	612	656	559	192	194	214	140	69
19	81	1,170	457	238	550	590	520	180	171	217	117	68
20	80	a1,000	414	238	537	529	469	168	228	212	105	66
21	80	a720	381	296	548	482	441	164	178	144	102	63
22	76	h391	340	306	725	592	406	162	157	115	95	61
23	74	a300	318	270	537	5,350	388	149	121	105	90	59
24	75	a450	306	278	461	3,050	370	151	110	128	87	56
25	76	a540	318	247	417	1,170	384	146	108	146	89	56
26	78	a400	296	287	410	995	350	144	98	112	87	56
27	95	a310	272	367	399	1,170	347	140	97	100	84	68
28	151	a280	258	520	384	945	315	182	94	115	80	130
29	105	a250	250	461	344	748	284	275	98	171	78	136
30	86	a240	241	733	-	679	275	217	102	125	76	98
31	81	-	238	870	-	1,810	-	171	-	188	74	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,729	151	74	88.0	0.429	0.50
November	14,496	1,860	123	483	2.36	2.63
December	13,506	1,300	192	436	2.13	2.45
Calendar year 1947	170,759	9,900	74	468	2.28	30.99
January	10,530	870	190	340	1.66	1.91
February	24,257	2,900	344	836	4.08	4.40
March	36,639	5,350	340	1,182	5.77	6.65
April	20,019	1,980	275	667	3.25	3.63
May	6,882	391	140	222	1.08	1.25
June	4,323	390	94	144	.702	.78
July	4,712	272	80	152	.741	.85
August	4,847	565	74	156	.761	.88
September	2,734	202	56	91.1	.444	.50
Water year 1947-48	145,674	5,350	56	398	1.94	26.43

Peak discharge (base, 4,000 sec.-ft.).- Mar. 23 (10 p.m.) 7,020 sec.-ft.

a No gage-height record; discharge computed on basis of 2 gage readings, recorded range in stage, and records for Autauga Creek at Prattville.

h Computed from tape-gage reading.

Cahaba River near Acton, Ala.

Location.- Water-stage recorder, lat. 32°22', long. 86°49', in SE¼ sec. 23, T. 19 S., R. 3 W., at bridge on U. S. Highway 31, half a mile upstream from Patton Creek, 1 mile northwest of Acton, and 16 miles south of Birmingham. Datum of gage is 375.00 feet above mean sea level, adjustment of 1912.

Drainage area.- 229 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 337 second-feet.

Extremes.- Maximum discharge during year, 5,660 second-feet Feb. 9; maximum gage height, 20.4 feet Feb. 9; minimum daily discharge, 1.1 second-feet Sept. 22.

1938-48: Maximum discharge, 25,500 second-feet Dec. 28, 1942; maximum gage height, 44.23 feet Dec. 29, 1942; minimum daily discharge, 0.7 second-foot Sept. 22, 1940, Oct. 27-29, 1944.

Remarks.- Records good except those for periods of no gage-height records, which are fair. An average of 53 second-feet is diverted above station by Birmingham Water Works Co. and is not included in records. Approximately 5 second-feet from this diversion is returned to river below station. Flow partly regulated by Purdy Lake (capacity, 17,400 acre-feet) on Little Cahaba River.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	11	17	606	1,180	204	550	71	39	14	68	14
2	14	38	16	670	700	1,650	535	70	28	19	80	7.0
3	12	51	14	433	535	2,150	420	67	20	12	150	3.1
4	15	25	12	322	447	1,480	353	67	18	7.5	351	3.1
5	15	13	28	246	655	1,030	380	58	13	5.8	332	5.4
6	35	7.7	32	197	595	1,810	1,510	77	10	5.4	211	20
7	50	6.7	12	164	1,540	2,860	1,420	95	9.0	50	95	19
8	38	6.2	17	141	k4,610	1,780	1,090	82	10	29	52	10
9	32	5.0	64	123	5,430	1,150	730	59	11	17	33	3.1
10	26	8.7	868	110	k4,190	880	700	58	9.0	24	18	2.2
11	25	74	1,300	100	2,350	685	1,090	48	5.8	63	11	2.0
12	21	118	535	95	2,380	535	850	38	3.7	50	8.6	1.8
13	15	72	266	667	2,410	420	910	34	2.8	31	5.8	1.8
14	14	40	229	565	k4,490	366	3,760	29	2.6	24	15	2.0
15	8.7	54	626	420	a3,300	324	2,380	33	5.8	69	9.5	2.2
16	5.0	144	1,330	319	a1,800	298	1,270	27	32	70	17	2.2
17	3.9	75	610	254	a1,200	288	860	20	32	63	186	1.8
18	3.9	75	420	211	820	254	610	18	24	43	147	1.6
19	3.6	184	296	168	a580	225	505	14	12	31	69	1.4
20	3.6	113	232	152	a490	204	406	10	6.6	13	36	1.4
21	13	93	189	158	a410	184	340	8.0	4.3	8.0	20	1.3
22	16	66	158	166	a410	195	291	7.0	3.7	5.0	13	1.1
23	11	66	139	151	a460	1,180	232	4.3	2.8	3.7	8.5	1.3
24	11	61	122	145	a380	1,060	209	3.4	2.4	3.4	5.4	3.5
25	7.7	47	116	127	a330	625	186	2.8	2.6	17	4.3	10
26	6.7	42	110	120	301	520	168	7.5	2.8	18	3.7	10
27	6.2	38	95	193	a280	3,520	152	10	3.1	19	3.7	9.0
28	5.0	31	90	670	a250	2,090	141	13	11	27	3.4	33
29	3.9	29	82	670	a200	1,120	122	34	17	35	3.4	38
30	3.6	22	73	1,270	-	820	77	45	12	39	3.7	183
31	4.2	-	82	2,090	-	595	-	50	-	46	8.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	445.0	50	3.6	14.3		
November	1,614.3	184	5.0	53.8		
December	8,178	1,330	12	264		
Calendar year 1947	133,080.3	9,230	3.6	365		
January	11,723	2,090	95	378		
February	42,723	5,430	200	1,473		
March	30,502	3,520	184	984		
April	22,265	3,760	77	742		
May	1,160.0	95	2.8	37.4		
June	356.0	39	2.4	11.9		
July	861.8	70	3.4	27.8		
August	1,970.5	351	3.4	63.6		
September	395.3	183	1.1	13.2		
Water year 1947-48	122,193.9	5,430	1.1	334		

Peak discharge (base, 4,500 sec.-ft.).- Feb. 9 (4 p.m.) 5,660 sec.-ft.; Feb. 14 (3 p.m.) 5,080 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for station at Centerville.

k Computed by using rate of change of stage as a factor.

Cahaba River at Centerville, Ala.

Location.- Water-stage recorder, lat. 32°56', long. 87°08', in E½ sec. 26, T. 23 N., R. 9 E., at bridge on State Highway 6, a quarter of a mile west of Centerville, half a mile upstream from Gulf, Mobile & Ohio Railroad bridge, and 2½ miles upstream from Sandy Creek. Datum of gage is 180.74 feet above mean sea level, datum of 1929, supplementary adjustment of 1944.

Drainage area.- 1,030 square miles.

Records available.- August 1901 to February 1908, May 1929 to March 1932, May 1935 to September 1948. Gage-height records collected at same site since January 1917 are contained in reports of U. S. Weather Bureau.

Average discharge.- 21 years (1901-7, 1929-31, 1935-48), 1,636 second-feet.

Extremes.- Maximum discharge during year, 24,800 second-feet Feb. 9 (gage height, 26.0 feet); minimum, 206 second-feet Sept. 27.

1901-8, 1929-32, 1935-48: Maximum discharge, 82,800 second-feet Apr. 8, 1938 (gage height, 36.63 feet); minimum, 90 second-feet Oct. 24-29, 1904 (gage height, -0.35 foot, present datum).

Remarks.- Records good. Discharge from 1,200 to 33,600 second-feet computed by using rate of change of stage as a factor. Some diversion above station (see "Remarks" for station near Acton).

Revisions (water years).- W 682: 1901-8. W 872: Drainage area.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	242	263	454	1,970	5,280	1,330	3,410	852	572	362	520	259
2	242	351	438	3,170	3,410	6,650	2,800	813	520	337	590	259
3	240	306	407	2,220	2,520	11,000	2,370	794	503	334	737	259
4	242	296	407	1,700	2,170	9,020	2,030	813	486	329	890	304
5	242	332	407	1,420	2,420	5,350	1,890	890	454	314	1,380	360
6	244	311	407	1,240	2,520	10,400	2,860	1,010	438	314	950	348
7	254	360	407	1,110	2,620	12,900	3,590	1,030	438	311	737	306
8	265	520	466	1,030	14,700	8,320	3,070	852	422	354	572	298
9	301	354	661	970	23,300	5,220	2,640	775	422	554	486	296
10	298	311	2,130	930	18,200	3,890	2,270	718	392	503	438	286
11	282	2,270	3,750	871	10,900	3,120	5,660	681	392	486	422	277
12	289	1,870	2,570	832	9,800	2,570	4,310	737	377	454	407	265
13	270	794	1,750	1,420	9,400	2,170	3,580	737	368	813	377	257
14	263	626	1,510	2,570	15,600	1,930	11,800	662	357	990	377	281
15	254	718	3,040	1,930	12,000	1,790	9,870	626	374	832	374	261
16	250	813	5,900	1,810	6,670	1,840	5,510	590	520	700	454	250
17	252	700	3,580	1,380	4,360	2,620	3,520	590	537	1,510	662	240
18	248	832	2,270	1,240	3,450	1,840	2,690	572	470	775	644	235
19	240	1,510	1,790	1,110	2,830	1,610	2,220	537	470	626	808	229
20	233	1,070	1,470	1,030	2,470	1,470	1,890	520	554	537	503	223
21	231	813	1,290	1,030	2,220	1,380	1,650	503	486	470	422	223
22	223	681	1,160	1,110	2,620	1,650	1,510	503	407	422	374	220
23	220	644	1,070	1,030	2,320	10,400	1,380	486	377	392	345	216
24	223	718	990	1,030	2,030	6,340	1,290	470	362	392	332	216
25	250	852	950	970	1,790	3,570	1,200	470	348	392	316	214
26	237	718	910	930	1,700	2,670	1,110	454	343	362	308	214
27	250	608	871	1,160	1,610	8.060	1,070	454	360	345	294	227
28	282	554	813	2,320	1,560	8,740	1,010	700	329	421	284	301
29	265	520	775	2,620	1,420	4,800	950	1,240	329	700	277	314
30	244	470	756	4,250	-	3,340	890	737	357	454	270	308
31	237	-	775	7,330	-	3,600	-	626	-	438	270	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	7,813	301	220	252	-	-
November	21,185	2,270	263	706	-	-
December	44,214	5,900	407	1,426	-	-
Calendar year 1947	649,437	39,600	220	1,779	1.73	23.45
January	53,533	7,330	832	1,727	-	-
February	171,890	23,300	1,420	5,927	-	-
March	149,590	12,900	1,330	4,825	-	-
April	90,040	11,800	890	3,001	-	-
May	21,442	1,240	454	692	-	-
June	12,764	572	329	425	-	-
July	16,223	1,510	311	523	-	-
August	15,620	1,380	270	504	-	-
September	7,926	360	214	264	-	-
Water year 1947-48	612,240	23,300	214	1,673	1.62	22.11

Peak discharge (base, 20,000 sec.-ft.).- Feb. 9 (6 p.m.) 24,800 sec.-ft.

Cahaba River at Sprott, Ala.

Location.- Water-stage recorder, lat. 32°40', long. 87°14', in NE¼ sec. 35, T. 20 N., R. 8 E., at bridge on State Highway 43, a half a mile upstream from Goose Creek, 1 mile west of Sprott, and 5½ miles northeast of Marion. Datum of gage is 129.51 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 1,380 square miles.

Records available.- October 1938 to September 1944 (fragmentary), October 1944 to September 1948.

Extremes.- Maximum discharge during year, 23,300 second-feet Feb. 11 (gage height, 19.3 feet); minimum, 310 second-feet Oct. 4, 5.

1938-48: Maximum discharge, 85,200 second-feet Aug. 16, 1939 (gage height, 27.5 feet); minimum observed since Oct. 1, 1944, 265 second-feet Sept. 29, 1945 (gage height, 4.42 feet).

Flood of Apr. 9, 1938, reached a stage of 28.55 feet, from floodmark.

Remarks.- Records good except those for periods of no gage-height record, which are fair. For diversion above station see "Remarks" for station near Acton.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	315	400	602	1,580	7,940	1,860	6,310	1,200	880	520	610	358
2	315	450	570	3,880	5,950	4,120	5,090	1,100	760	520	755	352
3	315	470	562	3,880	4,120	9,780	4,120	1,100	700	456	990	352
4	310	450	548	2,650	3,250	13,100	3,370	1,100	660	448	1,220	440
5	310	430	532	2,020	3,250	12,600	3,010	1,200	630	440	1,550	660
6	320	460	562	1,750	3,760	11,000	3,250	1,500	620	426	1,730	670
7	330	600	562	1,530	3,880	12,400	4,480	1,600	600	440	1,170	538
8	352	740	602	1,380	7,400	14,800	4,480	1,400	570	456	890	456
9	374	700	607	1,270	12,800	12,200	4,000	1,200	560	565	710	426
10	380	590	1,750	1,190	20,900	7,860	3,370	1,100	540	845	620	419
11	385	3,500	4,480	1,100	22,400	5,520	4,480	940	520	710	574	419
12	380	4,000	4,900	1,040	17,000	4,360	6,500	960	520	670	556	405
13	380	2,500	3,370	1,240	13,500	3,630	5,180	960	500	680	520	384
14	360	1,400	2,710	2,770	12,900	3,010	7,200	940	480	1,550	480	405
15	360	1,500	3,010	2,830	14,800	2,770	10,800	860	500	1,550	464	426
16	350	1,300	6,310	2,140	15,000	2,710	12,100	840	950	1,220	496	412
17	350	1,090	6,500	1,860	10,400	4,120	7,920	820	1,000	1,550	710	384
18	350	1,280	4,480	1,640	6,040	3,880	4,700	800	820	1,550	940	364
19	350	2,020	3,010	1,420	4,800	2,830	3,630	760	810	1,120	800	358
20	340	2,020	2,300	1,320	4,000	2,410	2,890	740	900	890	710	352
21	340	1,480	1,970	1,310	3,500	2,140	2,710	720	750	710	592	340
22	330	1,100	1,700	1,390	3,880	2,240	2,500	700	650	601	529	340
23	330	969	1,530	1,390	3,880	8,390	2,200	660	601	529	480	334
24	320	1,040	1,400	1,340	3,250	11,700	2,000	640	547	512	433	334
25	330	1,200	1,300	1,280	2,770	9,920	1,800	620	520	538	426	328
26	330	1,180	1,230	1,200	2,470	5,260	1,700	620	504	529	412	322
27	360	936	1,160	1,390	2,300	5,180	1,600	620	496	480	405	340
28	430	786	1,070	2,300	2,190	8,860	1,500	880	565	547	384	448
29	410	689	991	3,500	2,020	9,900	1,400	1,900	496	845	370	556
30	370	644	947	4,000	-	6,310	1,300	1,900	464	845	370	512
31	370	-	969	6,600	-	5,950	-	1,100	-	610	358	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	10,846	430	310	350	0.254	0.29
November	35,924	4,000	400	1,197	.867	.97
December	62,434	6,500	532	2,014	1.46	1.68
Calendar year 1947	904,468	42,700	310	2,478	1.80	24.37
January	64,190	6,600	1,040	2,071	1.50	1.73
February	220,350	22,400	2,020	7,598	5.51	5.94
March	210,810	14,800	1,860	6,800	4.93	5.68
April	125,590	12,100	1,300	4,186	3.03	3.38
May	31,480	1,900	620	1,015	.736	.85
June	19,113	1,000	464	637	.462	.52
July	23,352	1,550	426	753	.546	.63
August	21,254	1,730	358	686	.497	.57
September	12,434	670	322	414	.300	.34
Water year 1947-48	837,777	22,400	310	2,289	1.66	22.58

Peak discharge (base, 15,000 sec.-ft.).- Feb. 11 (2 a.m.) 23,300 sec.-ft.; Mar. 8 (12 m.) 15,200 sec.-ft.

Note.- No gage-height record Oct. 12 to Nov. 16, Apr. 22 to June 22; discharge computed on basis of recorded range in stage and records for stations at Centerville and near Marion Junction.

Cahaba River near Marion Junction, Ala.

Location.- Water-stage recorder, lat. 32°27', long. 87°11', on line between secs. 16 and 21, T. 17 N., R. 9 E., at bridge on U. S. Highway 80, half a mile upstream from Southern Railway bridge, 3 miles downstream from Oakmulgee Creek, 3½ miles east of Marion Junction, and 20 miles upstream from mouth. Datum of gage is 86.72 feet above mean sea level, datum of 1929 (levels by Corps of Engineers). Auxiliary wire-weight gage at Beloit, 12 miles downstream, at datum 15.2 feet lower.

Drainage area.- 1,780 square miles.

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge during year, 20,700 second-feet Feb. 13 (gage height, 32.0 feet); minimum, 374 second-feet Sept. 27 (gage height, 1.69 feet).
1939-48: Maximum discharge, 83,400 second-feet Aug. 16, 1939 (gage height, 42.95 feet); minimum daily, 345 second-feet Sept. 5, 1945.
A discharge of 323 second-feet was measured Oct. 7, 1935 (gage height, 1.01 feet).

Remarks.- Records good. Discharge for periods of backwater computed by using fall as determined by twice-daily readings of auxiliary gage as a factor. For diversion above station see "Remarks" for station near Acton.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	493	621	1,160	1,890	7,530	3,110	8,230	1,730	1,260	705	833	457
2	489	768	1,110	3,350	8,170	5,320	8,290	1,630	1,060	726	945	449
3	489	812	1,060	4,680	6,600	8,650	6,950	1,520	968	684	1,090	433
4	489	812	1,040	3,750	4,510	11,100	5,500	1,570	922	684	1,310	538
5	489	790	1,040	2,880	4,450	13,400	4,560	1,730	877	621	1,570	768
6	501	945	1,040	2,380	4,560	15,500	4,270	1,890	833	600	2,000	833
7	522	1,020	1,040	2,050	4,860	15,300	5,030	2,160	812	600	1,520	790
8	558	1,310	1,090	1,890	7,470	14,700	5,730	2,220	790	621	1,210	663
9	579	1,240	1,310	1,730	9,880	15,500	5,320	1,730	768	684	968	579
10	600	1,040	2,770	1,680	12,800	14,700	4,920	1,520	747	945	877	558
11	600	3,550	4,040	1,630	16,800	11,200	4,740	1,410	726	1,060	730	538
12	579	5,210	5,550	1,520	20,200	7,680	6,600	1,310	705	1,040	747	534
13	579	4,270	5,320	1,790	20,100	5,610	7,350	1,360	684	945	726	518
14	538	2,660	4,100	2,490	18,300	4,680	7,940	1,360	684	1,240	684	513
15	530	3,060	4,920	3,690	16,200	4,160	8,830	1,260	726	1,950	642	530
16	513	2,440	6,250	3,060	15,400	3,870	10,500	1,160	1,410	1,730	642	534
17	509	2,220	7,580	2,550	15,300	5,500	11,500	1,160	2,110	1,310	726	501
18	518	2,550	7,290	2,220	13,300	5,790	9,750	1,140	1,570	2,160	945	477
19	505	2,940	4,860	2,000	9,070	4,680	5,730	1,060	1,630	1,470	926	457
20	501	3,290	2,580	1,840	5,930	3,980	4,270	1,020	1,790	1,240	922	445
21	489	2,710	2,880	1,840	5,160	3,580	3,640	968	1,470	1,020	730	425
22	477	2,110	2,550	1,890	5,600	3,460	3,230	945	1,210	877	705	417
23	473	1,790	2,270	1,950	5,500	8,060	2,940	922	945	790	642	409
24	465	1,730	2,110	2,000	5,150	11,300	2,710	877	833	705	600	401
25	465	1,840	1,950	1,890	4,330	13,500	2,600	855	790	705	579	386
26	481	1,890	1,840	1,840	3,870	12,000	2,380	833	747	705	558	378
27	538	1,680	1,730	1,950	3,640	8,710	2,270	833	855	684	530	398
28	768	1,470	1,630	2,770	3,400	7,700	2,160	1,020	768	705	505	497
29	747	1,310	1,570	3,930	3,230	9,260	1,950	2,160	747	768	489	642
30	642	1,240	1,520	5,030	-	10,200	1,840	2,380	705	1,090	481	684
31	600	-	1,470	6,130	-	8,830	-	1,680	-	877	469	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	16,726	768	465	540	0.303	0.35
November	59,318	5,210	621	1,977	1.11	1.24
December	87,670	7,580	1,040	2,828	1.59	1.83
Calendar year 1947	1,229,361	42,800	465	3,368	1.89	25.68
January	80,290	6,130	1,520	2,590	1.46	1.68
February	261,310	20,200	3,230	9,011	5.06	5.46
March	271,030	15,500	3,110	8,743	4.91	5.66
April	161,730	11,500	1,840	5,391	3.03	3.38
May	43,413	2,380	833	1,400	.787	.91
June	30,142	2,110	684	1,005	.565	.63
July	29,899	2,160	600	964	.542	.62
August	26,491	2,000	469	855	.480	.55
September	15,752	833	378	525	.295	.33
Water year 1947-48	1,083,771	20,200	378	2,961	1.66	22.64

Peak discharge (base, 14,000 sec.-ft.).- Feb. 13 (3 a.m.) 20,700 sec.-ft.; Mar. 6 (4 p.m.) 15,800 sec.-ft.

Boguechitto Creek near Browns, Ala.

Location.- Wire-weight gage, lat. 32°26', long. 87°20', in NW¼ sec. 24, T. 17 N., R. 7 E., at bridge on U. S. Highway 80, a third of a mile upstream from Southern Railroad bridge, 2 miles east of Browns, and 2½ miles downstream from Washington Creek. Datum of gage is 129.39 feet above mean sea level, datum of 1929, supplementary adjustment of 1943 (levels by Corps of Engineers).

Drainage area.- 93 square miles.

Records available.- February 1944 to September 1948.

Extremes.- Maximum discharge during year, 3,290 second-feet Mar. 23 (gage height, 14.8 feet, from graph based on gage readings); minimum daily, 0.5 second-foot Oct. 4.

1944-48: Maximum discharge, 9,440 second-feet Mar. 26, 1945 (gage height, 17.16 feet, from graph based on gage readings); minimum observed, 0.1 second-foot July 24, 1944.

Flood of Dec. 28, 1942, reached a stage of 20.7 feet, from floodmarks.

Remarks.- Records fair. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 10)

Oct. 1 to Nov. 11

0.5	0.6	1.0	8.0	2.0	70
.6	1.2	1.1	11	4.0	240
.7	2.3	1.3	19	5.5	387
.8	3.6	1.5	30		
.9	5.3	1.7	45		

Nov. 12 to Sept. 30

0.5	1.2	1.3	22	10.0	938
.6	2.4	1.6	39	11.0	1,100
.7	3.8	2.0	66	12.0	1,310
.8	5.5	3.0	145	13.0	1,650
.9	7.6	5.0	325	13.5	1,900
1.0	10	7.0	545	14.0	2,270

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	5.1	48	280	319	310	365	32	32	13	13	4.5
2	.6	25	48	375	145	1,210	335	31	23	11	64	4.1
3	.6	22	45	145	121	2,270	181	28	20	8.8	105	3.5
4	.5	16	42	89	154	1,960	129	29	16	7.2	85	4.6
5	.8	19	43	73	430	1,030	113	56	14	6.3	59	38
6	.8	61	45	66	365	1,570	113	48	13	5.5	89	50
7	.8	55	45	62	309	1,840	105	66	12	4.8	35	23
8	1.4	83	48	59	982	966	93	44	10	5.7	22	15
9	5.8	36	264	56	1,490	335	105	31	9.9	90	21	11
10	5.1	32	772	56	1,200	244	105	28	9.3	113	27	8.8
11	3.6	378	642	52	617	199	163	26	7.9	66	24	7.4
12	3.4	655	253	56	521	163	129	24	6.3	181	22	7.9
13	2.7	340	397	199	512	137	444	28	6.3	355	17	7.4
14	2.4	177	497	253	826	121	896	48	5.9	208	16	6.8
15	2.8	593	854	113	504	113	864	31	5.9	208	13	6.6
16	d2.3	509	1,030	73	217	113	220	23	20	190	12	6.6
17	d2.2	145	649	70	163	362	113	21	235	85	16	6.3
18	d2.1	313	181	62	145	521	93	34	253	62	18	6.1
19	d2.1	605	121	59	129	199	81	32	85	59	14	4.8
20	2.0	254	105	59	217	145	73	20	62	105	10	4.0
21	2.0	105	93	113	509	121	62	16	56	48	9.3	3.8
22	d1.8	89	85	145	694	129	56	15	34	34	8.2	3.5
23	d1.6	81	77	137	420	1,770	56	14	24	23	6.6	3.5
24	1.5	93	73	163	163	2,180	52	12	20	20	5.7	a3.0
25	1.3	163	70	199	129	747	56	11	17	19	5.5	2.4
26	1.1	85	70	199	113	253	59	10	18	17	5.2	2.2
27	d2.0	66	62	208	113	217	52	9.3	27	14	4.8	2.0
28	4.6	62	59	485	113	235	48	16	45	21	4.5	6.2
29	22	59	59	316	97	163	42	217	20	26	4.5	34
30	7.7	52	58	602	-	145	36	145	15	18	4.1	a20
31	4.9	-	59	798	-	253	-	52	-	14	4.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	92.9	22	0.5	3.00	0.032	0.04
November	5,178.1	655	5.1	173	1.86	2.07
December	6,892	1,030	42	222	2.39	2.76
Calendar year 1947	89,477.6	5,900	.5	245	2.63	35.79
January	5,622	798	52	181	1.95	2.25
February	11,717	1,490	97	404	4.34	4.69
March	20,021	2,270	113	646	6.95	8.01
April	5,239	896	36	175	1.88	2.10
May	1,197.3	217	9.3	38.6	.415	.48
June	1,122.5	253	5.9	37.4	.402	.45
July	2,038.3	355	4.8	65.8	.708	.82
August	744.4	105	4.0	24.0	.258	.30
September	308.0	50	2.0	10.2	.110	.12
Water year 1947-48	60,171.5	2,270	.5	164	1.76	24.09

Peak discharge (base, 2,500 sec.-ft.).- Mar. 23 (10 p.m.) 3,290 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for station near Orrville.

d Doubtful gage-height record; discharge computed as explained in footnote a.

Boguechitto Creek near Orrville, Ala.

Location.- Wire-weight gage, lat. 32°18', long. 87°17', in NW¼ sec. 4, T. 15 N., R. 8 E., at bridge on State Highway 22, 300 feet downstream from Louisville & Nashville Railroad bridge, three-quarters of a mile downstream from Tatum Creek, and 2 miles west of Orrville. Datum of gage is 91.09 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 276 square miles.

Records available.- February 1944 to September 1948.

Extremes.- Maximum discharge during year, 9,160 second-feet Mar. 4 (gage height, 20.7 feet, from graph based on gage readings); minimum observed, 1.2 second-feet Oct. 4, 11.
1944-48: Maximum discharge observed, 32,400 second-feet Apr. 27, 1944 (gage height, 26.6 feet); minimum observed, 0.3 second-foot Sept. 5, 1945 (gage height, 2.49 feet).
Flood of Dec. 29, 1942, reached a stage of 29.4 feet, from floodmarks.

Remarks.- Records fair. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 27 to Sept. 30)

2.7	1.9	3.2	17	3.8	101	13.0	3,120
2.8	3.2	3.3	25	4.0	140	16.0	4,600
2.9	5.0	3.4	35	5.0	360	18.0	5,910
3.0	8.0	3.5	48	6.0	621	20.0	8,210
3.1	12	3.6	64	10.0	1,960		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	19	56	651	1,020	156	881	40	56	16	44	d4.3
2	2.4	13	d55	980	332	3,310	782	38	35	20	80	d4.2
3	1.9	16	d54	586	243	7,330	409	38	27	23	107	4.4
4	1.3	29	d54	170	192	8,210	203	43	17	11	130	7.7
5	2.1	19	54	140	538	3,760	160	64	16	7.4	110	8.4
6	2.9	36	51	d130	980	6,490	136	64	19	5.6	120	35
7	3.2	132	56	d120	728	7,820	126	86	16	5.0	82	36
8	4.6	69	86	d110	2,870	3,360	116	62	14	6.2	31	21
9	4.2	93	457	a100	4,400	706	438	43	14	68	22	15
10	3.0	45	3,160	a94	4,350	458	458	35	12	214	22	14
11	1.4	728	2,790	a91	2,390	384	214	33	11	85	27	15
12	7.4	1,320	1,610	a90	1,700	258	192	30	12	143	20	8.8
13	5.6	568	753	a130	832	203	709	30	8.4	337	19	9.6
14	5.6	894	2,320	592	2,790	181	3,900	38	6.8	337	20	12
15	4.8	2,350	2,030	300	1,370	160	2,710	43	d6.5	314	17	9.6
16	4.6	1,580	3,900	128	458	150	604	33	27	291	16	8.0
17	4.2	510	2,670	93	303	408	214	27	248	225	15	8.8
18	4.6	729	360	92	242	749	124	23	314	66	20	10
19	4.2	1,520	236	84	203	588	105	30	170	69	22	7.4
20	3.7	879	203	88	306	225	86	31	78	88	14	6.8
21	2.9	214	150	128	425	181	78	19	78	116	12	4.2
22	3.0	160	140	320	2,100	252	73	17	64	54	10	d4.0
23	3.9	136	126	333	1,670	2,300	68	19	45	36	9.2	d4.0
24	5.0	138	116	224	412	5,020	58	16	26	28	7.7	3.9
25	4.2	132	105	592	243	2,330	61	16	17	24	7.1	d3.7
26	4.4	160	93	564	181	510	75	12	16	22	6.2	3.5
27	6.5	112	92	510	170	621	97	12	54	23	d5.4	3.7
28	14	90	82	1,340	160	433	82	14	138	35	d5.1	4.2
29	14	68	78	1,520	150	236	48	27	45	32	d4.8	d4.6
30	14	61	73	1,760	-	181	d43	120	25	30	d4.6	5.3
31	12	-	101	3,400	-	771	-	101	-	23	d4.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	158.5	14	1.3	5.11	0.019	0.02
November	12,820	2,350	13	427	1.55	1.73
December	22,111	3,900	51	713	2.58	2.98
Calendar year 1947	235,245.3	19,300	1.3	645	2.34	31.69
January	15,460	3,400	84	499	1.81	2.08
February	31,758	4,400	150	1,095	3.97	4.28
March	57,741	8,210	150	1,863	6.75	7.78
April	13,250	3,900	43	442	1.60	1.79
May	1,204	120	12	38.8	.141	.16
June	1,615.7	314	6.5	53.9	.195	.22
July	2,754.2	337	5.0	88.8	.322	.37
August	1,014.6	130	4.5	32.7	.118	.14
September	287.1	36	3.5	9.57	.035	.04
Water year 1947-48	160,174.1	8,210	1.3	438	1.59	21.59

Peak discharge (base, 9,000 sec.-ft.).- Mar. 4 (4 a.m.) 9,160 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for station near Browns.

d Doubtful gage-height record; discharge computed as explained in footnote a.

Flat Creek at Fountain, Ala.

Location.- Water-stage recorder, lat. 31°37', long. 87°25', in SE¼ sec. 36, T. 8 N., R. 6 E., at bridge on State Highway 11, three-quarters of a mile downstream from St. Louis-San Francisco Railroad bridge, 1 mile northwest of Fountain, 2 miles upstream from Bradley Mill Creek, 8 miles upstream from mouth, and 8 miles northwest of Monroeville.

Drainage area.- 253 square miles.

Records available.- February 1944 to September 1948.

Extremes.- Maximum discharge during year, 8,900 second-feet Dec. 11 (gage height, 18.7 feet); minimum, 7.1 second-feet Sept. 28.

1944-48: Maximum discharge, 17,300 second-feet Apr. 27, 1944 (gage height, 21.19 feet); minimum, 4.6 second-feet Oct. 22, 1945.

Remarks.- Records good above 50 second-feet and fair below.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	18	91	180	1,820	280	324	64	28	43	34	10
2	14	45	83	183	1,340	608	722	61	26	26	98	8.8
3	13	25	79	169	641	2,740	722	57	24	23	61	8.4
4	13	24	76	157	479	4,560	453	58	23	19	36	19
5	12	23	73	140	414	5,340	324	63	22	17	28	24
6	13	23	72	130	362	5,500	336	78	20	17	23	19
7	14	73	70	124	312	6,500	312	77	20	19	19	22
8	16	69	85	120	290	5,310	260	70	19	21	18	16
9	15	58	299	116	966	3,200	260	61	22	26	18	12
10	14	47	3,900	117	1,760	2,150	270	56	22	49	19	11
11	13	1,420	6,560	114	1,730	1,610	214	54	19	53	18	13
12	12	1,370	6,100	114	1,490	1,080	174	54	22	42	17	12
13	12	858	3,600	159	1,110	776	166	53	22	31	18	22
14	11	260	2,720	182	1,280	628	440	45	19	28	17	28
15	11	516	2,120	180	1,280	546	722	41	22	33	16	28
16	10	440	1,880	160	886	506	427	36	32	87	15	20
17	11	336	1,490	145	614	914	237	36	83	166	14	15
18	11	191	914	140	506	1,230	169	35	225	134	14	12
19	11	164	587	142	414	1,200	144	30	145	85	13	11
20	25	135	479	142	349	1,030	123	28	82	55	12	9.3
21	28	129	401	210	414	722	112	26	79	40	11	8.8
22	23	128	336	312	1,370	560	100	25	64	32	11	8.8
23	17	123	290	312	1,610	970	87	24	47	35	11	8.8
24	17	280	260	260	1,280	1,260	83	23	40	28	13	8.4
25	16	388	241	260	668	942	79	24	34	24	9.7	8.4
26	16	312	227	250	506	574	94	34	28	22	9.7	7.9
27	16	201	210	241	427	492	102	27	24	21	11	8.4
28	16	140	194	592	375	414	94	39	22	19	10	7.9
29	14	114	182	1,050	324	349	85	53	27	17	8.4	7.9
30	13	102	176	1,400	-	290	74	36	28	19	8.4	7.9
31	13	-	171	1,940	-	270	-	31	-	35	8.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	455	28	10	14.7	0.058	0.07
November	8,012	1,420	18	267	1.06	1.18
December	33,966	6,560	70	1,096	4.33	4.99
Calendar year 1947	192,253	7,200	10	527	2.08	28.27
January	9,741	1,940	114	314	1.24	1.43
February	25,017	1,820	290	863	3.41	3.68
March	52,551	6,500	270	1,695	6.70	7.72
April	7,709	722	74	257	1.02	1.13
May	1,399	78	23	45.1	.178	.21
June	1,290	225	19	43.0	.170	.19
July	1,266	166	17	40.8	.161	.19
August	619.6	98	8.4	20.0	.079	.09
September	403.7	28	7.9	13.5	.053	.06
Water year 1947-48	142,429.3	6,560	7.9	389	1.54	20.94

Peak discharge (base, 3,000 sec.-ft.).- Dec. 11 (8 p.m.) 8,900 sec.-ft.; Mar. 7 (8 p.m.) 7,200 sec.-ft.

East Fork Tombigbee River near Fulton, Miss.

Location.- Water-stage recorder, lat. 34°15'55", long. 88°26'42", in SE¼ sec. 27, T. 9 S., R. 8 E. Chickasaw meridian, at bridge on U. S. Highway 78, 1,000 feet downstream from Twentymile-Fulton Canal, 2 miles west of Fulton, 6¼ miles upstream from Mantachie Creek Canal, and 13½ miles downstream from Twentymile Creek Canal. Datum of gage is 242.70 feet above mean sea level, datum of 1929.

Drainage area.- 605 square miles.

Records available.- August 1928 to September 1948. Gage-height records collected at site 800 feet upstream 1909-12 are contained in reports of U. S. Weather Bureau.

Average discharge.- 20 years, 862 second-feet.

Extremes.- Maximum discharge during year, 47,700 second-feet Feb. 14 (gage height, 22.24 feet); minimum, 53 second-feet Sept. 3, 4 (gage height, 1.82 feet).

1928-48: Maximum discharge, that of Feb. 14, 1948; minimum, 12 second-feet Aug. 31 to Sept. 2, 1943; minimum gage height, 0.87 foot Aug. 12, 1930.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 2						Mar. 3 to Sept. 30			
1.9	55	13.1	1,230	15.7	3,300	15.5	2,760	17.5	12,400
2.2	67	14.1	1,570	17.5	12,400	15.7	3,350	19.0	21,800
2.7	98	14.9	2,040	19.0	21,800	16.1	5,300	21.7	43,200
3.8	189	15.3	2,430	21.7	43,200	17.0	9,800		
11.8	1,000	15.5	2,760						

Note.- Same as preceding table below 15.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	377	307	727	943	2,580	4,660	327	232	137	104	a55
2	82	397	297	1,230	910	2,310	7,050	377	184	109	93	54
3	82	327	287	1,490	954	2,500	4,400	697	162	94	83	53
4	81	242	287	1,570	1,080	4,300	2,500	727	149	86	79	56
5	81	477	287	1,450	1,320	4,050	1,900	877	145	80	78	377
6	80	757	287	1,150	1,620	3,480	1,490	847	153	78	78	647
7	81	517	277	867	2,040	4,150	1,190	1,080	149	75	72	517
8	84	647	327	657	3,270	6,100	1,000	1,150	141	70	72	367
9	92	417	577	527	5,450	4,600	888	991	129	67	101	242
10	98	307	507	477	6,050	2,910	807	777	133	84	97	207
11	91	457	557	427	4,420	2,210	978	567	129	133	90	184
12	86	647	477	417	5,070	1,780	978	577	117	93	82	145
13	84	437	407	865	22,000	1,450	1,160	557	109	96	78	121
14	80	377	367	1,030	43,300	1,190	1,720	447	129	149	76	109
15	78	989	688	888	18,700	1,020	4,580	377	212	171	77	98
18	78	1,170	1,350	747	7,660	2,100	3,900	327	480	166	113	91
17	77	1,230	1,710	697	4,770	11,500	2,430	297	1,050	397	133	83
18	76	1,230	3,780	647	3,180	9,550	1,840	277	965	447	129	78
19	187	1,150	3,370	547	2,370	5,450	1,380	247	577	367	90	74
20	397	954	2,310	547	2,040	3,800	1,080	227	357	317	76	72
21	202	727	1,620	687	1,970	2,580	888	217	267	166	68	70
22	129	547	1,110	817	2,120	2,120	747	207	202	121	62	68
23	109	607	857	707	2,260	2,120	627	193	166	109	61	66
24	99	837	687	547	2,160	2,260	547	184	145	263	59	66
25	98	707	537	487	1,900	2,310	487	180	133	180	58	62
26	98	547	447	477	1,840	2,040	447	175	121	190	58	62
27	113	457	427	597	1,970	1,670	427	171	141	567	62	69
28	141	407	407	837	2,370	1,380	407	189	121	367	a80	137
29	137	367	387	747	3,300	1,150	367	317	137	242	a70	267
30	117	337	367	697	-	978	337	427	198	171	a60	277
31	121	-	357	867	-	1,240	-	337	-	125	a55	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,439	397	76	111	0.183	0.21
November	18,646	1,230	242	622	1.03	1.15
December	25,659	3,780	277	828	1.37	1.58
Calendar year 1947	344,453	11,800	57	944	1.56	21.19
January	24,424	1,570	417	788	1.30	1.50
February	157,037	43,300	910	5,415	8.95	9.65
March	96,878	11,500	978	3,125	5.17	5.96
April	51,212	7,050	337	1,707	2.82	3.15
May	14,347	1,150	171	463	.765	.88
June	7,333	1,050	109	244	.403	.45
July	5,717	567	67	184	.304	.35
August	2,494	133	55	80.5	.133	.15
September	4,774	647	53	159	.263	.29
Water year 1947-48	411,960	43,300	53	1,126	1.86	25.32

Peak discharge (base, 8,000 sec.-ft.).- Feb. 14 (5 a.m.) 47,700 sec.-ft.; Mar. 17 (6 p.m.) 15,400 sec.-ft.; Apr. 1 (10 p.m.) 8,400 sec.-ft.

a No gage-height record; discharge computed on basis of records for other stations in basin.

East Fork Tombigbee River at Bigbee, Miss.

Location.- Wire-weight gage, lat. 34°00'40", long. 88°30'50", in SW¼NE¼ sec. 25, T. 12 S., R. 7 E. Chickasaw meridian, at bridge on State Highway 6, 0.2 mile upstream from St. Louis-San Francisco Railway bridge, 0.5 mile southeast of Bigbee, 2 miles northwest of Amory, 3.7 miles upstream from confluence with West Fork, 8¼ miles downstream from Boguefala Creek, and 15¼ miles downstream from Bull Mountain Creek. Datum of gage is 190.00 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 1,194 square miles (authority, Corps of Engineers).

Records available.- March 1945 to September 1946, October 1947 to September 1948.

Extremes.- Maximum discharge during year, 52,800 second-feet Feb. 15 (gage height, 24.92 feet, from graph based on gage readings); minimum daily observed, 64 second-feet Sept. 4.
1945-46, 1948: Maximum discharge, that of Feb. 15, 1948; minimum daily observed, that of Sept. 4, 1948.

Remarks.- Records fair. Gage read twice daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a150	395	630	a1,200	2,060	3,120	5,190	757	548	205	279	81
2	a150	568	630	a2,100	2,060	4,560	4,560	714	413	205	234	81
3	a150	735	589	2,580	1,920	6,100	5,550	757	343	177	205	81
4	a150	651	589	2,430	2,060	6,480	7,300	1,250	295	154	172	64
5	a150	548	589	2,140	2,580	5,910	5,820	1,250	a300	156	146	295
6	a150	630	568	2,060	2,880	6,580	4,380	1,310	311	a150	146	822
7	149	945	548	1,990	3,280	8,250	3,610	1,370	295	144	146	920
8	a152	822	609	1,920	4,810	7,750	3,120	1,650	249	132	123	895
9	154	920	693	1,610	5,730	6,980	2,880	1,580	249	a120	146	651
10	154	778	920	1,190	5,650	7,300	2,660	1,550	249	112	172	527
11	177	714	945	1,030	6,770	6,380	2,810	1,310	219	112	172	431
12	177	822	945	1,000	11,900	4,830	2,580	1,110	219	134	172	377
13	177	1,060	895	1,460	24,700	3,870	2,730	1,060	191	191	159	449
14	154	1,000	778	1,920	45,800	3,280	5,550	945	191	191	146	327
15	154	1,920	1,350	2,210	48,700	2,730	5,640	672	191	295	191	249
16	154	2,210	4,300	2,060	31,200	3,610	4,650	568	327	279	249	205
17	154	2,280	3,200	1,710	21,200	8,960	5,100	568	1,190	279	264	205
18	141	2,060	2,810	1,490	13,800	14,800	5,370	548	1,430	651	295	172
19	129	1,740	2,510	1,250	9,060	20,200	4,470	507	1,250	651	a280	159
20	a380	1,710	2,430	1,140	6,880	14,300	3,610	487	870	548	a240	a150
21	507	1,610	2,580	1,280	5,550	9,100	3,120	377	609	548	a185	a145
22	377	1,370	2,730	1,430	5,010	6,580	2,660	360	449	327	146	a140
23	279	1,030	2,730	1,520	4,470	6,100	2,140	395	343	249	123	139
24	219	1,160	2,580	1,400	4,120	5,100	1,550	360	295	295	112	a125
25	191	1,400	2,060	1,030	3,950	4,300	1,280	360	264	343	101	112
26	177	1,280	1,400	945	3,780	3,950	1,140	327	234	343	112	101
27	177	972	1,030	a1,200	3,610	3,870	1,000	327	234	295	101	112
28	234	870	920	a1,400	3,440	3,700	945	360	219	845	112	219
29	295	800	870	1,920	a3,250	3,440	845	413	234	693	146	945
30	264	672	822	1,780	-	3,040	778	630	205	468	112	487
31	279	-	800	1,990	-	4,650	-	672	-	a375	91	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,305	507	129	203	0.170	0.20
November	33,672	2,280	395	1,122	.940	1.05
December	45,050	4,300	548	1,453	1.22	1.40
Calendar year	-	-	-	-	-	-
January	50,385	2,580	945	1,625	1.36	1.57
February	290,220	48,700	1,920	10,010	8.38	9.04
March	199,820	20,200	2,730	6,466	5.40	6.22
April	103,038	7,300	778	3,435	2.88	3.21
May	24,544	1,650	327	792	.663	.76
June	12,416	1,430	191	414	.347	.39
July	9,667	845	112	312	.261	.30
August	5,278	295	91	170	.142	.16
September	9,666	945	64	322	.270	.30
Water year 1947-48	790,061	48,700	64	2,159	1.81	24.60

a Doubtful or no gage-height record; discharge computed on basis of records for station near Fulton.

Tombigbee River near Amory, Miss.

Location.- Wire-weight gage, lat. 33°59'10", long. 88°33'05", in NE¼ sec. 3, T. 13 S., R. 7 E. Chickasaw meridian, at bridge on State Highway 41, 0.3 mile downstream from confluence of East and West Forks of Tombigbee River, and 3½ miles west of Amory. Datum of gage is 178.34 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 1,941 square miles (authority, Corps of Engineers).

Records available.- December 1937 to September 1948.

Average discharge.- 10 years (1938-48), 2,735 second-feet.

Extremes.- Maximum discharge observed during year, 89,100 second-feet Feb. 14 (gage height, 32.55 feet); minimum observed, 135 second-feet Aug. 25 (gage height, 1.68 feet).

1938-48: Maximum discharge, that of Feb. 14, 1948; minimum observed, 48 second-feet Sept. 1, 1943 (gage height, 0.77 foot).

Remarks.- Records fair except those for periods of doubtful or no gage-height record, which are poor.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 11 to June 17)

Oct. 1 to Feb. 14

1.7	152	14.5	7,150	28.0	46,700
2.5	373	17.0	9,300	30.0	60,000
3.0	525	20.0	13,500	31.5	74,500
4.0	890	20.8	15,100	32.4	86,300
5.0	1,400	23.0	22,200		
8.0	3,100	25.0	30,700		

Feb. 15 to Sept. 30

1.7	139	7.0	1,800	18.0	9,100
2.2	240	10.0	3,170	20.0	12,900
3.3	526	14.5	5,660	20.8	15,100
5.0	1,050	16.5	7,220		

Note.- Same as preceding table above 20.8 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	152	402	750	4,240	2,800	3,800	12,100	920	611	338	312	155
2	150	814	700	5,140	2,500	4,200	7,630	880	526	299	240	150
3	157	852	700	3,880	2,700	5,000	5,600	820	417	263	219	150
4	162	814	700	3,160	2,900	6,400	6,600	1,160	364	240	197	167
5	170	738	663	2,620	3,500	7,120	5,870	1,120	338	215	187	1,400
6	173	890	663	2,440	5,000	10,200	4,660	1,520	338	205	167	1,330
7	191	1,130	663	2,280	6,300	18,100	3,730	1,760	338	197	153	1,100
8	191	1,230	738	2,170	7,500	16,300	3,070	1,640	338	197	159	850
9	204	1,080	776	1,890	8,600	10,100	2,780	1,560	312	187	197	700
10	191	890	1,080	1,560	10,500	8,780	2,780	1,440	299	197	295	600
11	191	814	1,230	1,340	13,000	7,520	3,020	1,300	287	207	299	450
12	191	1,080	1,180	1,230	19,000	5,600	3,220	1,120	275	218	200	400
13	191	1,180	1,030	2,620	27,000	4,270	4,550	1,260	251	263	207	400
14	178	2,380	930	3,500	86,300	3,370	12,100	1,050	177	338	223	1,230
15	162	5,320	3,520	2,500	82,100	2,870	11,700	880	167	444	251	400
16	165	3,520	9,190	2,300	59,200	5,150	7,030	820	378	417	417	290
17	165	2,620	7,820	2,000	30,000	24,100	5,420	730	920	390	554	240
18	185	2,330	4,480	1,700	21,000	34,700	4,890	640	1,370	390	350	210
19	168	2,170	3,340	1,500	14,500	28,700	4,270	580	1,400	640	320	185
20	168	2,000	2,860	1,400	12,000	21,400	3,370	530	1,020	760	280	175
21	402	1,840	2,800	1,290	10,000	15,100	2,870	500	1,300	611	200	167
22	402	1,620	2,740	2,000	8,500	12,900	2,450	460	611	417	170	160
23	344	1,450	2,860	1,840	7,000	11,100	2,050	420	498	325	159	160
24	259	1,840	2,880	1,620	6,200	8,490	1,640	390	390	287	159	155
25	218	1,730	2,220	1,400	5,500	5,870	1,400	370	338	207	139	150
26	204	1,620	1,840	1,510	5,200	4,720	1,300	350	312	197	159	150
27	210	1,400	1,400	1,800	4,700	4,330	1,190	340	390	471	165	150
28	220	1,030	1,130	2,500	4,400	3,780	1,120	325	390	920	167	240
29	240	890	1,080	2,170	4,100	3,370	1,050	582	338	730	167	364
30	259	852	1,030	2,100	-	2,970	980	750	338	582	177	582
31	287	-	930	2,300	-	7,220	-	700	-	390	167	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,530	402	150	211	0.109	0.13
November	46,526	5,320	402	1,551	.799	.89
December	63,723	9,190	663	2,056	1.08	1.22
Calendar year 1947	1,142,359	34,700	150	3,130	1.61	21.89
January	70,000	5,140	1,230	2,258	1.16	1.34
February	472,000	86,300	2,500	16,280	8.39	9.04
March	307,530	34,700	2,870	9,920	5.11	5.89
April	130,440	12,100	980	4,348	2.24	2.50
May	26,917	1,760	325	868	.447	.52
June	15,031	1,400	167	501	.258	.29
July	11,542	920	187	372	.192	.22
August	7,033	554	139	227	.117	.13
September	12,860	1,400	150	429	.221	.25
Water year 1947-48	1,170,132	86,300	139	3,197	1.65	22.42

Note.- Doubtful or no gage-height record Oct. 16, 27-29, Dec. 1, Jan. 14-19, 27, 28, Jan. 30 to Feb. 13, Feb. 17 to Mar. 4, May 19-27, May 30, 31, July 5, 6, Aug. 10-12, 18-22, Aug. 27 to Sept. 3, Sept. 7-13, 15-20, 22-27; discharge computed on basis of records for nearby stations.

Tombigbee River at Aberdeen, Miss.

Location.- Water-stage recorder, lat. 33°49'14", long. 88°31'07", in N½ sec. 27, T. 14 S., R. 19 W. Huntsville meridian, at bridge on U. S. Highway 45, 1.3 miles downstream from former site at St. Louis-San Francisco Railway bridge, 1.5 miles east of Aberdeen, 2 miles downstream from Mattubby Creek, 6 miles downstream from Halfway Creek, and 13¼ miles upstream from McKinley Creek. Datum of gage is 154.71 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark). Auxiliary staff gage 4.4 miles downstream, at datum 1.80 feet lower.

Drainage area.- 2,210 square miles.

Records available.- August 1928 to September 1948. Gage-height records collected at site 1.3 miles upstream since 1909 are contained in reports of U. S. Weather Bureau.

Average discharge.- 20 years, 2,901 second-feet.

Extremes.- Maximum discharge during year, 97,000 second-feet Feb. 15 (gage height, 42.04 feet); minimum, 158 second-feet Sept. 1-4; minimum gage height, 1.68 feet Sept. 4.

1928-48: Maximum discharge, that of Feb. 15, 1948; minimum, 58 second-feet Sept. 1, 2, 1943 (gage height, 1.01 feet).

Maximum stage known, 44.8 feet, former site, present datum, Apr. 20, 1892.

Remarks.- Records good except those for periods of doubtful or no auxiliary gage-height record, which are fair. Discharge above about 1,700 second-feet computed by using fall as determined by twice-daily readings of auxiliary gage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	307	815	a2,860	a3,780	4,190	9,740	1,040	718	375	355	158
2	181	670	766	6,910	a2,720	a6,700	10,300	992	578	345	298	158
3	181	742	718	5,880	2,980	9,630	8,780	1,040	478	298	272	158
4	181	718	694	3,570	3,140	10,900	a8,400	1,380	426	263	239	163
5	181	624	694	2,280	6,320	10,500	8,070	1,560	385	239	215	742
6	187	865	718	2,370	6,390	10,200	a7,300	1,590	375	223	201	a1,710
7	194	890	718	2,280	7,360	a11,700	6,570	2,310	385	215	187	1,150
8	194	1,380	790	2,180	8,800	a13,100	4,650	1,960	375	208	187	992
9	201	1,070	992	2,020	10,400	a12,600	3,930	a1,840	355	194	194	840
10	208	915	1,100	1,740	a13,600	11,200	3,740	1,710	345	187	255	670
11	208	840	1,320	1,440	a12,200	9,980	a6,360	1,590	326	187	247	544
12	215	1,410	1,270	1,270	a14,800	8,960	5,540	1,470	316	194	231	436
13	208	1,070	1,150	2,870	a28,500	7,590	4,520	1,710	307	247	223	395
14	201	1,020	992	3,890	a64,200	6,360	8,640	1,470	289	289	215	1,240
15	194	4,670	2,350	2,730	a93,700	a4,460	11,100	1,150	289	335	231	522
16	194	a5,220	8,060	2,470	74,200	a4,000	11,200	940	426	375	375	335
17	187	a3,680	8,420	2,210	a43,000	a9,820	8,690	840	1,040	385	566	280
18	181	a2,410	7,020	a1,930	a27,800	19,900	7,490	742	1,560	426	375	255
19	181	2,150	4,300	a1,710	a21,000	27,700	6,620	670	1,470	960	345	239
20	181	2,020	2,800	1,590	a17,500	26,700	5,250	624	1,290	1,380	316	223
21	261	1,800	2,610	1,730	a14,000	a20,800	3,910	578	1,240	742	255	208
22	405	1,650	2,710	2,240	a12,400	15,400	3,080	544	879	511	208	201
23	326	1,440	2,770	2,120	9,530	13,200	2,670	522	544	365	187	194
24	263	1,800	2,740	1,890	a8,320	12,100	2,140	500	436	326	175	187
25	231	1,830	2,470	1,590	7,310	9,860	1,740	478	385	307	169	181
26	208	1,620	1,920	1,410	6,840	7,860	1,590	457	345	365	169	181
27	215	1,350	1,470	2,140	a6,350	7,130	1,440	447	426	345	169	175
28	231	1,130	1,210	a4,860	6,010	a6,310	1,350	447	468	780	163	223
29	255	966	1,100	a2,370	5,240	5,280	1,240	647	375	840	175	533
30	272	890	1,040	a2,210	-	4,570	1,130	766	405	647	181	742
31	280	-	1,020	a3,940	-	6,470	-	790	-	457	169	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,786	405	181	219	0.099	0.11
November	47,147	5,220	307	1,572	.711	.79
December	66,747	8,420	694	2,153	.974	1.12
Calendar year 1947	1,199,420	28,500	181	3,286	1.49	20.17
January	80,700	6,910	1,270	2,603	1.18	1.36
February	538,390	93,700	2,720	18,570	8.40	9.06
March	335,170	27,700	4,190	10,810	4.89	5.64
April	167,180	11,200	1,130	5,573	2.52	2.81
May	32,804	2,310	447	1,058	.478	.55
June	17,236	1,560	289	575	.260	.29
July	13,010	1,380	187	420	.190	.22
August	7,547	566	163	243	.110	.13
September	14,035	1,710	158	468	.211	.24
Water year 1947-48	1,326,752	93,700	158	3,625	1.64	22.32

Peak discharge (base, 13,000 sec.-ft.).- Feb. 15 (12 m.) 97,000 sec.-ft.; Mar. 19 (6 p.m.) 28,500 sec.-ft.

a Doubtful or no auxiliary gage-height record; discharge computed on basis of estimated falls or on basis of falls as determined from U. S. Weather Bureau gage 1 mile upstream.

Tombigbee River at Columbus, Miss.

Location.- Water-stage recorder, lat. 33°29'21", long. 88°25'57", in NW¼ sec. 20, T. 18 S., R. 18 W. Huntsville meridian, in Columbus, 1,400 feet upstream from Gulf, Mobile & Ohio Railroad bridge, 1,600 feet downstream from bridge on U. S. Highway 45, 2.3 miles upstream from Luxapalila Creek, and 6.7 miles downstream from Tibbee River. Datum of gage is 128.91 feet above mean sea level, datum of 1929, supplementary adjustment of 1941. Auxiliary staff gage 3.7 miles upstream at different datum.

Drainage area.- 4,490 square miles.

Records available.- January 1900 to December 1912, August 1928 to September 1948. Gage heights during low stages for the period 1900 to 1904 are believed to be in error. Gage-height records collected at same site since 1890 are contained in reports of U. S. Weather Bureau.

Average discharge.- 31 years (1900-1904, 1905-12, 1928-48), 5,831 second-feet.

Extremes.- Maximum discharge during year, 135,000 second-feet Feb. 16 (gage height, 38.32 feet); minimum, 297 second-feet Sept. 4 (gage height, 0.73 foot).

1900-1912, 1928-48: Maximum discharge, that of Feb. 16, 1948; minimum observed, 160 second-feet Oct. 29, 1904; minimum gage height observed, -0.1 foot, present datum, Oct. 9-12, 1911.

Maximum stage known, 42.6 feet, present datum, Apr. 8, 1892.

Remarks.- Records good. Discharge computed by using fall as determined by twice-daily readings of auxiliary gage as a factor.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	380	632	1,460	2,920	2,920	8,960	11,900	2,180	1,370	726	750	322
2	376	702	1,340	8,260	8,390	14,200	14,100	2,060	1,190	726	632	311
3	376	1,050	1,280	9,970	7,360	20,000	16,400	2,000	1,000	726	591	304
4	376	1,160	1,250	9,930	6,440	22,900	16,700	2,060	875	702	542	315
5	380	1,190	1,220	7,750	8,380	26,000	16,100	2,320	825	678	507	1,020
6	383	1,130	1,220	5,080	10,200	29,800	14,700	2,450	800	655	482	1,990
7	395	1,400	1,280	3,800	12,600	33,200	12,800	2,870	800	632	454	2,050
8	411	1,820	1,490	3,400	21,500	35,300	10,800	3,290	800	586	430	1,560
9	418	2,250	2,060	3,160	25,000	34,000	8,840	2,870	775	546	399	1,400
10	430	1,880	3,000	2,920	28,500	32,300	9,970	2,600	726	520	368	1,100
11	434	1,640	3,260	2,600	31,000	29,500	16,400	2,390	702	520	387	1,000
12	446	1,760	3,120	2,320	33,500	24,200	16,900	2,250	678	512	426	925
13	458	2,000	2,620	2,830	37,100	19,200	16,600	2,340	632	546	418	800
14	438	1,760	2,320	6,480	49,400	16,300	17,100	2,560	632	604	411	975
15	411	3,070	4,500	6,200	88,000	12,200	18,000	2,390	632	726	387	1,370
16	399	7,450	11,500	4,980	127,000	10,200	18,300	2,000	678	875	750	800
17	387	7,380	14,000	3,980	119,000	13,900	18,100	1,760	1,050	1,130	1,880	632
18	376	5,800	14,000	3,120	90,000	16,400	17,300	1,710	1,990	1,100	1,940	529
19	372	4,250	13,000	2,920	72,800	20,200	14,200	1,490	2,340	1,580	1,640	474
20	372	3,560	9,930	2,600	54,800	25,300	11,400	1,340	2,340	2,580	1,020	446
21	364	3,000	6,280	2,760	39,400	29,600	8,770	1,220	1,940	2,250	750	422
22	434	2,600	4,610	3,800	30,600	29,900	6,720	1,130	1,700	1,430	600	403
23	560	2,390	3,910	3,990	24,900	28,400	5,340	1,050	1,250	900	507	387
24	499	2,320	3,730	3,650	20,300	25,300	4,430	1,000	925	702	458	372
25	446	2,680	3,640	3,000	16,400	24,000	3,720	975	800	632	418	349
26	407	2,600	3,240	2,760	14,600	22,400	3,240	925	750	591	395	333
27	411	2,320	2,680	3,240	12,500	22,000	3,000	900	726	632	380	349
28	426	2,000	2,180	7,150	10,700	19,700	2,760	900	750	678	364	442
29	482	1,760	2,000	8,720	9,800	16,000	2,530	1,000	775	1,130	352	632
30	524	1,580	1,880	7,560	-	11,900	2,390	1,250	726	1,250	341	1,020
31	582	-	1,820	8,760	-	10,000	-	1,400	-	1,000	341	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	13,153	582	364	424	0.094	0.11
November	75,134	7,450	632	2,504	.558	.62
December	129,820	14,000	1,220	4,188	.933	1.08
Calendar year 1947	2,522,748	45,300	364	6,912	1.54	20.91
January	150,610	9,970	2,320	4,858	1.08	1.25
February	1,019,730	127,000	6,440	35,160	7.83	8.45
March	683,260	35,300	8,960	22,040	4.91	5.66
April	339,510	18,300	2,390	11,320	2.52	2.81
May	56,680	3,290	900	1,828	.407	.47
June	31,177	2,340	632	1,039	.231	.26
July	27,865	2,580	512	899	.200	.23
August	19,320	1,940	341	623	.139	.16
September	22,932	2,050	304	764	.170	.19
Water year 1947-48	2,569,191	127,000	304	7,020	1.56	21.29

Peak discharge (base, 24,000 sec.-ft.).- Feb. 16 (9 p.m.) 135,000 sec.-ft.; Mar. 8 (3 p.m.) 34,800 sec.-ft.; Mar. 22 (2 a.m.) 29,900 sec.-ft.

Tombigbee River near Cochrane, Ala.

Location.- Water-stage recorder, lat. 33°05', long. 88°14', in sec. 7, T. 24 N., R. 2 W., at bridge on State Highway 17, 200 feet upstream from Alabama, Tennessee & Northern Railroad bridge, $1\frac{1}{4}$ miles northeast of Cochrane, $2\frac{1}{4}$ miles downstream from Boguechitto Creek, and 7 miles southwest of Aliceville. Datum of gage is 89.85 feet above mean sea level, datum of 1929, supplementary adjustment of 1946. Auxiliary staff gage at Vienna Ferry, 12 miles downstream, at datum 7.5 feet lower.

Drainage area.- 5,990 square miles.

Records available.- January 1939 to September 1948. Gage-height records collected at same site November 1909 to September 1924 are contained in reports of U. S. Weather Bureau.

Extremes.- Maximum discharge during year, 107,000 second-feet Feb. 19 (gage height, 44.5 feet); minimum, 549 second-feet Sept. 3 (gage height, 3.29 feet).

1939-48: Maximum discharge, 108,000 second-feet Apr. 3, 1944; maximum gage height, that of Feb. 19, 1948; minimum discharge, 271 second-feet Aug. 29, 30, 1943 (gage height, 2.64 feet).

Maximum stage known, 50.2 feet in April 1892, present datum, from reports of U. S. Weather Bureau.

Remarks.- Records good. Discharge computed by using fall as determined by twice-daily readings of auxiliary staff gage as a factor.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in secoad-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	605	902	1,970	2,750	13,900	13,600	14,600	3,070	1,970	1,100	1,460	600
2	610	939	1,890	6,060	12,100	14,700	14,200	2,900	1,850	1,020	1,220	585
3	605	998	1,810	10,900	10,700	21,200	15,800	2,780	1,660	1,020	1,080	574
4	600	1,320	1,700	11,800	8,780	26,100	17,200	2,700	1,490	1,020	987	590
5	600	1,470	1,660	10,700	9,900	28,200	18,600	2,840	1,320	958	902	694
6	605	1,490	1,630	8,360	12,400	34,400	18,500	3,110	1,260	874	920	1,460
7	610	1,530	1,660	5,410	13,600	44,100	17,600	3,200	1,200	819	874	2,750
8	636	1,890	1,850	4,350	23,400	47,000	15,800	3,800	1,160	792	819	2,570
9	647	2,570	2,490	4,340	29,800	43,700	15,000	3,900	1,160	764	792	2,090
10	657	2,840	6,710	4,010	38,800	43,800	12,500	3,600	1,100	710	764	1,740
11	678	2,930	7,330	3,630	41,200	42,900	17,700	3,300	1,080	699	792	1,460
12	689	2,550	5,560	3,230	39,800	42,900	23,700	3,020	1,040	694	819	1,390
13	694	2,580	4,910	3,230	40,800	44,300	24,500	3,020	1,020	792	846	1,220
14	699	2,700	3,920	5,380	43,200	39,400	25,000	3,200	987	792	a960	1,160
15	684	3,430	4,970	8,660	50,400	31,100	25,900	3,230	958	846	a1,300	1,360
16	652	5,470	12,200	7,560	57,400	21,600	24,600	3,070	1,020	1,160	a2,000	1,630
17	631	9,120	15,900	5,940	66,000	17,900	23,500	4,890	1,260	1,600	3,020	1,160
18	605	8,140	16,300	4,790	87,800	18,000	22,500	3,780	1,630	1,770	3,020	920
19	605	6,440	16,600	4,230	105,000	19,700	21,200	3,140	2,490	1,700	2,570	819
20	600	5,130	15,200	3,550	99,800	23,200	17,100	2,610	2,930	2,250	2,090	764
21	600	4,380	10,100	3,380	84,800	26,500	13,700	2,180	2,800	3,110	1,420	710
22	600	3,820	4,660	4,610	75,000	29,700	9,890	1,800	2,330	2,440	1,100	678
23	626	3,260	3,390	5,930	62,300	31,000	7,490	1,640	2,170	1,680	920	641
24	779	2,990	3,790	5,620	49,300	30,400	6,440	1,560	1,660	1,320	819	610
25	752	3,140	4,000	4,780	38,900	31,200	5,530	1,570	1,360	1,110	737	600
26	673	3,500	4,010	3,930	32,900	31,100	4,750	1,520	1,200	1,040	694	585
27	641	3,300	4,040	4,100	28,900	32,200	4,230	1,460	1,100	987	678	569
28	652	2,810	3,400	8,470	21,500	32,800	3,960	1,460	1,040	1,020	657	647
29	673	2,470	2,870	11,800	16,300	29,300	3,650	1,490	1,040	1,200	647	737
30	737	2,260	2,700	11,700	-	24,900	3,360	1,660	1,260	1,660	641	1,080
31	792	-	2,520	13,800	-	19,900	-	1,970	-	1,700	641	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	20,237	792	600	653	0.109	0.13
November	96,369	9,120	902	3,212	.536	.60
December	171,740	16,600	1,630	5,540	.925	1.07
Calendar year 1947	3,409,748	52,200	600	9,342	1.56	21.18
January	197,000	13,800	2,750	6,355	1.06	1.22
February	1,214,680	105,000	8,780	41,890	6.99	7.54
March	936,800	47,000	13,600	30,220	5.05	5.82
April	448,500	25,900	3,360	14,950	2.50	2.78
May	83,470	4,890	1,460	2,693	.450	.52
June	44,545	2,930	958	1,485	.248	.28
July	38,647	3,110	694	1,247	.208	.24
August	36,189	3,020	641	1,167	.195	.22
September	32,393	2,750	569	1,080	.180	.20
Water year 1947-48	3,320,570	105,000	569	9,073	1.51	20.62

Peak discharge (base, 20,000 sec.-ft.).- Feb. 19 (2 p.m.) 107,000 sec.-ft.; Mar. 8 (10 a.m.) 48,100 sec.-ft.; Mar. 28 (10 a.m.) 33,400 sec.-ft.; Apr. 15, 25,900 sec.-ft.

a No gage-height record; discharge computed on basis of records for other Tombigbee River stations.

Tombigbee River at Gainesville, Ala.

Location.- Water-stage recorder, lat. 32°49', long. 88°09', in SE¼ sec. 2, T. 21 N., R. 2 W., at bridge on State Highway 39 at Gainesville, 2 miles downstream from Noxubee River. Datum of gage is 63.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1946. Auxiliary gage is water-stage recorder at Epes, 19 miles downstream at datum 10.08 feet lower.

Drainage area.- 8,700 square miles.

Records available.- October 1938 to September 1948. Gage-height records collected at same site since January 1937 are contained in reports of U. S. Weather Bureau.

Average discharge.- 10 years, 10,550 second-feet.

Extremes.- Maximum discharge during year, 119,000 second-feet Feb. 21 (gage height, 51.2 feet); minimum, 726 second-feet Sept. 27 (gage height, 1.45 feet).

1938-48: Maximum discharge, that of Feb. 21, 1948; minimum, 389 second-feet Aug. 31, 1943 (gage height, 0.81 foot).

Remarks.- Records good. Discharge at times computed by using fall as determined by auxiliary gage as a factor.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	802	1,250	3,090	4,890	24,500	33,600	30,900	4,980	2,840	1,630	2,260	816
2	774	1,780	2,840	7,140	22,100	31,000	27,100	4,620	2,750	1,440	1,980	774
3	753	2,020	2,670	12,100	18,800	36,600	24,100	4,260	2,500	1,480	1,700	740
4	753	1,940	2,580	14,100	15,600	40,900	22,800	4,080	2,260	1,480	1,550	802
5	760	2,260	2,500	13,700	15,300	42,200	22,600	4,080	2,020	1,400	1,440	879
6	760	2,260	2,420	12,200	16,700	45,900	23,100	4,260	1,860	1,330	1,400	1,780
7	781	2,340	2,420	8,890	18,600	51,900	22,800	4,530	1,780	1,180	1,400	4,340
8	823	2,500	2,840	6,930	28,100	54,300	20,900	4,620	1,700	1,110	1,250	4,710
9	844	2,920	3,720	6,020	37,500	56,000	21,100	5,170	1,660	1,080	1,220	3,450
10	879	3,720	8,570	5,550	42,300	57,500	20,900	4,890	1,630	970	1,180	2,750
11	900	5,960	16,000	5,260	44,900	58,600	21,400	4,530	1,550	1,040	1,110	2,260
12	970	5,840	15,500	4,800	47,100	59,000	25,800	4,350	1,550	1,040	1,180	1,940
13	970	4,620	11,700	4,960	49,300	58,600	29,900	4,350	1,480	1,080	1,250	1,860
14	970	4,440	8,590	5,830	54,600	57,100	37,200	4,260	1,400	1,440	1,330	1,740
15	935	7,630	10,700	8,990	59,500	51,000	38,900	4,440	1,360	1,480	1,400	1,660
16	900	9,280	20,900	9,390	63,100	44,200	39,000	4,440	1,480	1,550	1,780	2,020
17	851	10,600	24,000	8,290	67,000	36,700	37,000	5,260	1,700	2,100	3,450	1,900
18	823	12,300	24,400	6,930	72,800	31,500	35,200	5,450	1,980	2,500	4,620	1,480
19	802	12,700	23,200	5,930	92,200	28,400	34,100	4,800	2,750	2,580	3,990	1,220
20	795	9,450	21,400	5,360	113,000	27,000	31,600	4,260	3,450	2,670	3,540	1,110
21	795	7,240	17,800	5,170	114,000	27,900	26,800	3,630	3,630	3,540	2,840	1,000
22	788	5,930	13,000	5,930	111,000	29,700	19,700	3,010	3,360	3,720	2,180	935
23	774	5,260	9,440	7,450	93,800	34,100	13,400	2,670	3,010	2,840	1,660	879
24	900	4,890	7,980	7,770	83,500	36,300	10,200	2,500	2,670	2,260	1,360	830
25	1,000	4,620	7,240	7,240	73,000	35,100	9,060	2,340	2,180	1,860	1,220	781
26	900	4,710	6,720	6,720	66,400	34,800	7,980	2,260	1,820	1,630	1,140	746
27	879	4,620	6,210	7,770	58,500	38,500	7,140	2,180	1,630	1,550	1,000	746
28	886	4,260	5,550	12,400	51,100	40,200	6,510	2,260	1,480	1,700	935	781
29	893	3,810	4,980	16,600	41,700	40,600	5,930	2,340	1,480	1,780	900	865
30	970	3,360	4,440	21,200	-	38,700	5,450	2,420	1,550	2,180	858	1,080
31	1,110	-	4,080	25,000	-	35,800	-	2,670	-	2,500	837	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	26,740	1,110	753	863	0.099	0.11
November	154,510	12,700	1,250	5,150	.592	.66
December	297,390	24,400	2,420	9,593	1.10	1.27
Calendar year 1947	4,818,417	60,400	753	13,200	1.52	20.58
January	280,510	25,000	4,800	9,049	1.04	1.20
February	1,596,000	114,000	15,300	55,030	6.33	6.82
March	1,293,700	59,000	27,000	41,730	4.80	5.53
April	678,570	39,000	5,450	22,620	2.60	2.90
May	119,910	5,450	2,180	3,868	.445	.51
June	62,510	3,630	1,360	2,084	.240	.27
July	56,140	3,720	970	1,811	.208	.24
August	53,960	4,620	837	1,741	.200	.23
September	46,874	4,710	740	1,562	.180	.20
Water year 1947-48	4,666,814	114,000	740	12,750	1.47	19.94

Peak discharge (base, 35,000 sec.-ft.).- Feb. 21 (3 a.m.) 119,000 sec.-ft.; Mar. 12, 59,000 sec.-ft.; Mar. 29, 40,600 sec.-ft.; Apr. 15 (11 p.m.) 39,200 sec.-ft.

Tombigbee River near Coatopa, Ala.

Location.- Water-stage recorder, lat. 32°26', long. 88°02', in sec. 19, 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. Navigation dam at lock 3, 10 miles downstream, is control at low stages. Datum of gage is 29.30 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark). Auxiliary gages are upper and lower staff gages at lock 3 at different datum.

Drainage area.- 15,500 square miles.

Records available.- August 1928 to September 1948.

Average discharge.- 20 years, 21,590 second-feet.

Extremes.- Maximum discharge during year, 156,000 second-feet Feb. 23 (gage height, 49.1 feet); minimum daily, 1,300 second-feet Sept. 24-27.
1928-48: Maximum discharge observed, 179,000 second-feet Mar. 29, 1929 (gage height, 51.4 feet); minimum daily, 382 second-feet Oct. 1, 1931; minimum gage height, 1.64 feet (result of unusual lock manipulation) Sept. 10, 1943 (discharge not determined).

Remarks.- Records good except those below 5,000 second-feet, which are fair. Discharge above about 12,500 second-feet computed by using relationship between gage heights at recorder and auxiliary staff gages as a factor. Auxiliary gages read at least once daily.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Revisions (water years).- W 782: 1934. W 952: 1941.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,360	2,280	5,420	11,000	49,300	89,100	64,700	11,000	7,090	2,860	4,440	1,770
2	e1,400	2,970	5,040	15,200	50,100	86,500	61,400	9,430	5,920	2,970	4,200	2,360
3	e1,500	4,440	4,680	16,700	47,900	87,400	59,400	8,390	5,040	2,860	3,860	2,660
4	1,670	4,200	4,440	21,000	41,700	90,900	57,600	8,390	4,440	2,660	3,860	2,760
5	1,650	3,740	4,320	20,500	37,400	94,500	55,500	7,870	3,980	2,660	5,540	2,970
6	1,630	3,740	4,200	19,000	36,700	99,700	51,900	8,390	3,630	2,660	5,290	3,190
7	1,650	3,860	4,200	16,500	36,000	105,000	48,000	8,910	3,410	2,470	4,200	4,320
8	1,790	4,440	4,560	13,900	44,800	108,000	47,800	9,430	3,300	2,420	3,300	6,310
9	2,420	5,160	7,090	11,500	60,400	108,000	51,800	9,430	3,300	2,380	2,970	7,090
10	2,440	5,420	12,600	10,500	72,300	108,000	51,300	9,430	3,190	2,280	2,760	5,420
11	2,380	10,700	26,000	9,950	80,400	107,000	48,300	8,390	3,190	2,280	2,660	3,980
12	1,990	14,300	34,200	8,910	85,300	106,000	48,600	7,870	3,190	2,280	2,660	3,300
13	1,970	13,300	30,600	9,430	91,200	105,000	54,200	7,610	2,860	2,550	2,760	2,860
14	1,930	9,690	24,900	14,200	96,500	102,000	65,500	7,350	2,760	3,080	2,970	2,760
15	1,850	11,800	23,400	18,000	102,000	92,800	69,000	7,350	2,760	4,800	3,410	2,660
18	1,830	15,600	32,000	20,100	109,000	84,100	73,100	7,350	2,660	5,660	4,680	2,260
17	1,850	17,000	43,700	17,400	115,000	78,200	75,800	7,350	3,300	5,290	4,800	2,380
18	1,690	16,900	47,600	15,300	126,000	73,300	75,900	8,390	5,540	5,040	7,870	2,400
19	1,610	20,000	44,900	13,900	136,000	65,900	73,700	8,910	6,180	5,290	7,350	2,070
20	1,590	19,000	39,400	12,300	143,000	59,300	67,200	7,870	6,310	5,160	6,180	e1,700
21	1,550	15,200	32,700	11,200	148,000	50,700	56,200	6,830	6,310	4,800	4,920	e1,600
22	1,490	12,600	25,100	11,800	152,000	45,500	44,900	5,790	6,050	5,290	3,860	e1,500
23	1,470	9,950	15,500	13,100	156,000	55,200	33,500	4,920	5,540	5,160	3,080	e1,400
24	1,470	9,170	12,600	14,500	155,000	62,200	26,500	4,440	4,800	4,200	3,080	e1,300
25	1,550	9,910	13,400	14,800	149,000	66,100	19,900	4,200	4,200	3,520	2,860	e1,300
26	1,670	8,130	12,300	14,500	138,000	68,100	15,800	3,980	3,630	3,080	2,110	e1,300
27	1,710	7,610	11,500	15,500	126,000	67,900	14,000	3,980	3,190	2,860	2,010	e1,300
28	1,790	7,090	10,500	19,900	114,000	69,100	13,200	4,200	3,190	2,860	1,870	e1,400
29	1,890	6,570	9,430	26,700	104,000	70,800	12,600	6,050	3,030	3,190	1,670	e1,800
30	1,970	5,920	8,650	35,000	-	70,800	11,500	7,870	2,860	4,440	1,610	e2,800
31	1,950	-	8,390	43,000	-	67,900	-	7,870	-	4,560	1,650	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	54,710	2,440	1,360	1,765	0.114	0.13
November	279,690	20,000	2,280	9,323	.601	.67
December	563,320	47,600	4,200	18,170	1.17	1.35
Calendar year 1947	9,456,790	146,000	1,240	25,910	1.67	22.69
January	515,290	43,000	8,910	16,620	1.07	1.24
February	2,802,000	156,000	36,000	96,620	6.23	6.72
March	2,545,000	108,000	45,500	82,100	5.30	6.11
April	1,448,800	75,900	11,500	48,290	3.12	3.48
May	229,240	11,000	3,980	7,395	.477	.55
June	124,900	7,090	2,660	4,163	.269	.30
July	111,610	5,660	2,280	3,600	.232	.27
August	114,480	7,870	1,610	3,693	.238	.27
September	80,920	7,090	1,300	2,697	.174	.19
Water year 1947-48	8,869,960	156,000	1,300	24,230	1.56	21.28

Peak discharge (base, 80,000 sec.-ft.).- Feb. 23, 156,000 sec.-ft.

e Indefinite stage-discharge relation; discharge computed on basis of records for Tombigbee River at Gainesville and Black Warrior River near Eutaw.

Tombigbee River near Leroy, Ala.

Location.- Staff gage above spillway of navigation dam at lock 1, lat. 31°34', long. 88°02', in sec. 13, T. 7 N., R. 1 W., 4 miles upstream from Jackson Creek and 5 miles northwest of Leroy. Datum of gage is 7.28 feet below mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 19,100 square miles.

Records available.- October 1928 to September 1948.

Average discharge.- 20 years, 26,450 second-feet.

Extremes.- Maximum discharge during year, 158,000 second-feet Mar. 7, 8 (gage height, 42.7 feet); minimum daily, 1,410 second-feet Oct. 5.

1928-48: Maximum discharge, 192,000 second-feet Apr. 10, 1938; maximum gage height, 46.0 feet Apr. 2, 1929; minimum daily discharge not determined.

Remarks.- Records good above 10,000 second-feet and fair below. Discharge between 20,000 and 74,000 second-feet computed by using rate of change of stage as a factor. Discharge below 8,000 second-feet determined by using number of gates raised on crest of dam as a factor. Some regulation at low flow by locks and dams. Gage read twice daily.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,180	3,090	7,550	11,300	53,700	145,000	81,000	14,400	9,730	4,530	5,750	2,230
2	2,000	4,040	6,860	16,500	54,900	141,000	80,200	12,800	8,950	4,800	5.750	2,070
3	1,690	6,080	6,130	21,100	56,900	145,000	80,200	11,800	7,010	4,200	4,840	2,070
4	1,460	6,460	5,940	23,100	56,200	148,000	78,900	10,800	5,820	3,930	4,030	3,270
5	1,410	5,690	5,940	24,800	54,300	145,000	77,000	11,300	5,200	3,780	5,280	4,330
6	1,510	5,200	5,740	24,600	51,400	154,000	74,400	11,300	5,000	3,630	6,840	4,150
7	1,870	6,660	5,540	23,100	47,900	156,000	72,000	11,800	4,490	3,410	6,370	4,150
8	2,130	8,280	5,810	20,700	48,000	156,000	68,300	11,800	4,040	3,320	5.060	5,830
9	2,380	7,620	8,570	17,600	55,200	149,000	65,300	11,800	4,020	3,450	3,790	7,260
10	3,070	7,620	29,800	14,900	60,800	144,000	63,200	11,800	4,180	3,450	3,200	7,260
11	3,160	9,090	42,900	12,800	64,900	138,000	62,300	11,300	4,350	3,320	3,330	6,440
12	3,030	22,000	49,900	12,300	68,700	134,000	61,000	10,400	4,180	3,450	3,600	4,860
13	2,800	22,400	51,200	11,800	73,100	129,000	61,000	9,390	4,180	3,450	3,600	4,270
14	2,390	19,300	49,800	12,800	77,000	125,000	65,300	9,280	4,020	3,450	4,530	4,630
15	2,160	19,900	49,200	17,600	81,800	124,000	68,200	8,570	4,020	4,710	5,010	5,030
16	2,160	26,500	51,400	21,900	85,000	120,000	71,400	8,640	3,860	7,320	5.330	4,820
17	2,160	26,900	52,500	23,600	89,200	119,000	73,700	8,640	4,800	7,900	6,540	4,260
18	2,160	25,400	54,500	21,800	92,100	116,000	75,000	9,010	6,780	6,710	6,660	4,040
19	2,160	25,500	55,100	19,900	96,000	113,000	76,300	10,200	8,380	6,100	8,270	3,880
20	2,080	27,500	54,100	17,600	99,100	108,000	77,600	10,200	8,020	6,270	8,980	3,470
21	2,080	25,200	51,400	15,400	106,000	104,000	77,600	9,420	8,360	6,270	6,920	3,220
22	2,000	21,300	45,300	14,400	114,000	98,000	77,000	7,780	8,020	6,020	6,100	2,820
23	2,000	17,600	38,000	15,400	126,000	92,100	75,000	6,920	7,670	6,020	4,990	2,310
24	2,000	14,400	29,900	17,100	134,000	38,200	67,200	5,610	5,920	6,020	4,200	2,150
25	1,930	12,800	24,500	18,800	142,000	86,600	54,000	5,420	5,430	5,300	3,460	2,230
26	1,930	12,300	20,200	18,800	148,000	85,000	39,400	5,200	5,200	4,420	3,270	2,310
27	·1,950	10,800	17,100	19,900	151,000	83,400	28,000	5,200	4,800	3,250	3,270	2,310
28	2,050	9,900	14,900	28,000	152,000	82,600	24,400	5,420	4,320	3,320	3,150	2,310
29	2,130	9,100	13,300	33,700	151,000	82,600	20,200	6,910	3,770	4,640	2,760	2,980
30	2,210	8,300	11,800	41,000	-	81,800	16,500	8,650	3,780	5,640	2,450	3,430
31	2,640	-	10,800	51,000	-	81,000	-	9,720	-	5,970	2,300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	66,880	3,160	1,410	2,157	0.113	0.13
November	426,930	27,500	3,090	14,230	.745	.83
December	875,680	55,100	5,540	28,250	1.48	1.71
Calendar year 1947	12,365,410	149,000	1,410	33,880	1.77	24.08
January	643,300	51,000	11,300	20,750	1.09	1.25
February	2,590,200	152,000	47,900	89,320	4.68	5.04
March	3,674,300	156,000	81,000	118,500	6.20	7.15
April	1,911,600	81,000	16,500	63,720	3.34	3.72
May	291,480	14,400	5,200	9,403	.492	.57
June	168,300	9,730	3,770	5,610	.294	.33
July	148,050	7,900	3,250	4,776	.250	.29
August	149,630	8,980	2,300	4,827	.253	.29
September	114,390	7,260	2,070	3,813	.200	.22
Water year 1947-48	11,060,740	156,000	1,410	30,220	1.58	21.53

Peak discharge (base 85,000 sec.-ft.).- Mar. 7, 8, 158,000 sec.-ft.

Mackys Creek near Dennis, Miss.

Location.- Staff gage, lat. 34°32', long. 88°20', in sec. 26, T. 6 S., R. 9 E. Chickasaw meridian, at bridge on county highway at Narrows dam site, 6 miles southwest of Dennis and about 10 miles upstream from confluence with Browns Creek. Datum of gage is 333.47 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 66 square miles (authority, Corps of Engineers).

Records available.- February 1938 to September 1948. Prior to January 1944 monthly discharge only.

Average discharge.- 10 years (1938-48), 100 second-feet.

Extremes.- Maximum discharge observed during year, 3,520 second-feet Feb. 13 (gage height, 22.08 feet); minimum observed, 11 second-feet Aug. 5 (gage height, 1.64 feet).
1938-48: Maximum discharge observed, that of Feb. 13, 1948; minimum not determined.

Remarks.- Records fair. Gage read twice daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.7	15	3.5	253	14.0	1,640
2.0	39	4.5	371	17.0	2,280
2.3	72	7.0	583	21.0	3,250
2.7	128	9.0	790		
3.0	178	11.0	1,080		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	144	61	339	99	128	716	65	47	33	31	14
2	24	128	52	253	84	361	253	81	43	28	28	13
3	25	92	56	113	92	391	152	194	34	25	24	13
4	26	71	58	89	128	210	128	479	34	27	22	25
5	28	169	64	81	178	186	136	427	34	24	14	96
6	26	169	59	73	239	454	120	266	48	23	14	186
7	28	99	48	70	253	599	113	186	52	19	24	89
8	38	113	57	73	471	316	106	113	44	19	27	49
9	37	81	106	73	339	202	106	99	54	23	30	34
10	33	73	95	67	202	152	136	82	45	39	31	44
11	29	86	86	61	241	144	186	82	39	29	29	36
12	29	93	81	64	1,430	120	136	82	34	36	28	32
13	28	76	71	239	3,400	113	361	77	36	46	28	28
14	29	98	68	99	2,220	113	487	76	41	70	28	27
15	28	350	381	84	661	106	253	70	36	48	35	24
16	29	210	503	81	339	872	169	65	62	92	41	24
17	29	106	178	80	239	888	128	60	82	106	32	24
18	28	92	113	73	169	350	113	56	66	161	28	22
19	89	93	95	81	161	316	99	58	57	99	26	23
20	80	81	84	86	253	239	99	56	50	62	20	22
21	62	73	84	98	202	169	84	50	44	40	19	21
22	40	85	76	89	225	162	91	49	38	33	18	21
23	36	99	73	84	161	253	82	48	33	66	17	21
24	26	99	71	76	136	225	80	53	28	65	18	21
25	33	84	62	73	161	161	77	50	30	47	21	21
26	34	75	65	71	169	136	76	46	30	38	19	23
27	42	80	61	92	292	136	81	49	27	37	20	33
28	48	67	64	89	225	120	73	60	40	33	18	84
29	44	51	59	89	152	128	67	120	50	30	20	99
30	38	59	58	91	-	113	65	86	42	32	14	68
31	53	-	61	99	-	1,000	-	66	-	30	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,146	89	24	37.0	0.561	0.65
November	3,196	350	51	107	1.62	1.80
December	3,050	503	48	98.4	1.49	1.72
Calendar year 1947	39,751	985	21	109	1.65	22.40
January	3,130	339	61	101	1.53	1.76
February	12,921	3,400	84	446	6.76	7.28
March	8,863	1,000	106	286	4.33	4.99
April	4,773	716	65	159	2.41	2.69
May	3,351	479	46	108	1.64	1.89
June	1,300	82	27	43.3	.656	.73
July	1,460	161	19	47.1	.714	.82
August	748	41	14	24.1	.365	.42
September	1,237	186	13	41.2	.624	.70
Water year 1947-48	45,175	3,400	13	123	1.86	25.45

Bull Mountain Creek at Tremont, Miss.

Location.- Staff gage, lat. 34°14'20", long. 88°16'15", in NE¼SW¼ sec. 5, T. 10 S., R. 10 E. Chickasaw meridian, at bridge on U. S. Highway 78, 0.7 mile northwest of Tremont, 1 mile upstream from Johns Creek, 1½ miles upstream from Cypress Creek, 3¼ miles upstream from Chubby Creek, and 8 miles southeast of Fulton. Datum of gage is 317.39 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 120 square miles (authority, Corps of Engineers).

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge observed during year, 11,600 second-feet Feb. 13 (gage height, 9.45 feet); minimum observed, 12 second-feet Sept. 2-4.

1943-48: Maximum discharge observed, 11,600 second-feet Jan. 8, 1946, Feb. 13, 1948; maximum gage height observed, 9.47 feet Jan. 8, 1946; minimum discharge observed, 9 second-feet Oct. 10-13, 1943; minimum gage height observed, 2.1 feet Oct. 12, 13, 1943.

A discharge of 5.1 second-feet (gage height, 1.95 feet), was measured by Corps of Engineers Aug. 30, 1943.

Remarks.- Records fair except those above 500 second-feet and those for periods of no gage-height record, which are poor. Gage read once daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 25-30)

Oct. 1 to Feb. 13

2.5	22	6.3	521	8.2	4,000
2.8	44	6.6	620	8.6	5,700
3.4	97	6.8	800	9.0	8,100
4.0	164	7.0	1,100	9.1	8,800
5.0	299	7.5	2,100		

Feb. 14 to Sept. 30

2.3	13	3.5	112
2.7	43	4.0	164
3.1	76		

Note.- Same as preceding table above 4.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	60	78	250	255	299	446	112	55	24	27	13
2	20	140	78	501	214	464	412	117	48	22	24	12
3	21	73	78	330	201	655	330	176	45	21	21	12
4	21	52	78	214	255	690	299	188	44	20	19	12
5	22	50	73	164	346	597	269	284	42	19	17	31
6	21	52	78	146	378	690	255	153	43	19	17	107
7	22	60	78	129	446	1,100	241	122	45	18	16	63
8	23	102	112	123	574	800	227	107	41	17	16	55
9	28	73	107	118	690	482	214	103	41	16	16	45
10	34	164	102	112	845	412	227	103	37	19	17	42
11	32	146	102	107	2,340	378	330	89	36	19	20	38
12	30	118	102	118	3,020	330	201	80	33	24	24	36
13	28	92	92	330	8,830	284	330	80	31	24	33	34
14	27	69	97	330	4,890	269	1,250	76	29	25	39	33
15	26	371	330	241	2,120	269	1,080	71	39	25	35	31
16	26	346	544	188	998	1,510	464	71	149	27	30	29
17	26	176	464	176	574	3,400	362	63	127	27	25	26
18	26	129	284	152	501	1,070	314	63	63	63	21	24
19	26	140	188	146	446	597	284	59	59	80	19	24
20	28	118	164	146	521	482	269	59	51	75	18	24
21	28	102	146	152	482	412	227	55	48	65	17	23
22	29	102	129	152	464	378	214	55	41	55	16	22
23	28	107	123	140	412	539	188	51	37	50	16	23
24	28	129	112	123	362	558	176	50	34	45	16	22
25	27	123	107	123	362	395	153	49	31	40	16	21
26	28	107	102	123	362	446	142	48	30	35	16	21
27	29	97	97	152	330	446	132	46	36	35	17	24
28	30	92	92	164	269	429	127	55	30	34	15	51
29	31	82	92	188	269	362	122	112	27	33	13	80
30	30	82	92	227	-	346	117	76	25	32	13	51
31	42	-	92	284	-	544	-	67	-	29	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	835	42	18	26.9	0.224	0.26
November	3,554	371	50	118	.983	1.10
December	4,413	544	73	142	1.18	1.37
Calendar year 1947	72,239	3,100	14	198	1.65	22.38
January	5,849	501	107	189	1.58	1.81
February	31,756	8,830	201	1,095	9.12	9.84
March	19,633	3,400	269	633	5.28	6.08
April	9,402	1,250	117	313	2.61	2.91
May	2,840	824	46	91.6	.763	.88
June	1,397	149	25	46.6	.388	.43
July	1,037	80	16	33.5	.279	.32
August	623	39	13	20.1	.167	.19
September	1,029	107	12	34.3	.286	.32
Water year 1947-48	82,368	8,830	12	225	1.88	25.51

Note.- No gage-height record Jan. 1, July 19-21, 23-29, July 31 to Aug. 7, Aug. 9-24; discharge computed on basis of records for station near Smithville.

Bull Mountain Creek near Smithville, Miss.

Location.- Wire-weight gage, lat. 34°05', long. 88°24', in SE¼ sec. 30, T. 11 S., R. 9 E. Chickasaw meridian, at bridge on State Highway 25, 0.8 mile upstream from Mississippian Railway bridge, 1.1 miles north of Smithville, and 3½ miles upstream from mouth. Datum of gage is 234.81 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 335 square miles (authority, Corps of Engineers).

Records available.- October 1940 to September 1948.

Extremes.- Maximum discharge during year, 24,800 second-feet Feb. 13 (gage height, 15.25 feet); minimum not determined, occurred during period of doubtful gage-height record.

1940-48: Maximum discharge, that of Feb. 13, 1948; minimum daily, 19 second-feet Aug. 28 to Sept. 3, 1943, occurred during period of doubtful gage-height record.

Remarks.- Records fair except those for periods of doubtful or no gage-height record, which are poor. Gage read twice daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 18

1.8	38	6.0	650	11.0	4,010
2.0	53	7.0	944	12.0	6,000
2.6	105	8.0	1,320	12.5	7,310
3.2	169	9.2	1,860	13.0	9,100
3.8	252	9.6	2,120	13.5	11,600
5.0	448	10.0	2,500	14.0	14,900
5.6	560	10.5	3,180	14.6	19,500

Mar. 19 to Sept. 30

2.1	41	4.0	269
2.5	71	4.8	409
3.0	118	5.6	560
3.5	187		

Note.- Same as preceding table above 5.6 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	100	169	500	560	581	1,560	219	130	63	67	47
2	40	115	146	900	521	701	1,660	235	112	59	63	45
3	39	364	252	920	484	1,240	1,660	235	102	59	59	47
4	48	194	169	700	484	1,610	978	373	97	59	55	40
5	50	115	169	470	603	1,610	626	320	92	59	55	112
6	48	100	169	350	846	2,200	603	303	88	59	51	102
7	47	169	169	316	978	2,120	581	320	92	55	51	150
8	46	194	181	300	1,560	2,050	540	303	83	55	48	269
9	50	157	221	284	1,560	2,120	520	269	97	51	51	102
10	46	130	236	252	1,990	1,860	560	219	92	55	51	88
11	51	181	221	252	2,760	1,360	728	203	83	55	51	79
12	57	221	221	380	5,330	815	701	187	63	55	55	88
13	57	348	194	502	14,400	603	911	235	83	59	55	75
14	50	560	252	815	19,600	540	1,480	195	75	67	51	67
15	65	626	448	785	10,900	521	1,760	179	71	71	55	67
15	57	701	950	466	5,300	878	2,050	164	112	67	63	59
17	47	626	1,100	380	3,140	1,980	1,610	150	172	67	83	51
18	50	414	900	348	2,200	4,100	978	143	303	67	107	51
19	50	348	650	316	1,480	3,900	815	130	164	80	88	55
20	49	284	521	316	1,240	2,000	675	124	136	110	63	51
21	47	236	364	316	1,120	1,610	463	118	112	100	55	51
22	45	221	310	316	1,080	1,400	427	112	102	71	51	51
23	44	221	250	284	1,050	1,200	391	112	88	70	48	48
24	43	252	230	252	978	1,010	320	107	83	67	51	48
25	41	348	220	268	815	950	337	107	75	59	51	47
26	40	252	220	300	756	920	320	102	75	75	48	48
27	39	221	210	397	701	920	303	97	75	124	48	48
28	38	207	210	502	675	911	286	112	75	164	47	55
29	49	194	205	502	603	756	269	143	83	235	55	97
30	87	181	205	502	-	650	252	235	71	97	48	136
31	87	-	210	560	-	1,320	-	157	-	71	51	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,547	87	38	49.9	0.149	0.17
November	8,280	701	100	276	.824	.92
December	9,972	1,100	146	322	.961	1.10
Calendar year 1947	187,935	8,350	38	515	1.54	20.86
January	13,751	920	252	444	1.33	1.53
February	83,714	19,600	484	2,887	8.62	9.29
March	44,436	4,100	521	1,433	4.28	4.93
April	24,364	2,050	252	812	2.42	2.70
May	5,908	373	97	191	.570	.66
June	3,106	303	71	104	.310	.34
July	2,405	235	51	77.6	.232	.27
August	1,775	107	47	57.3	.171	.20
September	2,274	269	40	75.8	.226	.25
Water year 1947-48	201,532	19,600	38	551	1.64	22.36

Note.- Doubtful or no gage-height record Oct. 1, 2, 19-26, Nov. 1, Dec. 16-18, Dec. 22 to Jan. 6, Mar. 18-20, 23, 25-27, July 19-21, 23; discharge computed on basis of records for station at Tremont.

West Fork Tombigbee River near Nettleton, Miss.

Location.- Water-stage recorder and wire-weight gage, lat. 34°03'32", long. 88°37'40", in NW¼ sec. 12, T. 12 S., R. 6 E. Chickasaw meridian, at bridge on U. S. Highway 45, 1.9 miles downstream from Tallabinnela Creek, 2 miles downstream from Tubbalubba Creek, and 2.1 miles south of Nettleton. Datum of gage is 194.01 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 1, 1947, at datum 10.0 feet higher.

Drainage area.- 617 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 56,300 second-feet Feb. 14 (gage height, 30.74 feet); minimum observed, 5.9 second-feet Sept. 24 (gage height, 6.29 feet).

1939-48: Maximum discharge, that of Feb. 14, 1948; maximum gage height, 31.18 feet Mar. 28, 1944, present datum; minimum discharge observed, 0.8 second-foot Sept. 14, 15, 1942; minimum gage height observed, that of Sept. 24, 1948.

Flood of Dec. 24, 1926, reached a stage of 32.5 feet, present datum, from floodmark.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Wire-weight gage read twice daily and used when stage was below intakes.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 6, May 8-21)

Oct. 1 to Mar. 6

7.0	10	10.8	458	25.4	9,560
7.4	23	11.6	678	26.4	11,800
7.8	43	12.8	1,100	27.4	16,300
8.2	71	15.0	1,940	28.4	23,800
8.8	127	18.0	3,380	29.4	34,600
9.4	197	21.0	5,300	30.0	43,000
10.0	290	24.0	7,860		

Mar. 7 to Sept. 30

6.4	7.0	10.0	331	24.0	9,000
6.6	11	11.0	572	26.0	12,600
7.0	25	12.0	892	27.0	15,800
7.4	45	13.0	1,270	28.0	21,000
7.8	73	16.0	2,600	28.7	26,800
8.2	107	19.0	4,400		
9.0	187	22.0	6,800		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	230	71	4,230	1,170	533	7,680	176	26	32	20	12
2	11	167	71	3,000	588	5,030	1,760	192	24	29	18	10
3	12	59	67	846	1,130	5,540	823	352	22	27	18	10
4	12	32	67	423	2,180	3,480	631	268	20	25	16	200
5	13	348	71	290	3,200	1,280	530	247	19	22	16	1,060
6	14	136	63	232	3,500	6,910	504	830	18	21	16	400
7	13	304	63	197	3,300	9,300	442	650	18	21	16	160
8	18	365	152	184	7,560	2,940	385	222	17	19	18	80
9	21	107	161	178	6,940	1,270	407	176	17	17	40	40
10	15	92	218	166	2,440	964	1,330	145	16	17	100	30
11	14	743	234	154	2,990	756	2,230	140	16	17	80	20
12	13	293	122	166	15,800	572	772	487	16	17	25	16
13	12	197	107	2,690	43,200	478	4,930	276	16	25	40	12
14	11	417	102	823	38,300	442	13,400	150	15	58	60	255
15	11	4,280	3,740	309	12,000	419	5,690	120	15	69	40	48
16	10	981	6,500	263	3,160	7,180	1,390	107	300	85	140	25
17	10	281	2,320	318	1,680	26,800	892	89	559	88	200	19
18	10	267	678	255	1,170	9,930	661	77	350	100	50	14
19	11	259	412	203	916	2,050	530	65	250	1,060	25	12
20	14	154	299	263	2,090	1,230	454	61	250	159	20	11
21	14	127	247	687	1,320	928	385	58	613	70	20	9.8
22	13	117	210	533	2,470	2,160	352	52	93	35	18	9.8
23	12	342	190	310	1,060	4,960	293	48	48	28	16	8.8
24	12	446	172	200	881	1,870	261	45	39	25	16	6.7
25	12	203	154	180	1,360	964	247	42	34	40	14	6.7
26	12	138	143	160	1,740	772	234	38	39	150	14	7.8
27	15	112	132	1,370	1,980	772	222	36	233	267	50	73
28	18	97	127	1,320	1,550	517	204	34	74	60	40	130
29	15	83	122	458	777	430	187	32	48	28	23	261
30	14	75	122	664	-	396	176	30	77	25	18	73
31	21	-	117	1,440	-	6,740	-	23	-	20	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	415	21	10	13.4	0.022	0.03
November	11,452	4,280	32	382	.619	.69
December	17,254	6,500	63	557	.903	1.04
Calendar year 1947	322,187	17,500	10	883	1.43	19.42
January	22,512	4,230	154	726	1.18	1.36
February	166,452	43,200	588	5,740	9.30	10.0
March	107,613	26,800	396	3,471	5.63	6.49
April	48,002	13,400	176	1,600	2.59	2.89
May	5,268	830	23	170	.276	.32
June	3,282	613	15	109	.177	.20
July	2,656	1,060	17	85.7	.139	.16
August	1,203	200	14	38.8	.063	.07
September	3,020.6	1,060	6.7	101	.164	.18
Water year 1947-48	389,129.6	43,200	6.7	1,063	1.72	23.43

Peak discharge (base, 15,000 sec.-ft.).- Feb. 14 (12:30 a.m.) 56,300 sec.-ft.; Mar. 17 (1:30 a.m.) 31,000 sec.-ft.; Apr. 14 (10 a.m.) 15,000 sec.-ft.

Note.- No gage-height record Jan. 23-26, May 22 to June 16, June 18-20, July 21, 22, 25, 26, July 30 to Sept. 4, Sept. 6-13; discharge computed on basis of records for nearby stations. Intakes inoperative below a discharge of about 270 second-feet; discharge computed on basis of outside gage readings.

Buttahatchee River near Hamilton, Ala.

Location.- Water-stage recorder, lat. 34°03', long. 88°01', in sec. 4, T. 12 S., R. 14 W., at Stuck Springs, three-quarters of a mile downstream from county line, 7 miles downstream from Woods Creek, and 7 miles south of Hamilton. Datum of gage is 333.84 feet above mean sea level, datum of 1929, supplementary adjustment of 1944 (Corps of Engineers bench mark).

Drainage area.- 308 square miles.

Records available.- October 1941 to September 1948.

Extremes.- Maximum discharge during year, 17,300 second-feet Feb. 12 (gage height, 26.1 feet); minimum, 39 second-feet Sept. 27.
1941-48: Maximum discharge, 21,300 second-feet Jan. 8, 1946 (gage height, 27.77 feet); minimum, 22 second-feet Aug. 28, 1943.

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	149	113	723	540	609	k2,200	262	109	119	79	46
2	55	187	112	540	451	k1,870	1,370	272	98	82	68	44
3	56	113	110	336	403	2,290	1,050	302	97	70	82	41
4	54	94	109	292	451	1,970	900	272	94	63	144	47
5	54	245	124	252	652	1,340	900	246	94	62	86	171
6	55	176	142	227	841	k3,090	870	286	93	59	69	131
7	54	191	125	210	k1,250	k3,390	754	292	106	58	65	98
8	58	242	296	198	3,800	1,830	696	244	107	62	63	74
9	64	134	302	196	2,690	1,370	1,600	220	91	56	66	68
10	65	113	250	189	2,290	1,110	1,210	205	83	61	66	170
11	62	163	242	170	1,860	930	1,310	191	78	65	67	97
12	69	158	209	171	k9,980	783	990	218	78	74	71	73
13	60	124	185	272	11,000	710	k1,390	451	75	73	66	64
14	58	176	170	252	k7,800	682	2,170	246	73	93	62	63
15	55	1,200	k1,180	207	a4,000	624	1,400	207	74	109	75	60
16	54	336	k1,290	200	a2,500	k2,130	1,050	183	195	189	150	56
17	54	212	581	196	a1,700	k2,200	841	173	392	380	172	52
18	55	183	415	168	1,270	1,310	710	159	182	569	86	49
19	56	192	335	178	1,080	1,050	595	152	120	161	70	49
20	57	163	292	192	1,080	900	527	141	105	128	63	49
21	57	146	252	214	960	783	476	136	93	156	57	49
22	55	138	233	227	1,020	k2,490	451	133	87	98	52	47
23	54	170	216	201	900	k4,820	403	124	83	87	49	46
24	54	191	200	180	841	k1,970	380	119	80	87	47	43
25	55	147	183	185	870	1,340	357	124	77	85	55	42
26	56	146	176	183	812	1,140	335	119	74	159	59	42
27	73	134	168	302	783	2,480	324	113	74	342	59	47
28	116	128	161	427	725	1,400	302	203	73	192	48	158
29	86	122	158	357	667	1,080	282	171	64	109	50	146
30	72	114	154	451	-	930	272	147	134	95	63	97
31	71	-	154	609	-	k5,120	-	125	-	119	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,898	116	54	61.2	0.199	0.23
November	5,987	1,200	94	200	.649	.72
December	8,637	1,290	109	279	.906	1.04
Calendar year 1947	204,484	8,330	48	560	1.82	24.68
January	8,505	723	168	274	.890	1.03
February	63,216	11,000	403	2,180	7.08	7.63
March	53,741	5,120	609	1,734	5.63	6.49
April	26,115	2,200	272	870	2.82	3.15
May	6,236	451	113	201	.653	.75
June	3,183	392	64	106	.344	.38
July	4,062	569	56	131	.425	.49
August	2,258	172	47	72.8	.236	.27
September	2,219	171	41	74.0	.240	.27
Water year 1947-48	186,057	11,000	41	508	1.65	22.45

Peak discharge (base, 7,000 sec.-ft.).- Feb. 12 (10:30 a.m.) 17,300 sec.-ft.
a No gage-height record; discharge computed on basis of records for station near Sulligent.
k Computed by using rate of change of stage as a factor.

Buttahatchee River near Sulligent, Ala.

Location.- Wire-weight gage, lat. 33°55', long. 88°09', in NE¼ sec. 19, T. 13 S., R. 15 W., at bridge on county road, 1 mile upstream from Bogue Creek, 1½ miles northwest of Sulligent, and 2 miles downstream from Beaver Creek. Datum of gage is 287.58 feet above mean sea level, datum of 1929, supplementary adjustment of 1941.

Drainage area.- 460 square miles.

Records available.- March 1939 to September 1948.

Extremes.- Maximum discharge during year, 25,400 second feet Feb. 13 (gage height, 15.1 feet), from graph based on gage readings; minimum observed, 66 second-feet Sept. 26 (gage height, 2.50 feet).

1939-48: Maximum discharge, 33,000 second-feet Jan. 8, 1946 (gage height, 15.5 feet, from graph based on gage readings); minimum observed, 44 second-feet Aug. 29, 1943 (gage height, 2.42 feet).

Remarks.- Records fair except those for periods of doubtful gage-height record, which are poor. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 31						Apr. 1 to Sept. 30	
2.7	79	10.0	1,540	13.8	4,200	2.5	66
3.0	116	12.0	2,150	13.9	4,900	3.5	196
3.5	187	12.5	2,370	14.0	6,000	5.0	422
5.0	422	13.0	2,700	14.2	9,200		
6.5	693	13.5	3,300	15.0	23,600		
8.0	1,030	13.7	3,800				

Note.- Same as preceding table above 5.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	d230	d200	d700	865	820	5,670	422	210	176	150	81
2	97	d300	d190	d1,100	734	1,470	3,150	422	182	162	124	74
3	91	d260	d190	d800	634	3,210	2,010	422	176	130	124	70
4	91	217	d200	d540	634	3,500	1,540	456	176	117	156	71
5	91	390	d220	d450	1,010	3,500	1,400	390	169	110	162	162
6	91	422	d240	d410	1,260	3,000	1,560	422	169	104	130	297
7	85	560	d230	d380	1,540	4,000	1,330	542	169	110	110	182
8	110	542	d450	d360	3,090	4,270	1,130	406	182	104	104	130
9	122	d400	d530	d350	5,450	2,940	1,540	358	169	104	104	110
10	122	d260	d450	d340	4,760	2,010	1,950	327	169	104	110	124
11	110	d280	d420	326	4,000	1,620	2,110	312	143	104	110	238
12	110	262	374	294	6,900	1,330	1,800	297	136	117	110	130
13	110	217	358	456	22,700	1,130	1,510	653	130	130	117	110
14	103	217	342	490	18,100	1,030	2,760	507	130	136	104	104
15	97	781	560	374	8,010	958	3,000	358	130	252	124	98
16	91	d1,200	1,870	342	4,340	1,080	2,150	312	182	238	169	98
17	97	615	2,040	342	2,940	3,220	1,510	297	569	539	196	87
18	97	d400	1,540	326	2,160	3,020	1,230	267	473	695	169	82
19	103	d340	1,060	310	1,740	1,830	1,060	252	252	469	124	79
20	97	d350	820	326	1,510	1,510	911	238	196	238	110	78
21	97	d260	634	358	1,480	1,260	820	224	176	196	104	77
22	97	d240	542	422	1,460	1,370	755	224	162	196	91	76
23	91	d270	422	358	1,330	4,230	693	210	156	150	87	76
24	85	d300	406	326	1,160	5,560	634	210	143	135	84	73
25	85	d250	390	326	1,230	3,150	596	210	136	130	87	72
26	91	d240	374	310	1,160	2,480	560	210	130	124	91	67
27	d120	d230	358	374	1,060	2,490	560	196	143	519	98	68
28	d160	d220	342	374	1,010	3,000	524	267	130	374	88	130
29	d200	d210	326	673	911	2,020	473	390	130	224	82	267
30	d140	d200	326	634	-	1,430	439	312	124	176	82	182
31	d130	-	342	842	-	2,110	-	238	-	156	87	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,308	200	85	107	0.233	0.27
November	10,663	1,200	200	355	.772	.86
December	16,746	2,040	190	540	1.17	1.35
Calendar year 1947	320,225	11,100	85	877	1.91	25.89
January	14,013	1,100	294	452	.983	1.13
February	103,178	22,700	634	3,558	7.73	8.34
March	74,548	5,560	820	2,405	5.23	6.03
April	45,375	5,670	439	1,512	3.29	3.67
May	10,351	653	196	334	.726	.84
June	5,542	569	124	185	.402	.45
July	6,520	695	104	210	.457	.53
August	3,588	196	82	116	.252	.29
September	3,493	297	67	116	.252	.28
Water year 1947-48	297,325	22,700	67	812	1.77	24.04

Peak discharge (base, 4,000 sec.-ft.).- Feb. 13 (8 p.m.) 25,400 sec.-ft.; Mar. 5 (4 p.m.) 4,200 sec.-ft.; Mar. 8 (8 a.m.) 4,900 sec.-ft.; Mar. 17 (9 p.m.) 4,000 sec.-ft.; Mar. 23 (12 p.m.) 7,350 sec.-ft.; Apr. 1 (12 m.) 6,750 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of records for station near Hamilton.

Buttahatchee River near Caledonia, Miss.

Location.- Wire-weight gage, lat. 33°42'10", long. 88°20'50", in SW¼ sec. 5, T. 16 S., R. 17 W. Huntsville meridian, at bridge on county road 600 feet downstream from Elbethel Creek, 2 miles northwest of Caledonia, 2 miles upstream from Dry Creek, 16 miles north of Columbus, and 19 miles upstream from mouth. Datum of gage is 198.59 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 823 square miles (authority, Corps of Engineers).

Records available.- August 1928 to May 1932, February 1939 to September 1948.

Average discharge.- 12 years, 1,085 second-feet.

Extremes.- Maximum discharge observed during year, 24,200 second-feet Feb. 15 (gage height, 17.50 feet); minimum not determined, occurred during period of doubtful gage-height record.

1928-32, 1939-48: Maximum discharge observed, 30,700 second-feet Mar. 30, 1944; maximum gage height observed, 17.62 feet Jan. 9, 1946; minimum discharge observed, 79 second-feet Aug. 28, 29, 1943 (gage height, 1.74 feet).

Flood in July 1916 reached a stage about 5 feet higher than that of Jan. 9, 1946, from information by local residents.

Remarks.- Records fair except those for periods of doubtful or no gage-height record, which are poor.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.2	146	7.5	2,190	14.0	9,700
3.0	306	9.0	3,120	15.0	13,300
4.0	549	10.0	3,900	17.0	21,700
5.0	900	12.0	6,040		
6.0	1,360	13.0	7,510		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a160	a350	397	780	1,570	2,070	3,560	609	306	284	263	164
2	a160	a500	397	1,120	1,570	2,430	4,270	578	306	252	263	a160
3	a162	397	397	1,730	1,260	2,860	5,910	609	284	242	242	a150
4	a162	397	397	1,410	1,210	3,260	5,320	609	284	212	263	a140
5	a164	397	397	1,170	1,360	4,170	4,080	609	263	212	232	306
6	a164	397	397	940	1,510	4,570	3,560	609	252	212	192	306
7	164	445	445	780	2,190	4,880	3,260	609	263	202	164	284
8	183	496	522	674	2,860	5,430	2,730	578	252	192	146	263
9	183	496	674	674	3,640	6,170	2,370	549	252	192	192	263
10	202	496	940	641	4,470	6,300	2,610	549	252	192	192	222
11	212	a430	990	609	6,440	5,100	2,930	549	242	183	192	212
12	202	a450	708	609	8,290	3,990	2,930	549	232	202	164	202
13	192	470	743	820	8,740	3,190	2,670	578	222	a190	212	202
14	202	496	609	900	18,100	2,670	2,370	549	222	183	252	192
15	212	609	900	780	23,200	2,430	2,430	522	263	242	306	192
16	183	1,030	1,360	743	17,700	2,310	2,930	496	284	328	252	183
17	183	1,680	1,900	674	10,000	2,430	3,640	445	397	306	306	173
18	183	1,460	2,430	578	6,720	2,550	3,560	421	743	743	263	173
19	183	900	2,370	578	5,210	3,260	3,120	397	900	708	232	164
20	183	470	2,010	549	4,270	4,570	2,490	374	306	674	212	164
21	183	522	1,790	674	3,560	4,170	1,950	351	306	609	192	164
22	173	496	940	743	3,060	3,720	1,510	328	306	674	183	155
23	164	496	820	674	2,860	2,990	1,310	328	306	328	183	155
24	164	578	743	708	2,800	2,990	1,260	328	306	252	183	146
25	164	780	674	780	2,610	3,120	1,080	306	306	a230	192	146
26	173	549	609	860	2,490	3,330	900	306	306	a280	212	146
27	192	496	578	990	2,370	3,990	860	306	306	a450	a210	155
28	222	470	549	1,030	2,250	4,270	820	306	306	641	a180	155
29	242	445	549	1,360	2,010	3,900	743	306	306	a680	a170	173
30	263	421	522	1,410	-	3,810	641	306	306	a550	a180	183
31	173	-	522	1,410	-	4,370	-	306	-	a400	a180	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,752	263	160	186	0.226	0.26
November	17,619	1,680	350	587	.713	.79
December	27,279	2,430	397	880	1.07	1.23
Calendar year 1947	504,859	12,500	160	1,383	1.68	22.79
January	27,398	1,730	549	884	1.07	1.24
February	154,320	23,200	1,210	5,321	6.47	6.97
March	115,300	6,300	2,070	3,719	4.52	5.21
April	77,814	5,910	641	2,594	3.15	3.52
May	14,265	609	306	460	.559	.64
June	9,585	900	222	320	.389	.43
July	11,045	743	183	356	.433	.50
August	6,605	306	146	213	.259	.30
September	5,693	306	140	190	.230	.26
Water year 1947-48	472,675	23,200	140	1,291	1.57	21.35

a Doubtful or no gage-height record; discharge computed on basis of records for stations in adjacent basins.

Tibbee River near Tibbee, Miss.

Location.- Water-stage recorder, lat. 33°32'17", long. 88°38'00", in SW¼ sec. 4, T. 19 N., R. 16 E. Choctaw meridian, at bridge on old State Highway 25, 560 feet upstream from Gulf, Mobile & Ohio Railroad bridge, 0.7 mile north of Tibbee, 4½ miles upstream from Magee Creek, 5 miles south of West Point, and 9¾ miles upstream from Catalpa Creek. Datum of gage is 154.07 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 928 square miles.

Records available.- August 1928 to August 1930, November 1939 to September 1948.

Extremes.- Maximum discharge during year, 48,900 second-feet Feb. 14 (gage height, 28.49 feet); minimum, 0.1 second-foot Oct. 20-26.

1928-30, 1939-48: Maximum discharge, 49,700 second-feet July 4, 1940; maximum gage height, 29.16 feet July 4, 1940; no flow at times.

Maximum stage known, 31.5 feet in December 1926, from information by local residents.

Remarks.- Records good except those below 10 second-feet, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 3, Feb. 16-20)

Oct. 1 to Mar. 8						Mar. 9 to Sept. 30					
1.1	0.1	3.3	170	23.5	9,400	0.8	.2	2.0	51	14.0	2,820
1.2	.2	4.1	288	24.5	13,000	.9	.6	2.4	87	17.5	4,480
1.3	1.0	5.5	531	25.5	17,800	1.0	1.7	3.0	156	21.0	6,700
1.4	4.2	8.5	1,130	26.5	24,500	1.1	4.1	4.5	370	22.5	8,380
1.6	13	13.0	2,430	27.5	34,400	1.3	11	6.0	630	24.0	11,500
1.9	30	18.0	4,330	28.2	44,000	1.5	20	8.5	1,150		
2.3	60	20.5	5,720			1.7	31	11.5	1,970		
2.7	98	22.5	7,480								

Discharge, in seocnd-feet, water year Octcber 1947 to September 1948

Day	Oot.	Ncv.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jnne	July	Aug.	Sept.
1	0.2	2.3	46	672	2,770	702	1,310	106	23	8.6	12	0.6
2	.2	2.3	39	1,890	2,670	2,110	2,220	98	18	9.4	7.5	.5
3	.2	6.4	36	2,840	1,620	5,710	3,520	96	15	5.5	4.8	.5
4	.2	43	34	3,100	960	11,200	2,550	91	12	3.6	3.6	2.3
5	.2	25	33	2,070	1,620	12,200	850	86	11	2.2	2.2	163
6	.2	26	34	577	2,670	11,000	1,130	85	11	1.5	1.6	484
7	.3	68	36	328	3,580	13,000	930	98	9.4	1.0	1.3	230
8	.6	217	133	248	5,880	13,800	592	130	8.3	.7	.9	78
9	.4	272	330	204	12,000	11,500	573	98	7.5	.5	.7	38
10	.2	92	588	197	17,800	8,260	1,200	78	7.2	.4	.6	22
11	.2	45	721	197	15,800	4,800	4,070	66	5.8	.4	.5	23
12	.2	210	588	176	13,000	1,740	7,170	59	5.5	.6	.5	26
13	.2	161	320	469	15,800	670	6,230	82	4.8	1.7	.4	15
14	.2	78	190	1,270	44,000	501	5,230	169	4.4	2.2	1.7	15
15	.2	635	1,010	1,500	34,800	450	5,170	115	4.4	1.4	104	19
16	.2	1,300	2,370	900	17,600	829	4,810	75	4.1	3.5	200	11
17	.2	1,650	4,130	450	8,960	2,620	4,640	57	60	19	630	8.6
18	.2	1,150	4,730	312	5,280	4,990	2,720	48	125	172	910	6.8
19	.2	423	4,530	204	3,730	7,070	730	41	156	355	433	4.1
20	.1	379	2,850	204	2,770	7,170	450	34	151	537	103	2.7
21	.1	226	696	386	2,280	4,370	370	30	67	284	44	1.7
22	.1	138	328	800	2,370	1,520	317	28	38	90	26	1.5
23	.1	117	248	800	2,670	2,060	280	26	37	38	16	.9
24	.1	267	197	531	2,670	4,640	237	25	28	22	12	.6
25	.1	396	164	346	2,280	5,230	216	24	17	15	7.9	.5
26	.1	256	136	304	1,950	4,420	188	22	12	12	5.1	.4
27	.2	156	117	447	1,680	2,220	175	21	11	15	3.6	.5
28	.6	105	106	1,350	1,150	1,580	165	20	17	11	2.4	3.4
29	.6	74	97	2,040	900	1,820	142	20	15	39	1.6	118
30	.6	58	92	2,340	-	970	119	24	15	33	1.0	182
31	.9	-	89	2,370	-	670	-	29	-	18	.8	-

Month	Second-fcct-days	Maximum	Minimum	Msan	Per square mile	Runoff in inchss
Octcber	8.1	0.9	0.1	0.261	0.00028	0.0003
Ncvember	8,578.0	1,650	2.3	286	.308	.34
December	25,018	4,730	33	807	.870	1.00
Calendar year 1947	548,658.9	30,000	.1	1,503	1.62	21.97
January	29,521	3,100	176	952	1.03	1.18
February	231,260	44,000	900	7,974	8.59	9.27
March	149,822	13,800	450	4,833	5.21	6.00
April	58,304	7,170	119	1,943	2.09	2.34
May	1,981	169	20	63.9	.069	.08
June	900.4	156	4.1	30.0	.032	.04
July	1,703.2	537	.4	54.9	.059	.07
Angust	2,538.7	910	.4	81.9	.088	.10
September	1,459.6	484	.4	48.7	.052	.06
Water year 1947-48	511,094.0	44,000	.1	1,396	1.50	20.48

Peak discharge (base, 10,000 sec.-ft.).- Feb. 10 (3 p.m.) 18,400 sec.-ft.; Feb. 14 (3 p.m.) 48,900 sec.-ft.; Mar. 5 (2 a.m.) 13,000 sec.-ft.

Sakatonchee River near West Point, Miss.

Location.- Wire-weight gage, lat. 33°36', long. 88°42', on line between secs. 7 and 18, T. 17 S., R. 6 E., Chickasaw meridian, at bridge on State Highway 10, 3 miles west of West Point and 3½ miles upstream from mouth. Datum of gage is 170.10 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 514 square miles (authority, Corps of Engineers).

Records available.- October 1943 to September 1946, October 1947 to September 1948.

Extremes.- Maximum and minimum discharge during year not determined.
1943-46, 1947-48: Maximum discharge observed, 38,300 second-feet Mar. 29, 1944 (gage height, 21.7 feet); no flow at times.

Remarks.- Records fair except those for periods of doubtful or no gage-height record or backwater from Tibbee River, which are poor. Gage read twice daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	2	29	658	1,800	410	1,510	84	19	8.0	3.0	0.5
2	.1	5	26	1,450	1,000	2,070	2,740	78	16	4.5	1.6	.4
3	.1	23	24	2,320	800	3,900	2,880	78	13	3.5	1.0	.4
4	.1	25	23	2,040	1,400	6,780	944	75	11	2.0	.3	2.0
5	.1	11	25	626	2,300	7,620	430	72	10	2.5	.3	150
6	.2	17	26	236	3,100	7,060	558	69	10	1.3	.3	100
7	.3	60	24	166	4,500	7,060	371	110	8	.7	.3	40
8	.2	72	54	131	7,000	8,920	282	96	7	.3	.3	25
9	.2	66	131	117	12,000	6,280	335	69	6	.3	.3	20
10	.1	103	131	124	9,600	3,340	430	57	5	.3	.3	15
11	.1	138	229	145	8,000	979	1,100	45	4.5	.3	.3	16
12	.1	159	152	317	10,000	513	3,000	42	4.0	.2	.2	12
13	.1	63	110	690	15,000	390	2,500	100	3.5	.3	.2	10
14	.1	100	84	940	22,000	180	2,300	124	3.5	.7	10	11
15	.1	710	c848	662	13,000	145	2,200	78	3.5	.7	100	10
16	.1	1,130	c1,550	335	8,200	576	2,100	54	8.5	19	200	7
17	.1	1,190	c2,250	236	5,700	1,780	1,800	41	145	48	470	4
18	.1	460	c2,880	200	4,000	3,740	1,200	33	117	208	260	3
19	.1	282	c2,230	190	3,500	6,500	500	25	96	299	90	2
20	.1	194	678	400	2,600	3,420	360	23	90	243	50	1
21	.1	124	250	600	2,000	1,230	300	20	20	90	35	.8
22	.1	84	166	600	2,100	662	260	17	15	25	20	.7
23	.1	96	124	500	2,040	2,140	220	19	10	13	11	.4
24	.1	194	100	350	1,600	2,880	190	19	6.0	8.0	7	.2
25	.1	173	90	240	1,180	3,340	160	18	5.0	5	5	.2
26	.1	110	78	140	1,080	2,000	145	17	5.5	5	3	.2
27	.2	84	69	450	830	940	124	17	13	6.0	2	1
28	.4	57	66	1,100	620	1,240	124	17	5.5	20	1	20
29	.4	48	63	1,600	594	830	103	18	16	9.5	.9	60
30	.5	34	60	1,700	-	420	90	26	6.5	7.5	.8	100
31	.5	-	57	1,800	-	602	-	22	-	5	.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5.1	0.5	0.1	0.16	0.00031	0.0004
November	5,814	1,190	2	194	.377	.42
December	12,627	2,880	23	407	.792	.91
Calendar year	-	-	-	-	-	-
January	21,063	2,320	117	679	1.32	1.52
February	147,544	22,000	594	5,088	9.90	10.68
March	87,947	8,920	145	2,837	5.52	6.36
April	29,256	3,000	90	975	1.90	2.12
May	1,573	124	17	50.7	.099	.11
June	683.0	145	3.5	22.8	.044	.05
July	1,036.6	299	.2	33.4	.065	.08
August	1,274.7	470	.2	41.1	.080	.09
September	612.8	150	.2	20.4	.040	.04
Water year 1947-48	309,436.2	22,000	.1	845	1.64	22.38

c Backwater from Tibbee River.

Note.- Doubtful or no gage-height record Oct. 1-7, Oct. 9 to Nov. 2, Dec. 24, Jan. 18 to Feb. 22, Apr. 11-26, June 1-10, 13 July 25, 26, 31, Aug. 5-8, Aug. 12 to Sept. 30; discharge computed on basi of records for Tibbee River near Tibbee.

Luxapalila Creek near Fayette, Ala.

Location.- Water-stage recorder, lat. 33°43', long. 87°52', in SW¼ sec. 26, T. 15 S., R. 13 W., at bridge on State Highway 18, 3 miles northwest of Fayette. Datum of gage is 322.33 feet above mean sea level, datum of 1929, supplementary adjustment of 1944 (levels by Corps of Engineers).

Drainage area.- 127 square miles.

Records available.- May 1945 to September 1948.

Extremes.- Maximum discharge during year, 5,060 second-feet Feb. 12 (gage height, 11.6 feet); minimum, 44 second-feet Sept. 26, 27.

1945-48: Maximum discharge, 9,310 second-feet Jan. 8, 1946 (gage height, 13.57 feet); minimum, 38 second-feet Sept. 10, 1945.

Remarks.- Records fair.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	138	88	450	263	156	369	90	62	57	51	61
2	48	81	88	229	216	1,190	272	90	62	52	48	62
3	48	75	86	177	193	1,270	226	86	62	51	67	63
4	48	71	86	164	312	697	206	86	63	51	67	75
5	71	150	98	154	376	450	374	84	61	48	63	121
6	57	78	97	150	342	1,740	348	103	66	49	50	79
7	55	290	97	141	1,630	a2,500	254	100	61	49	49	72
8	57	114	232	141	2,130	a1,100	206	86	58	49	50	72
9	58	91	169	144	2,490	a560	210	81	57	49	51	211
10	58	86	191	139	1,410	328	402	75	57	51	52	133
11	59	135	169	131	966	269	450	71	57	55	55	81
12	59	97	139	139	3,490	226	287	72	56	54	52	70
13	56	88	126	248	2,490	208	757	72	56	62	50	75
14	52	212	117	184	1,720	203	752	72	56	71	47	75
15	52	737	a200	154	717	206	418	71	57	70	75	70
16	55	175	a700	148	523	746	319	71	91	99	85	70
17	56	128	352	144	407	622	248	71	97	91	79	66
16	55	148	275	133	332	386	200	68	70	345	64	61
19	55	144	231	131	284	325	169	66	64	85	68	58
20	55	115	208	137	287	260	154	66	63	70	64	54
21	54	110	191	182	263	218	143	68	58	63	63	51
22	52	112	182	169	355	1,280	137	64	54	61	62	52
23	52	154	175	144	240	1,350	124	64	58	59	61	49
24	52	143	171	141	234	523	117	64	58	57	62	45
25	54	121	162	173	240	404	121	64	56	55	62	45
26	55	112	154	137	213	468	103	63	57	385	62	45
27	84	103	160	252	198	1,160	107	68	55	296	59	55
28	66	a98	148	332	182	439	98	90	50	98	58	130
29	56	a92	144	237	158	a350	96	94	52	70	59	78
30	56	a90	143	393	-	287	91	70	109	59	59	64
31	64	-	146	369	-	682	-	63	-	61	79	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,747	84	48	56.4	0.444	0.51
November	4,288	737	71	143	1.13	1.26
December	5,515	700	86	178	1.40	1.61
Calendar year 1947	82,871	2,660	48	227	1.79	24.25
January	5,931	450	131	191	1.50	1.74
February	22,661	3,490	518	781	6.15	6.64
March	20,603	2,500	156	665	5.24	6.03
April	7,758	757	91	259	2.04	2.27
May	2,353	103	63	75.9	.598	.69
June	1,883	109	50	62.8	.494	.55
July	2,772	385	48	89.4	.704	.81
August	1,873	85	47	60.4	.476	.55
September	2,243	211	45	74.8	.589	.66
Water year 1947-48	79,627	3,490	45	218	1.72	23.32

Peak discharge (base, 2,500 sec.-ft.).- Feb. 9 (7 p.m.) 3,770 sec.-ft.; Feb. 12 (7 p.m) 5,060 sec.-ft.; Mar. 7 (time unknown) 3,280 sec.-ft.; Mar. 22 (9 p.m.) 3,100 sec.-ft.

a *No gage-height record; discharge computed on basis of recorded range in stage and records for stations on nearby streams.*

Sipsey River near Fayette, Ala.

Location.- Wire-weight gage, lat. 33°40', long. 87°49', in SW¼ sec. 8, T. 16 S., R. 12 W., at bridge on county road, 1 mile southeast of Fayette and 1½ miles downstream from Southern Railroad bridge. Datum of gage is 296.72 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 275 square miles.

Records available.- February 1939 to September 1948.

Extremes.- Maximum discharge during year, 8,800 second-feet Feb. 14 (gage height, 19.1 feet, from graph based on gage readings); minimum observed, 25 second-feet Sept. 27.

1939-48: Maximum discharge observed, 20,000 second-feet Jan. 8, 1946 (gage height, 21.75 feet), from rating curve extended above 10,000 second-feet on basis of records for other stations in Mobile River Basin; minimum observed, 13 second-feet Aug. 26-28, Oct. 11-13, 1943.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 13						Feb. 14 to Sept. 30					
6.3	32	10.0	422	15.5	2,050	6.1	23	10.0	488	16.0	2,520
6.6	45	12.0	810	16.0	2,490	6.5	48	11.5	760	16.5	3,170
7.0	68	13.0	1,020	16.5	3,140	7.0	81	13.0	1,120	17.0	4,030
7.5	107	14.0	1,300	17.0	4,030	7.5	129	14.0	1,400	18.0	6,000
8.0	155	14.5	1,480	18.1	6,200	8.0	187	15.0	1,810	18.7	7,600
9.0	275	15.0	1,730			9.0	326	15.5	2,100		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	68	98	245	910	406	1,160	163	78	a60	51	34
2	34	102	90	550	690	840	1,040	151	74	51	48	29
3	36	86	a90	389	512	1,600	682	151	67	54	51	27
4	36	75	a92	275	439	1,810	556	151	64	44	94	36
5	34	72	94	236	630	1,910	539	140	70	40	61	54
6	68	86	98	212	710	2,330	824	163	61	67	51	67
7	50	145	98	188	880	2,030	781	226	61	51	51	54
8	50	224	135	177	1,790	2,520	645	175	61	40	40	51
9	50	145	212	166	4,760	2,170	556	140	58	37	40	47
10	45	94	301	177	6,200	1,570	627	124	54	44	42	54
11	42	145	288	155	4,600	965	1,120	118	51	40	42	64
12	45	125	249	145	4,220	701	1,020	129	58	45	42	58
13	45	98	212	275	5,210	573	802	239	48	78	39	45
14	40	98	177	405	7,600	488	1,220	281	47	187	42	47
15	40	315	312	301	4,600	454	1,480	175	47	187	48	44
16	40	531	947	249	2,520	471	1,220	134	81	134	81	38
17	42	236	1,150	236	1,760	1,080	781	124	129	94	98	34
16	40	166	570	212	1,140	1,370	591	124	129	89	74	34
19	38	188	358	188	781	940	488	108	113	175	54	30
20	38	166	301	177	682	701	422	98	74	89	48	33
21	38	145	249	224	609	573	358	89	64	67	47	30
22	36	135	212	275	682	522	326	89	58	51	37	29
23	36	135	200	262	682	1,070	296	81	54	47	36	28
24	36	155	188	236	573	1,520	267	78	54	46	34	28
25	42	155	166	224	573	1,760	253	78	54	42	33	31
26	38	145	155	212	556	1,210	226	74	a48	39	31	27
27	50	125	145	249	522	1,120	226	74	44	184	31	30
28	59	116	135	512	505	1,520	200	81	a46	176	37	85
29	42	116	135	630	454	1,440	187	108	a60	89	28	89
30	48	102	125	630	-	869	163	98	a80	61	28	67
31	50	-	125	890	-	760	-	89	-	58	34	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,322	68	34	42.6	0.155	0.18
November	4,494	531	68	150	.545	.61
December	7,707	1,150	90	249	.905	1.04
Calendar year 1947	172,663	6,400	34	473	1.72	23.34
January	9,302	890	145	300	1.09	1.26
February	55,790	7,600	439	1,924	7.00	7.54
March	37,293	2,520	406	1,203	4.37	5.04
April	19,056	1,480	163	635	2.31	2.58
May	4,053	281	74	131	.476	.55
June	1,987	129	44	66.2	.241	.27
July	2,466	187	37	79.5	.289	.33
August	1,473	98	28	47.5	.173	.20
September	1,324	89	27	44.1	.160	.18
Water year 1947-48	146,267	7,600	27	400	1.45	19.78

Peak discharge (base, 2,500 sec.-ft.).- Feb. 9 (9 p.m.) 7,350 sec.-ft.; Feb. 14 (5 a.m.) 8,800 sec.-ft.; Mar. 8 (5 p.m.) 3,020 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations at Moores Bridge and near Elrod.

Sipsey River at Moores Bridge, Ala.

Location.- Wire-weight gage, lat. 33°27', long. 87°46', in NW¼ sec. 35, T. 18 S., R. 12 W., at bridge on county road, 1 mile east of Moores Bridge and 6 miles downstream from Bear Creek. Datum of gage is 240.95 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 406 square miles.

Records available.- February 1939 to September 1948.

Extremes.- Maximum discharge during year, 10,200 second-feet Feb. 15 (gage height, 14.5 feet, from graph based on gage readings); minimum daily, 40 second-feet Sept. 1, 23-26. 1939-48: Maximum discharge, 23,600 second-feet Jan. 10, 1946 (gage height, 16.78 feet, from floodmark); minimum observed, 29 second-feet Oct. 9-13, 1943.

Remarks.- Records good. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 14)

1.1	39	8.0	810	12.5	2,180
2.0	107	9.0	960	12.8	2,720
2.5	152	10.0	1,160	13.1	3,650
3.0	205	11.0	1,440	13.4	4,870
5.0	434	12.0	1,830	14.4	9,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	91	162	293	1,100	784	1,670	260	124	107	124	40
2	44	142	172	484	1,160	892	1,480	249	107	91	84	44
3	49	133	162	596	1,190	1,210	1,670	227	99	76	73	42
4	48	133	162	659	1,160	1,830	1,290	227	88	72	89	45
5	49	133	162	571	1,080	2,070	1,210	205	88	69	89	72
6	49	124	183	446	1,000	2,990	1,100	205	84	61	91	84
7	50	162	162	386	1,040	4,870	980	260	84	69	72	80
8	58	282	194	350	1,410	4,440	1,020	271	80	72	65	72
9	72	282	326	315	2,540	3,480	1,080	271	80	65	63	69
10	69	271	530	304	4,660	4,240	1,100	216	76	58	65	95
11	65	304	709	304	8,200	3,480	1,290	183	72	58	61	88
12	65	350	709	293	7,700	2,320	1,440	282	69	65	61	80
13	65	271	596	374	7,700	1,930	1,630	350	69	105	61	76
14	61	216	434	559	7,700	1,550	1,830	422	69	227	59	69
15	61	386	555	621	9,700	1,210	1,790	350	65	152	59	61
16	58	534	823	609	7,210	960	1,710	271	80	216	183	58
17	58	596	877	509	5,550	849	1,670	227	133	183	216	54
18	61	584	1,000	434	4,030	836	1,670	183	162	152	162	49
19	61	459	1,100	386	2,860	960	1,510	172	152	115	124	48
20	58	374	1,080	362	2,070	1,160	1,160	162	194	183	91	45
21	54	326	892	374	1,750	1,320	863	142	133	142	73	42
22	51	282	646	434	1,510	1,260	709	133	95	95	63	41
23	49	249	496	471	1,260	1,140	596	124	84	80	61	d40
24	48	271	422	484	1,140	1,140	509	115	76	65	59	d40
25	47	271	374	459	1,100	1,210	446	107	76	65	54	40
26	49	260	338	422	1,020	1,320	386	107	72	65	57	d40
27	54	249	304	471	960	1,750	362	107	76	69	49	41
28	80	227	293	646	892	2,070	338	115	69	99	45	72
29	88	205	282	771	836	1,790	304	142	65	227	45	84
30	76	183	282	960	-	1,710	271	152	103	133	45	124
31	69	-	249	1,020	-	1,710	-	142	-	107	d42	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,811	88	44	58.4	0.144	0.17
November	8,350	596	91	278	.685	.76
December	14,676	1,100	162	473	1.17	1.34
Calendar year 1947	274,208	7,190	44	751	1.85	25.10
January	15,367	1,020	293	496	1.22	1.41
February	89,528	9,700	836	3,087	7.60	8.20
March	58,481	4,870	784	1,886	4.65	5.36
April	33,084	1,830	271	1,103	2.72	3.03
May	6,379	422	107	206	.507	.58
June	2,824	194	65	94.1	.232	.26
July	3,343	227	58	108	.266	.31
August	2,487	216	42	80.2	.198	.23
September	1,835	124	40	61.2	.151	.17
Water year 1947-48	238,165	9,700	40	651	1.60	21.82

Peak discharge (base, 4,500 sec.-ft.).- Feb. 15 (8 a.m.) 10,200 sec.-ft.; Mar. 7 (5 p.m.) 5,320 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of records for stations at Fayette and near Elrod.

Sipsey River near Elrod, Ala.

Location.- Water-stage recorder, lat. 33°15', long. 87°46', in NE¼ sec. 3, T. 21 S., R. 12 W., at bridge on U. S. Highway 82, a quarter of a mile upstream from Gulf, Mobile & Ohio Railroad bridge, 1 mile east of Elrod, and 2 miles downstream from Box Creek. Datum of gage is 197.81 feet above mean sea level, datum of 1929, supplementary adjustment of 1944.

Drainage area.- 515 square miles.

Records available.- August 1928 to March 1932, October 1939 to September 1948.

Average discharge.- 12 years (1928-31, 1939-48), 721 second-feet.

Extremes.- Maximum discharge during year, 9,200 second-feet Feb. 16 (gage height, 15.64 feet); minimum, 51 second-feet Sept. 25, 26.
1928-32, 1939-48: Maximum discharge, 18,600 second-feet Jan. 11, 1946 (gage height, 17.76 feet); minimum, 29 second-feet Oct. 3, 1931.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.5	49	6.0	218	11.0	890	14.0	3,090
3.8	62	7.0	312	12.0	1,160	14.5	4,610
4.0	72	8.0	419	12.5	1,410	15.0	6,600
4.5	103	9.0	544	13.0	1,780	15.6	9,000
5.0	139	10.0	694	13.5	2,300		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	117	245	408	1,070	1,130	2,020	342	169	110	131	55
2	65	150	236	557	1,100	1,320	2,120	312	146	120	146	53
3	65	185	222	598	1,130	1,820	2,070	292	131	106	124	55
4	66	181	214	598	1,200	2,180	1,820	282	120	90	146	60
5	66	169	214	613	1,350	2,070	1,610	272	114	84	139	78
6	68	181	218	644	1,410	2,910	1,610	272	106	78	117	106
7	70	201	236	644	1,540	4,090	1,540	292	103	70	117	106
8	77	236	245	570	2,380	4,610	1,410	312	103	72	96	96
9	106	302	322	479	3,450	4,460	1,350	312	100	87	84	90
10	110	312	680	419	3,320	3,450	1,440	302	96	78	84	96
11	96	375	1,100	397	3,610	3,450	2,500	263	90	72	84	146
12	90	455	1,070	375	7,200	3,580	2,240	245	87	72	78	128
13	87	479	985	397	8,000	2,890	2,120	332	84	81	78	103
14	84	419	936	455	8,400	2,500	2,430	375	81	128	78	96
15	84	408	985	518	7,600	2,180	2,430	364	81	201	78	96
16	81	505	1,160	570	8,800	1,920	2,300	375	90	193	90	87
17	81	544	1,130	613	7,200	1,610	2,120	353	150	222	169	78
18	81	570	1,100	628	5,400	1,380	1,970	282	197	209	218	71
19	78	613	1,070	598	4,160	1,200	1,870	236	189	181	185	66
20	78	628	1,040	531	3,320	1,100	1,780	205	177	154	146	61
21	76	584	1,040	479	2,800	1,040	1,690	189	209	177	114	59
22	72	479	1,100	492	2,570	1,100	1,500	177	177	169	90	56
23	70	397	1,130	505	2,240	1,470	1,240	161	128	124	81	55
24	68	375	1,070	531	1,920	1,610	1,070	154	106	100	75	54
25	69	364	936	544	1,690	1,440	890	146	96	84	70	52
26	68	353	729	544	1,540	1,350	729	139	92	78	66	51
27	72	332	544	570	1,410	1,920	584	135	87	106	64	53
28	84	312	455	694	1,290	2,430	492	146	84	124	61	68
29	110	292	408	747	1,200	2,300	419	185	78	139	59	117
30	120	263	375	868	-	2,360	386	193	76	209	57	169
31	106	-	364	1,010	-	2,120	-	185	-	169	57	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,514	120	65	81.1	0.157	0.18
November	10,781	628	117	359	.697	.78
December	21,559	1,160	214	695	1.35	1.56
Calendar year 1947	322,697	6,200	65	884	1.72	23.30
January	17,596	1,010	375	568	1.10	1.27
February	98,300	8,800	1,070	3,390	6.58	7.10
March	68,990	4,610	1,040	2,225	4.32	4.98
April	47,750	2,500	386	1,592	3.09	3.45
May	7,830	375	135	253	.491	.57
June	3,547	209	76	118	.229	.26
July	3,887	222	70	125	.243	.28
August	3,182	218	57	103	.200	.23
September	2,461	169	51	82.0	.159	.18
Water year 1947-48	288,397	8,800	51	788	1.53	20.84

Peak discharge (base, 4,500 sec.-ft.).- Feb. 16 (11 a.m.) 9,200 sec.-ft.; Mar. 8 (11 p.m.) 5,000 sec.-ft.

Sipsey River near Pleasant Ridge, Ala.

Location.- Wire-weight gage, lat. 33°02', long. 88°07', in S½ sec. 20, T. 24 N., R. 1 W., at bridge on State Highway 40, 450 feet downstream from Hughes Creek, 2½ miles northwest of Pleasant Ridge, 6 miles upstream from mouth, and 6 miles south of Aliceville. Datum of gage is 105.13 feet above mean sea level, datum of 1929, supplementary adjustment of 1946. Auxiliary staff gage at Vienna Ferry on Tombigbee River, 2 miles upstream from mouth of Sipsey River, at datum of 23.06 feet lower.

Drainage area.- 766 square miles.

Records available.- February 1939 to September 1948.

Extremes.- Maximum discharge observed during year, 9,050 second-feet Feb. 15; maximum gage height, 23.7 feet Feb. 19, from graph based on gage readings; minimum daily discharge, 50 second-feet Sept. 26, 28.

1939-48: Maximum discharge observed, 15,000 second-feet Jan. 13, 1946; maximum gage height, that of Feb. 19, 1948; minimum daily discharge since Oct. 1, 1943, 46 second-feet Oct. 9-13, 1943; minimum prior to Oct. 1, 1943, not determined.

Remarks.- Records fair. Discharge for periods of backwater from Tombigbee River computed by using fall as determined from twice-daily readings of auxiliary gage as a factor. Gages read twice daily.

Cooperation.- Base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	165	388	843	1,980	2,380	2,590	706	300	134	233	67
2	87	189	343	948	1,740	3,100	3,060	608	280	134	206	70
3	87	206	343	913	1,520	3,470	3,200	577	261	127	181	66
4	87	206	321	843	1,590	3,840	2,970	490	224	157	181	72
5	87	224	300	843	1,590	3,990	2,620	463	206	150	173	81
6	87	224	300	808	1,590	4,870	2,460	518	198	142	173	127
7	81	206	300	808	1,820	5,310	2,460	518	189	134	173	142
8	94	242	321	808	2,930	5,600	2,620	490	181	165	173	134
9	100	261	388	808	3,950	4,930	3,020	463	173	215	150	127
10	134	280	878	774	5,050	4,900	2,700	437	173	206	142	120
11	120	518	1,120	706	5,290	4,860	2,460	437	157	134	134	113
12	142	577	1,230	577	4,950	4,660	2,300	463	142	127	127	113
13	127	547	1,300	673	4,640	4,740	2,490	437	d130	120	120	150
14	113	547	1,270	740	6,250	4,480	3,830	437	d120	127	120	150
15	113	913	1,340	706	8,610	4,320	4,630	437	d120	142	100	142
16	106	983	1,940	673	8,670	3,630	4,080	490	d190	224	165	113
17	106	808	2,180	673	7,080	3,160	3,180	490	d300	280	189	106
18	106	1,050	1,980	706	5,620	2,750	2,850	547	d320	300	189	94
19	106	913	1,710	740	6,920	2,400	2,580	518	d300	280	206	87
20	100	913	1,560	774	7,180	2,180	2,400	365	d280	280	224	87
21	106	843	1,410	808	6,780	2,020	2,220	343	261	233	224	68
22	106	808	1,370	808	6,300	1,840	2,060	321	242	198	181	64
23	113	706	1,270	774	5,640	2,090	1,940	280	261	198	150	61
24	94	706	1,230	740	4,590	2,150	1,820	280	242	181	127	55
25	94	608	1,230	706	3,950	2,060	1,710	261	189	165	150	53
26	87	608	1,230	740	3,390	2,060	1,590	242	173	142	120	50
27	87	490	1,190	1,050	3,130	2,540	1,410	242	150	142	100	55
28	113	463	1,160	1,230	2,440	2,560	1,270	242	142	181	94	50
29	106	437	1,020	1,340	2,600	2,510	948	300	134	157	81	68
30	113	388	808	1,630	-	2,480	843	365	142	206	75	81
31	134	-	640	1,980	-	2,550	-	343	-	198	75	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,223	142	81	104	0.136	0.16
November	16,029	1,050	165	534	.697	.78
December	32,070	2,180	300	1,035	1.35	1.56
Calendar year 1947	467,987	7,210	81	1,282	1.67	22.74
January	27,170	1,980	577	876	1.14	1.32
February	127,790	8,670	1,520	4,407	5.75	6.20
March	104,430	5,600	1,840	3,369	4.40	5.07
April	74,311	4,630	843	2,477	3.23	3.61
May	13,110	706	242	423	.552	.64
June	6,180	320	120	206	.269	.30
July	5,579	300	120	180	.235	.27
August	4,736	233	75	153	.200	.23
September	2,766	150	50	92.2	.120	.13
Water year 1947-48	417,394	8,670	50	1,140	1.49	20.27

Peak discharge (base, 4,500 sec.-ft.).- Feb. 15 (10 p.m.) 9,050 sec.-ft.; Mar. 8 (6 a.m.) 5,730 sec.-ft.; Apr. 15 (6 p.m.) 4,760 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of weather records and records for station near Elrod.

Noxubee River near Brookville, Miss.

Location.- Wire-weight gage, lat. 33°13'30", long. 88°42'10", in center of sec. 19, T. 16 N., R. 16 E. Choctaw meridian, at bridge on county road a quarter of a mile downstream from Shotbag Creek, 3½ miles upstream from Lynn Creek, 4½ miles downstream from Octoc Creek, 5¾ miles upstream from Yellow Creek, and 7 miles west of Brooksville.

Drainage area.- 440 square miles (authority, Corps of Engineers).

Records available.- July 1940 to June 1942, January 1944 to September 1948.

Extremes.- Maximum discharge observed during year, 8,600 second-feet Feb. 15 (gage height, 19.74 feet); minimum observed, 5 second-feet Sept. 27 (gage height, 0.51 foot).
1940-42, 1944-48: Maximum discharge, 18,900 second-feet July 9, 1940 (gage height, 21.4 feet, from graph based on gage readings); minimum observed, 4.3 second-feet Oct. 30 to Nov. 1, 1944 (gage height, 0.52 foot).

Remarks.- Records fair. Gage read once daily.

Cooperation.- Base data collected by Corps of Engineers occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Mar. 6

0.6	6	6.0	405	17.4	2,770
.9	16	8.5	671	18.1	3,650
1.3	33	10.7	1,000	18.6	4,760
1.7	54	14.7	1,820	19.3	6,920
2.4	99	16.0	2,130	19.6	8,100
3.8	202	17.0	2,480		

Mar. 7 to Sept. 30

0.5	5	3.7	227
.8	15	5.5	425
1.2	34	9.0	905
1.6	58	13.0	1,550
2.3	109	16.0	2,130

Note.- Same as preceding table above 16.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	27	54	178	1,000	405	581	117	46	46	109	26
2	10	35	51	445	919	1,230	425	109	40	39	101	26
3	10	43	81	545	780	2,390	354	101	39	28	97	26
4	9	113	92	555	577	3,830	299	97	39	27	86	89
5	10	113	88	385	588	5,900	267	97	31	26	75	529
6	10	113	85	245	634	7,300	321	97	29	22	65	413
7	10	127	81	202	738	6,220	555	101	30	23	58	237
8	11	134	92	178	2,870	5,030	634	101	30	20	55	101
9	11	134	155	162	4,500	5,030	1,250	109	28	18	52	55
10	10	162	281	155	8,100	3,830	1,790	97	28	17	49	35
11	10	162	455	141	8,100	2,770	4,220	86	29	17	49	24
12	11	134	445	127	6,920	2,130	5,310	d76	43	17	49	19
13	12	155	345	162	6,220	1,040	5,600	79	40	19	58	14
14	12	178	210	254	6,920	542	5,900	75	38	22	191	15
15	12	272	466	245	8,100	425	4,500	61	30	26	117	15
16	11	299	1,490	236	6,220	389	3,650	58	20	30	247	13
17	11	405	1,020	194	4,760	845	3,230	61	25	109	746	15
18	11	308	855	162	3,360	995	2,480	58	24	151	438	18
19	11	218	646	148	2,320	1,230	1,840	52	21	218	310	12
20	11	162	485	141	1,430	1,380	875	49	32	125	165	10
21	10	148	365	148	684	1,180	425	49	38	93	97	9
22	10	141	272	236	634	746	332	43	30	36	79	8
23	9	127	245	299	646	802	288	40	31	82	65	7
24	9	127	202	272	658	788	200	38	33	149	58	6
25	8	113	170	263	780	690	182	38	49	157	49	6
26	8	85	170	272	684	718	173	36	43	141	46	6
27	7	92	162	236	622	1,550	157	34	38	209	d33	5
28	10	113	148	345	545	1,640	149	37	35	165	33	26
29	9	99	134	555	455	1,500	141	38	33	133	31	109
30	11	85	127	887	-	1,410	125	39	52	117	28	109
31	25	-	120	987	-	1,010	-	36	-	117	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	329	25	7	10.6	0.024	0.03
November	4,424	405	27	147	.334	.37
December	9,592	1,490	51	309	.702	.81
Calendar year 1947	242,806.2	8,100	7	665	1.51	20.52
January	9,360	987	127	302	.686	.79
February	80,764	8,100	455	2,785	6.33	6.83
March	64,945	7,300	389	2,095	4.76	5.49
April	46,253	5,900	125	1,542	3.50	3.91
May	2,109	117	34	68.0	.155	.18
June	1,024	52	20	34.1	.078	.09
July	2,439	218	17	78.7	.179	.21
August	3,662	746	26	118	.268	.31
September	1,983	529	5	66.1	.150	.17
Water year 1947-48	226,884	8,100	5	620	1.41	19.19

d Doubtful gage-height record; discharge computed on basis of records for station at Macon.

Noxubee River at Macon, Miss.

Location.- Water-stage recorder, lat. 33°06'05", long. 88°33'40", in NE¼ sec. 4, T. 14 N., R. 17 E. Choctaw meridian, at bridge on U. S. Highway 45, in Macon, a quarter of a mile upstream from Cedar Creek, 1 mile downstream from Gulf, Mobile & Ohio Railroad bridge, 1½ miles downstream from Horse Hunters Creek, and 6¼ miles upstream from Running Water Creek. Datum of gage is 142.38 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 812 square miles.

Records available.- August 1928 to May 1932, September 1938 to September 1948.

Average discharge.- 13 years (1928-31, 1938-48), 813 second-feet.

Extremes.- Maximum discharge during year; 12,100 second-feet Mar. 7 (gage height, 28.23 feet); minimum, 43 second-feet Oct. 22-25; minimum gage height, 5.62 feet Oct. 22, 23.

1928-32, 1938-48: Maximum discharge, 25,000 second-feet July 10, 1940; maximum gage height, 30.28 feet July 10, 1940; minimum discharge, 22 second-feet Aug. 25, 26, 1943 (gage height, 4.89 feet).

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 15

5.7	49	9.0	638	23.0	4,170
6.0	77	10.0	882	25.5	5,370
6.4	123	10.8	1,090	26.5	6,400
7.0	218	13.0	1,600	27.0	7,300
7.9	394	19.0	3,010	28.0	10,900

Apr. 16 to Sept. 30

5.9	48	8.1	392
6.3	89	9.0	620
6.9	164	10.0	880
7.5	258	10.8	1,090

Note.- Same as preceding table above 10.8 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	63	136	815	2,400	758	1,260	223	95	79	165	56
2	47	155	114	934	1,780	2,980	782	207	94	91	161	55
3	49	182	97	832	1,400	4,210	638	199	91	80	161	53
4	48	154	108	758	1,210	5,030	546	185	88	69	142	67
5	47	149	133	734	1,280	5,240	501	185	85	61	129	828
6	47	178	137	546	1,310	6,700	468	185	85	58	117	1,840
7	47	196	136	404	1,690	10,900	557	185	79	57	105	1,040
8	48	236	268	342	4,050	9,600	758	192	78	54	94	429
9	48	245	362	322	6,070	6,730	1,330	178	79	53	89	240
10	49	222	1,840	292	9,000	5,800	2,100	178	121	47	90	159
11	49	373	2,050	282	9,000	5,180	2,620	171	113	44	96	125
12	47	373	1,210	263	9,800	4,530	2,590	160	83	66	121	108
13	48	292	615	514	10,000	3,760	3,110	152	81	328	135	91
14	48	290	468	638	9,600	2,300	5,150	157	97	80	154	87
15	47	710	1,710	569	8,200	908	7,300	150	86	52	672	105
16	47	592	2,880	468	7,100	662	6,400	135	79	51	698	94
17	47	501	2,620	425	6,260	710	5,370	133	97	79	828	80
18	45	546	1,780	373	5,900	1,090	4,530	215	93	125	724	74
19	45	479	1,260	322	5,240	1,190	3,820	155	99	207	529	77
20	45	362	1,140	292	4,530	1,350	3,110	125	153	240	404	74
21	44	282	857	446	3,710	1,470	1,580	117	96	192	240	69
22	43	245	546	638	2,300	1,470	659	114	97	156	155	65
23	43	231	425	615	1,400	1,640	517	105	81	121	120	63
24	43	234	362	580	1,310	1,310	429	103	75	123	109	60
25	43	220	332	557	1,580	1,040	356	97	72	185	101	58
26	44	189	312	512	1,510	960	321	97	83	240	87	57
27	48	155	282	934	1,260	3,460	299	95	87	207	77	59
28	48	136	273	2,280	1,090	3,970	310	91	94	268	64	72
29	69	149	254	2,190	908	3,910	268	100	83	321	51	160
30	59	150	245	2,230	-	3,060	240	152	74	207	59	215
31	50	-	236	2,640	-	1,960	-	109	-	178	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,479	69	43	47.7	0.059	0.07
November	8,289	710	63	276	.340	.38
December	23,188	2,880	97	748	.921	1.06
Calendar year 1947	389,249	9,400	43	1,066	1.31	17.82
January	23,747	2,640	263	766	.943	1.09
February	120,888	10,000	908	4,169	5.13	5.54
March	103,878	10,900	662	3,351	4.13	4.76
April	57,919	7,300	240	1,931	2.38	2.65
May	4,650	223	91	150	.185	.21
June	2,718	153	72	90.6	.112	.12
July	4,119	328	44	133	.164	.19
August	6,736	828	51	217	.267	.31
September	6,560	1,840	53	219	.270	.30
Water year 1947-48	364,171	10,900	43	995	1.23	16.68

Peak discharge (base, 5,000 sec.-ft.).- Feb. 13 (3 p.m.) 10,600 sec.-ft.; Mar. 7 (8:30 p.m.) 12,100 sec.-ft.; Apr. 15 (12 m.) 7,900 sec.-ft.

Noxubee River near Geiger, Ala.

Location.- Wire-weight gage, lat. 32°55', long. 88°18', in SE¼ sec. 33, T. 23 N., R. 3 W., at bridge on State Highway 17, half a mile upstream from Woodards Creek, 1 mile upstream from Alabama, Tennessee & Northern Railroad bridge, and 4 miles north of Geiger. Datum of gage is 86.08 feet above mean sea level, datum of 1929, supplementary adjustment of 1946. Water-stage recorder for station at Gainesville on Tombigbee River, 1½ miles downstream from mouth of Noxubee River, is used as auxiliary gage.

Drainage area.- 1,080 square miles.

Records available.- March 1939 to September 1940, July 1944 to September 1948.

Extremes.- Maximum discharge during year, 14,500 second-feet Feb. 16 (gage height, 36.0 feet, from graph based on gage readings); minimum observed, 39 second-feet Sept. 26.
1939-40, 1944-48: Maximum discharge observed, 22,800 second-feet July 10, 1940 (gage height, 41.3 feet, site and datum then in use); minimum daily, 41 second-feet Nov. 8, 1944.

Remarks.- Records fair. Gage read twice daily. Discharge includes flow of Noxubee cutoff channel at bridge on State Highway 17, 1 mile north of gage. Discharge for periods of backwater from Tombigbee River computed using fall as determined from auxiliary gage as a factor.

Cooperation.- Base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	c200	206	708	4,730	2,300	3,470	247	137	123	281	84
2	56	c350	198	1,480	3,830	c4,000	1,770	230	109	130	214	84
3	55	353	182	1,360	2,240	c7,000	1,120	230	96	109	206	56
4	51	230	167	1,030	1,730	9,400	841	a220	96	a97	206	68
5	51	230	160	956	1,830	9,120	638	a210	96	a88	206	198
6	52	167	182	812	2,030	10,300	625	a210	90	a80	198	1,620
7	52	214	190	625	2,210	11,600	652	a210	90	68	160	1,760
8	55	c270	190	450	c5,000	11,400	660	a210	84	62	137	836
9	56	281	411	372	9,120	10,700	1,520	a210	84	62	146	372
10	55	a350	c2,000	372	10,500	10,800	2,670	a200	84	62	146	317
11	56	c900	5,120	353	10,300	10,500	2,580	a190	108	84	160	198
12	57	1,120	3,660	317	9,920	9,200	2,980	a180	123	264	182	198
13	56	513	1,680	410	10,500	8,370	a4,000	167	116	625	214	137
14	52	808	908	671	12,800	7,070	6,300	152	96	214	281	116
15	51	c2,000	c2,200	740	14,200	5,450	7,270	137	96	123	648	152
16	52	c2,000	5,080	648	13,900	2,350	6,950	146	130	a110	980	152
17	52	1,050	5,190	492	12,600	a1,500	6,820	206	230	108	932	146
16	a52	1,290	3,920	450	10,800	1,140	6,820	214	230	198	1,050	a110
19	51	1,170	2,310	391	9,100	1,310	6,260	230	182	c260	740	d90
20	50	764	1,560	372	7,780	1,280	4,870	214	152	281	492	a73
21	49	492	1,340	372	7,280	1,430	3,200	160	335	281	450	73
22	49	391	1,050	830	7,140	1,520	a2,000	160	264	264	372	68
23	49	335	579	a1,000	5,640	2,420	884	152	146	247	281	a66
24	50	335	513	812	3,590	2,890	717	108	109	190	167	a64
25	49	317	391	764	3,370	1,870	450	109	84	198	152	a62
26	54	299	372	812	2,990	1,480	450	108	160	230	146	a62
27	63	247	372	1,460	2,380	c3,500	299	96	137	353	a130	a65
28	61	214	372	3,590	1,810	6,260	317	116	90	450	a120	73
29	61	198	353	4,300	1,660	6,300	299	109	90	353	a100	78
30	68	190	335	4,560	-	5,660	299	108	96	391	84	a150
31	116	-	317	5,040	-	4,860	-	152	-	372	73	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,739	116	49	56.1	0.052	0.06
November	17,278	2,000	167	576	.533	.59
December	41,508	5,090	160	1,339	1.24	1.43
Calendar year 1947	620,630	11,600	49	1,700	1.57	21.38
January	36,549	5,040	317	1,179	1.09	1.26
February	190,980	14,200	1,660	6,586	6.10	6.58
March	172,980	11,600	1,140	5,580	5.17	5.96
April	77,731	7,270	299	2,591	2.40	2.68
May	5,391	247	96	174	.161	.19
June	3,940	335	84	131	.121	.14
July	6,477	625	62	209	.194	.22
August	9,654	1,050	73	311	.288	.33
September	7,528	1,760	62	251	.232	.26
Water year 1947-48	571,755	14,200	49	1,562	1.45	19.70

Peak discharge (base, 12,000 sec.-ft.).- Feb. 16 (1 a.m.) 14,500 sec.-ft.

a Doubtful or no gage-height record; discharge computed on basis of records for station at Macon, Miss.

c Backwater from tributary inflow; discharge computed on basis of 3 discharge measurements, weather records, and records for station at Macon, Miss.

Mulberry Fork near Garden City, Ala.

Location.- Water-stage recorder, lat. 34°00', long. 86°45', in NE¼ sec. 16, T. 12 S., R. 2 W., at bridge on U. S. Highway 31, 1,000 feet downstream from Louisville & Nashville Railroad bridge, 1 mile southwest of Garden City, and 5½ miles downstream from Mud Creek. Datum of gage is 380.54 feet above mean sea level, datum of 1929.

Drainage area.- 365 square miles.

Records available.- June 1928 to September 1948.

Average discharge.- 19 years (1929-48), 619 second-feet.

Extremes.- Maximum discharge during year, 27,700 second-feet Feb. 12 (gage height, 17.9 feet); minimum, 3.7 second-feet Sept. 26 (gage height, 1.95 feet).

1928-48: 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 good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 24 to Sept. 30)

1.9	3.7	2.7	71	6.0	1,920
2.0	6.8	3.0	133	7.0	3,060
2.1	11	3.5	276	8.0	4,600
2.2	16	4.0	500	9.0	6,400
2.3	24	4.5	750	11.0	10,700
2.5	43	5.0	1,070	14.0	17,700

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	26	89	802	1,630	550	1,590	176	70	104	28	12
2	6.8	43	84	625	1,290	1,850	2,180	168	53	58	23	18
3	7.2	43	80	360	1,070	1,540	1,290	190	43	39	640	12
4	8.0	30	78	302	1,040	1,370	1,040	249	39	32	255	10
5	991	143	82	269	1,100	1,100	1,620	190	33	26	513	12
6	276	153	84	242	1,210	2,500	2,380	204	31	22	143	9.6
7	89	122	97	227	3,290	3,060	2,230	276	29	19	73	8.4
8	46	179	126	212	9,580	2,020	1,450	190	26	16	47	8.0
9	31	89	171	204	8,250	1,580	2,900	150	22	14	39	8.4
10	24	65	298	195	6,210	1,290	1,370	126	22	15	34	9.6
11	19	215	334	176	4,030	1,070	1,180	115	19	18	114	12
12	16	181	269	185	16,800	870	960	202	18	18	65	19
13	14	119	230	675	10,900	750	1,990	227	16	17	42	12
14	12	91	209	515	9,960	700	4,270	156	15	35	30	12
15	11	1,140	1,320	364	3,640	645	1,870	124	127	71	29	10
18	10	415	1,440	317	2,500	932	1,370	104	1,770	65	59	8.8
17	10	233	780	302	1,970	1,420	1,070	87	415	77	37	7.6
18	9.6	221	630	273	1,580	810	870	78	166	71	28	6.4
19	10	266	520	242	1,330	725	725	68	148	46	26	5.8
20	9.6	206	445	239	1,140	675	635	62	148	35	21	5.5
21	9.2	174	386	259	1,000	590	550	53	102	27	18	5.2
22	8.8	153	342	302	1,070	803	490	51	71	19	15	4.9
23	8.0	153	313	269	870	2,900	410	47	53	18	15	4.6
24	8.0	166	283	256	750	1,370	355	43	43	16	14	4.3
25	8.4	161	252	233	840	1,070	313	41	37	15	12	4.2
26	8.4	143	233	218	750	930	280	39	32	12	10	4.3
27	13	131	215	276	725	1,630	262	50	31	12	8.8	6.8
28	162	119	204	630	700	1,000	236	269	53	229	8.0	27
29	60	108	195	610	600	810	209	124	184	70	7.6	22
30	33	97	184	1,120	-	725	187	104	285	42	7.2	12
31	22	-	176	1,970	-	2,480	-	102	-	28	8.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,948.2	991	6.8	62.8	0.172	0.20
November	5,385	1,140	26	180	.493	.55
December	10,149	1,440	78	327	.896	1.03
Calendar year 1947	229,486.8	17,000	6.8	629	1.72	23.40
January	12,869	1,970	176	415	1.14	1.31
February	95,825	16,800	600	3,304	9.05	9.76
March	39,765	3,060	550	1,283	3.52	4.05
April	36,282	4,270	187	1,209	3.31	3.70
May	4,065	276	39	131	.359	.41
June	4,101	1,770	15	137	.375	.42
July	1,286	229	12	41.5	.114	.13
August	2,366.6	640	7.2	76.3	.209	.24
September	302.5	27	4.3	10.1	.028	.03
Water year 1947-48	214,344.3	16,800	4.3	586	1.61	21.83

Peak discharge (base, 13,000 sec.-ft.).- Feb. 12 (9 p.m.) 27,700 sec.-ft.

Black Warrior River at Tuscaloosa, Ala.

Location.- Water-stage recorder, lat. 33°12'45", long. 87°34'35", in NW¼ sec. 22, T. 21 S., R. 10 W., in Tuscaloosa, 55 feet downstream from Gulf, Mobile & Ohio Railroad bridge. Navigation dam at Tuscaloosa lock and dam, half a mile downstream, is control at low and medium stages. Datum of gage is 83.29 feet above mean sea level, datum of 1929, supplementary adjustment of 1941. Auxiliary water-stage recorder 500 feet downstream from Tuscaloosa lock and dam, at datum 1.16 feet lower.

Drainage area.- 4,830 square miles.

Records available.- January 1889 to December 1894 (gage heights only), January 1895 to December 1902, January 1903 to December 1905 (gage heights only), August 1928 to September 1948.

Average discharge.- 28 years (1894-1902, 1928-48), 7,709 second-feet.

Extremes.- Maximum discharge during year, 121,000 second-feet Feb. 14 (gage height, 59.9 feet); minimum daily, 77 second-feet Oct. 1.

1889-1905, 1928-48: Maximum discharge, 215,000 second-feet Apr. 18, 1900 (gage height, 67.7 feet); minimum daily, 57 second-feet July 26, 1944.

Maximum stage known, that of Apr. 18, 1900.

Remarks.- Records good above 1,700 second-feet and fair below. Discharge above 33,000 second-feet computed by using relationship between gage heights at base gage and auxiliary gage as a factor. Some regulation at low flow by lock below gage and occasional regulation by reservoir at lock 17 (usable capacity, 112,000 acre-feet). Diversion through lock valves included in figures of discharge.

Revisions (water years).- W 662: Drainage area. W 1002: 1940-43.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	1,750	1,050	4,050	21,500	6,630	19,700	2,020	1,170	542	1,040	259
2	107	1,480	814	6,010	15,700	21,900	30,900	1,990	1,010	375	814	1,530
3	141	754	804	6,480	11,800	36,300	23,900	1,990	620	582	3,160	355
4	141	642	637	3,970	9,980	35,400	15,700	1,980	565	620	4,140	293
5	124	522	668	3,660	12,800	23,900	13,600	1,960	449	625	2,640	283
6	158	447	736	2,590	12,800	38,400	24,700	2,580	578	642	989	262
7	996	1,270	668	2,540	24,800	55,400	26,400	2,650	542	563	771	224
6	975	1,960	1,080	2,530	87,400	41,200	23,100	2,330	483	468	685	253
9	642	975	1,890	2,570	95,700	25,500	17,600	2,260	489	451	737	270
10	470	910	19,300	2,220	93,400	19,100	20,300	1,930	582	428	706	262
11	487	4,110	13,200	1,390	75,800	14,600	29,100	1,650	394	432	544	338
12	411	2,320	6,850	1,310	57,200	11,200	19,500	1,360	356	481	561	262
13	407	1,310	4,280	7,210	74,400	9,380	17,600	1,380	338	1,070	519	219
14	310	1,280	2,910	11,800	118,000	7,950	46,200	1,300	305	1,930	2,680	219
15	279	4,100	13,300	7,120	101,000	7,670	38,200	1,330	322	2,870	1,170	219
16	175	6,740	26,400	5,260	67,100	6,900	23,100	1,500	1,750	2,120	3,000	236
17	133	2,010	14,200	5,020	33,100	11,600	16,400	1,360	4,060	1,370	4,290	219
18	141	2,870	8,800	4,640	19,500	14,200	11,800	1,170	2,600	1,310	1,770	236
19	124	3,590	7,060	3,380	15,000	9,380	9,680	1,090	1,920	1,230	879	232
20	123	2,550	4,180	2,530	13,200	8,230	7,950	937	1,330	934	689	232
21	124	2,110	3,890	3,100	10,900	6,740	6,480	625	1,250	582	651	175
22	204	1,270	3,670	3,740	11,200	7,580	5,550	409	917	426	508	228
23	233	1,280	2,680	3,670	11,200	30,000	5,600	525	821	389	409	153
24	276	1,280	2,580	3,670	9,380	30,900	4,330	582	489	468	338	175
25	266	1,250	2,530	3,550	9,380	18,800	3,750	563	544	392	338	170
26	236	1,200	2,360	3,260	8,800	13,200	3,750	544	542	451	288	177
27	310	1,220	1,480	3,860	8,800	30,000	2,980	466	659	565	324	241
28	e340	1,170	1,390	11,800	7,670	24,700	2,680	1,620	527	2,420	262	2,490
29	e290	1,120	1,500	11,800	7,670	15,300	2,470	3,030	603	1,870	307	1,080
30	296	1,120	2,010	16,800	-	12,500	2,380	3,130	542	1,260	288	903
31	389	-	2,220	29,100	-	11,200	-	1,920	-	1,220	338	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	9,385	996	77	303	0.063	0.07
November	54,610	6,740	447	1,820	.377	.42
December	155,137	26,400	637	5,004	1.04	1.19
Calendar year 1947	2,993,986	136,000	77	8,203	1.70	23.05
January	180,630	29,100	1,310	5,827	1.21	1.39
February	1,045,180	118,000	7,670	36,040	7.46	8.05
March	605,760	55,400	6,630	19,540	4.05	4.66
April	475,400	46,200	2,380	15,850	3.28	3.66
May	48,181	3,130	409	1,554	.322	.37
June	26,757	4,060	305	892	.185	.21
July	29,086	2,870	375	938	.194	.22
August	35,835	4,290	262	1,156	.239	.28
September	12,195	2,490	153	406	.084	.09
Water year 1947-48	2,678,156	118,000	77	7,317	1.51	20.61

Peak discharge (base 85,000 sec.-ft.).- Feb. 9 (4 p.m.) 106,000 sec.-ft.; Feb. 14 (3 p.m.) 121,000 sec.-ft.

e Draw-down caused by passing water through valves in control dam; discharge computed on basis of gage-height record for auxiliary gage and records for station near Eutaw.

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 Wedgeworth, 1¼ miles downstream from Big Creek and 4 miles southeast of Eutaw. Navigation dam at lock 7, 3 miles downstream, is control at low stages. Auxiliary gages are upper and lower staff gages at lock 7. Datum of all gages is 53.11 feet above mean sea level, adjustment of 1912.

Drainage area.- 5,820 square miles.

Records available.- May 1932 to September 1948.

Average discharge.- 16 years, 8,862 second-feet.

Extremes.- Maximum discharge during year, 102,000 second-feet Feb. 16 (gage height, 54.6 feet); minimum daily, 431 second-feet Sept. 23.

1932-48: Maximum discharge, 134,000 second-feet Feb. 13, 1946; maximum gage height, 56.3 feet Feb. 8, 1936; minimum discharge, 177 second-feet Oct. 9, 1935 (gage height, 18.44 feet); minimum daily, 203 second-feet Oct. 9, 1935.

Remarks.- Records good except those for periods of no gage-height record and indefinite stage-discharge relation, which are fair. Discharge above about 8,000 second-feet computed by using relationship between gage heights at recorder and auxiliary gages as a factor. Auxiliary gages read at least once daily. Occasional regulation by reservoir at lock 17 (usable capacity, 112,000 acre-feet).

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	433	1,050	2,010	4,450	25,600	8,280	15,700	3,850	2,920	1,270	1,630	595
2	445	2,320	1,850	6,060	24,500	10,700	24,600	3,610	2,220	1,220	1,470	651
3	447	2,180	1,680	8,220	20,400	23,400	28,200	3,380	1,890	1,100	1,510	1,040
4	455	1,680	1,640	7,410	14,600	31,900	27,700	3,380	1,590	1,100	3,910	815
5	453	1,400	1,500	5,520	13,100	35,300	23,000	3,380	1,450	1,130	4,330	815
6	475	1,220	1,520	4,710	14,200	36,800	19,200	3,490	1,360	1,090	2,920	822
7	550	1,380	1,540	4,060	14,200	39,100	22,600	4,210	1,360	1,030	1,710	770
8	1,400	2,430	1,740	3,800	23,400	42,500	25,500	4,210	1,320	1,100	1,320	705
9	1,700	2,720	2,630	3,680	35,400	44,700	24,900	3,850	1,330	1,100	1,180	651
10	1,400	2,050	6,480	3,680	44,400	42,900	21,800	3,610	1,330	1,190	a1,100	651
11	1,200	3,560	17,200	3,090	51,700	38,500	22,800	3,140	1,280	1,170	a1,100	656
12	930	5,790	14,900	2,570	62,400	32,400	26,300	2,810	1,140	1,190	a1,000	665
13	930	4,450	10,100	3,930	67,800	25,800	24,100	2,660	1,050	1,510	a920	646
14	930	3,430	6,870	9,570	70,400	18,000	25,300	2,620	1,000	2,810	a1,100	646
15	740	4,320	6,870	12,000	80,000	10,500	31,900	2,500	1,020	4,090	a2,200	615
16	840	6,600	17,800	8,760	98,400	9,600	35,800	2,560	1,130	4,090	a1,700	599
17	740	6,870	23,400	6,870	96,600	10,000	35,100	2,730	3,050	3,380	a3,600	583
18	570	4,710	17,200	6,060	79,300	14,100	29,200	2,560	4,450	2,810	3,850	572
19	480	5,250	13,400	5,520	58,400	15,300	21,000	2,350	3,610	2,400	2,380	568
20	570	5,250	9,030	4,320	45,200	12,400	16,700	2,070	2,810	2,050	1,510	547
21	570	4,450	6,600	3,930	36,000	10,600	11,000	1,910	2,380	1,660	1,180	507
22	480	3,430	5,520	4,450	31,100	9,630	8,900	1,610	2,070	1,280	1,050	435
23	480	2,790	4,980	4,710	28,500	16,600	8,150	1,540	1,730	1,070	949	431
24	570	2,720	4,320	4,710	24,900	26,900	7,400	1,470	1,470	970	830	443
25	660	2,700	4,060	4,710	19,800	30,500	6,400	1,460	1,260	928	740	460
26	660	2,610	3,800	4,710	13,400	26,600	5,650	1,460	1,180	886	640	472
27	740	2,410	3,430	4,710	12,100	24,400	5,410	1,450	1,160	928	580	472
28	973	2,260	2,700	7,410	10,800	27,600	4,810	2,110	1,140	1,160	540	646
29	1,050	2,150	2,480	12,800	9,070	28,100	4,210	4,210	1,100	2,520	540	2,070
30	912	2,030	2,720	12,500	-	20,200	3,970	4,690	1,140	2,190	587	962
31	912	-	3,140	19,400	-	17,200	-	4,210	-	1,770	595	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	23,695	1,700	433	764	0.131	0.15
November	96,210	6,870	1,050	3,207	.551	.61
December	203,110	23,400	1,500	6,552	1.13	1.30
Calendar year 1947	3,560,997	112,000	433	9,756	1.68	22.75
January	198,320	19,400	2,570	6,397	1.10	1.27
February	1,125,670	98,400	9,070	38,820	6.67	7.19
March	740,510	44,700	8,280	23,890	4.10	4.73
April	567,300	35,800	3,970	18,910	3.25	3.63
May	89,090	4,690	1,450	2,874	.494	.57
June	51,940	4,450	1,000	1,731	.297	.33
July	52,192	4,090	886	1,684	.289	.33
August	48,671	4,330	540	1,570	.270	.31
September	20,510	2,070	431	684	.118	.13
Water year 1947-48	3,217,218	98,400	431	8,790	1.51	20.55

Peak discharge (base, 50,000 sec.-ft.).- Feb. 16 (11 p.m.) 102,000 sec.-ft.

a No gage-height record; discharge computed on basis of gage readings of upper staff gage at lock 7.

Note.- Stage-discharge relation indefinite Oct. 8-27, Aug. 26-28; discharge computed on basis of gage readings of lower staff gage at lock 7.

Sipsey Fork near Falls City, Ala.

Location.- Water-stage recorder, lat. 34°03', long. 87°16', in NE¼ sec. 33, T. 11 S., R. 7 W., at bridge on county highway 1¼ miles downstream from Clifty Fork, 1¾ miles north of Falls City, and 2¼ miles upstream from Clear Creek.

Drainage area.- 375 square miles.

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 27,000 second-feet Feb. 12 (gage height, 20.8 feet); minimum, 12 second-feet Sept. 25-27.

1943-48: Maximum discharge, 48,400 second-feet Jan. 8, 1946 (gage height, 29.6 feet), from rating curve extended above 16,000 second-feet; minimum, that of Sept. 25-27, 1948.

A discharge of 6.4 second-feet was measured Aug. 26, 1943.

Remarks.- Records good except those for periods of doubtful or no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 20 to Aug. 8)

1.8	11	3.0	133	5.0	730	8.0	2,890
2.0	21	3.4	212	5.5	970	10.0	5,450
2.3	45	3.8	310	6.0	1,260	13.0	10,100
2.6	75	4.3	463	7.0	1,970	16.5	17,300

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	67	67	181	571	516	2,580	a260	114	34	40	18
2	14	104	65	302	498	1,170	1,930	a280	91	40	36	18
3	16	88	63	249	430	2,390	1,400	330	78	38	49	16
4	16	70	61	203	440	2,890	1,080	324	71	33	67	16
5	34	140	65	170	688	1,860	1,050	307	66	31	51	20
6	64	110	74	151	1,020	2,830	1,330	292	63	25	48	26
7	44	95	72	135	2,250	5,310	1,330	321	60	23	39	34
8	32	140	99	128	6,460	2,680	1,050	287	58	20	34	29
9	30	87	182	125	4,640	1,820	1,300	a250	55	20	33	30
10	28	74	199	120	3,230	1,360	995	a230	50	20	33	60
11	25	72	192	111	2,580	1,020	970	a220	46	26	40	70
12	26	84	168	111	14,700	798	846	a240	41	30	43	60
13	24	72	144	170	17,000	684	821	a260	39	40	40	45
14	22	74	125	182	8,740	609	2,680	a220	39	73	45	35
15	23	548	648	162	3,730	571	2,050	a180	50	82	51	38
16	24	382	1,330	153	2,210	1,140	1,470	a150	68	78	54	25
17	22	190	590	a150	1,610	4,770	1,080	a130	80	118	45	22
18	21	151	373	a140	1,200	1,970	846	a120	98	63	40	20
19	39	157	284	a140	945	1,470	688	108	78	57	35	18
20	39	127	233	144	821	1,110	571	101	64	48	30	17
21	35	106	194	147	846	895	516	94	54	41	27	16
22	36	95	172	166	1,020	1,160	463	91	48	37	24	16
23	33	98	157	159	1,050	6,900	417	83	41	35	22	15
24	29	112	142	135	895	2,580	370	78	40	52	20	14
25	27	106	128	127	846	1,640	350	76	34	44	19	12
26	26	99	117	119	798	1,230	327	73	33	34	18	12
27	28	89	106	157	752	2,320	307	71	30	47	16	14
28	32	83	102	247	688	2,010	294	116	27	60	16	69
29	29	75	98	247	590	1,440	287	307	28	66	16	116
30	29	71	96	350	-	1,080	a270	259	32	63	16	85
31	38	-	91	571	-	2,260	-	159	-	50	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	900	64	14	29.0	0.077	0.09
November	3,766	548	67	126	.336	.37
December	6,437	1,330	61	208	.555	.64
Calendar year 1947	209,789	8,910	14	575	1.53	20.80
January	5,652	571	111	182	.485	.56
February	81,248	17,000	430	2,802	7.47	8.06
March	60,447	6,900	516	1,950	5.20	5.99
April	29,668	2,680	270	989	2.64	2.94
May	6,017	330	71	194	.517	.60
June	1,676	114	27	55.9	.149	.17
July	1,428	118	20	46.1	.123	.14
August	1,068	67	16	34.5	.092	.11
September	986	116	12	32.9	.088	.10
Water year 1947-48	199,293	17,000	12	545	1.45	19.77

Peak discharge (base, 11,000 sec.-ft.).- Feb. 12 (11:30 p.m.) 27,000 sec.-ft.

a Doubtful or no gage-height record; discharge computed on basis of records for nearby streams.

Clear Creek at Falls City, Ala.

Location.- Water-stage recorder, lat. 34°02', long. 87°16', in NE¼ sec. 9, T. 12 S., R. 7 W., at bridge on county highway a quarter of a mile upstream from Clear Creek Falls, half a mile south of Falls City, and 2 miles upstream from mouth.

Drainage area.- 151 square miles.

Records available.- June 1904 to December 1905 (gage heights only published as Clear Creek near Elk), October 1939 to September 1948.

Extremes.- Maximum discharge during year, 6,640 second-feet Feb. 13 (gage height, 7.1 feet); minimum, 16 second-feet Sept. 25-27 (gage height, 0.69 foot).

1939-48: Maximum discharge, 13,000 second-feet Jan. 8, 1946 (gage height, 10.97 feet), from rating curve extended above 6,800 second-feet; minimum, 12 second-feet July 19, 1942 (gage height, 0.63 foot).

Remarks.- Records good.

Rating table, water year 1947-48, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 15 to Sept. 30)

0.7	21	1.4	260	3.5	2,190
.8	38	1.7	425	4.0	2,750
.9	60	2.0	628	6.5	5,860
1.0	89	2.5	1,070		
1.2	168	3.0	1,630		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	66	53	157	360	241	815	122	86	56	34	26
2	21	139	50	270	300	536	600	130	77	46	34	19
3	21	66	50	160	260	936	458	186	74	36	138	18
4	21	48	48	134	251	1,080	383	147	74	33	111	19
5	28	130	53	119	332	678	425	126	72	29	55	29
6	34	124	63	104	395	1,240	517	147	66	29	40	42
7	26	85	60	93	810	2,070	517	164	66	48	38	36
8	24	155	74	89	2,470	1,120	419	126	69	36	31	29
9	26	72	162	86	2,020	748	564	111	57	28	34	28
10	28	53	134	83	1,850	579	490	104	50	29	38	57
11	28	60	143	74	1,340	464	538	100	48	33	40	56
12	26	69	119	74	4,020	371	464	111	46	29	48	33
13	26	55	104	108	5,740	316	444	218	44	44	44	28
14	24	57	89	119	3,480	285	996	143	48	100	57	26
15	24	546	298	93	1,630	270	700	111	55	80	55	26
16	24	262	797	89	986	406	538	100	86	50	77	24
17	24	134	360	89	708	1,160	419	100	164	122	55	21
16	24	111	241	b74	558	621	348	86	96	74	44	21
19	38	119	195	83	464	490	295	80	66	48	38	19
20	48	93	155	96	407	395	265	74	55	40	34	19
21	34	77	134	100	360	338	241	77	50	38	33	19
22	29	72	119	115	401	432	222	77	46	33	29	19
23	28	74	108	104	360	2,580	204	72	44	34	28	19
24	28	86	100	83	332	965	190	66	44	53	26	18
25	28	83	89	b83	338	628	182	72	40	42	24	18
26	28	74	83	96	332	497	168	72	38	33	24	16
27	31	66	77	111	321	1,050	164	69	36	50	23	21
28	48	60	74	186	305	678	151	147	36	74	23	78
29	55	53	74	186	265	510	134	295	40	55	21	112
30	34	53	72	222	-	419	130	147	48	40	23	46
31	31	-	69	365	-	996	-	108	-	38	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	910	55	21	29.3	0.194	0.22
November	3,142	546	48	105	.695	.77
December	4,247	797	48	137	.907	1.05
Calendar year 1947	93,553	3,230	20	256	1.70	23.03
January	3,845	365	74	124	.821	.95
February	31,395	5,740	251	1,083	7.17	7.73
March	23,099	2,580	241	745	4.93	5.69
April	11,981	996	130	399	2.64	2.95
May	3,688	295	66	119	.788	.91
June	1,821	164	36	60.7	.402	.45
July	1,490	122	28	48.1	.319	.37
August	1,330	138	21	42.9	.284	.33
September	942	112	16	31.4	.208	.23
Water year 1947-48	87,890	5,740	16	240	1.59	21.65

Peak discharge (base, 3,000 sec.-ft.).- Feb. 13 (9 a.m.) 6,640 sec.-ft.; Mar. 23 (10 a.m.) 3,230 sec.-ft.

b Stage-discharge relation affected by ice.

Blackwater Creek near Manchester, Ala.

Location.- Water-stage recorder, lat. 33°55', long. 87°15', in SE¼ sec. 15, T. 13 S., R. 7 W., at bridge on county highway, a quarter of a mile downstream from unnamed tributary, 2 miles east of Manchester, and 5¼ miles north of Jasper. Datum of gage is 401.04 feet above mean sea level, datum of 1929, unadjusted.

Drainage area.- 177 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 278 second-feet.

Extremes.- Maximum discharge during year, 3,800 second-feet Feb. 14 (gage height, 8.0 feet); minimum, 6.4 second-feet Oct. 5.

1938-48: Maximum discharge, 8,050 second-feet Jan. 9, 1946 (gage height, 11.49 feet); minimum daily, 1.3 second-feet (result of regulation) Oct. 25, 1938.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Occasional regulation at very low flow by mill dam 2 miles above station.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.6	22	41	163	592	281	831	a100	a80	56	18	10
2	7.3	36	40	226	475	779	950	a96	a66	50	19	14
3	7.0	56	38	234	385	1,140	691	g92	a56	38	21	10
4	7.0	37	37	171	378	1,300	515	a88	a48	30	22	10
5	7.9	30	36	137	488	1,140	587	a86	a42	25	26	10
6	10.0	49	38	117	492	1,480	802	a100	a40	22	27	9.4
7	9.7	73	43	103	1,070	1,790	774	a120	g41	20	22	8.8
8	12	67	50	92	2,150	1,700	649	a110	a42	18	18	14
9	14	76	70	90	2,500	1,480	524	g96	a37	18	16	18
10	14	48	127	88	2,750	1,110	538	g81	a34	17	16	14
11	14	42	135	79	2,750	774	638	a76	a32	18	16	12
12	13	40	118	76	3,250	582	592	a85	a30	20	14	18
13	13	44	100	186	3,380	430	659	a180	a29	25	16	17
14	12	41	85	202	3,690	360	1,110	a130	a30	31	18	14
15	12	132	313	158	3,580	324	1,010	97	g33	63	17	10
16	12	261	718	131	2,850	411	a800	74	a50	52	18	9.1
17	11	171	577	124	1,840	860	a630	61	g475	53	17	8.5
18	11	107	392	110	1,040	746	a460	a58	305	54	20	8.2
19	9.7	105	281	b97	746	638	a370	g58	164	41	22	7.9
20	8.8	99	195	98	582	520	a300	a58	110	33	18	7.9
21	7.9	76	158	122	501	419	a260	a58	77	27	15	7.9
22	8.2	62	135	153	577	440	g228	a58	59	22	13	7.6
23	9.1	59	118	143	501	831	a200	a53	51	20	10	7.6
24	9.4	67	105	126	430	802	a180	g48	52	17	8.5	7.9
25	9.4	70	94	111	458	831	a160	a52	43	16	7.8	7.6
26	9.4	65	86	110	427	691	a140	a52	40	16	7.3	7.0
27	11	56	78	141	396	774	g133	a50	36	19	7.0	9.1
28	8.8	50	74	298	367	831	a120	a150	33	25	7.3	11
29	8.8	47	70	305	298	686	a110	a200	36	30	7.3	14
30	9.7	43	68	442	-	582	a110	g137	59	25	7.6	14
31	12	-	66	638	-	686	-	a100	-	22	7.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	316.7	14	7.0	10.2	0.058	0.07
November	2,131	261	22	71.0	.401	.45
December	4,466	718	36	144	.814	.94
Calendar year 1947	116,553.1	3,150	7.0	319	1.80	24.50
January	5,247	638	76	169	.955	1.10
February	38,921	3,690	296	1,342	7.58	8.18
March	25,378	1,790	281	819	4.63	5.33
April	15,049	1,110	110	502	2.84	3.16
May	2,804	200	48	90.5	.511	.59
June	2,230	475	29	74.3	.420	.47
July	923	63	16	29.8	.168	.19
August	477.2	27	7.0	15.4	.087	.10
September	322.5	18	7.0	10.8	.061	.07
Water year 1947-48	98,265.4	3,690	7.0	268	1.51	20.65

Peak discharge (base, 1,800 sec.-ft.).- Feb. 14 (5 p.m.) 3,800 sec.-ft.; Mar. 6 (6:30 p.m.) 1,880 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and records for nearby stations.

b Stage-discharge relation affected by ice.

g Computed from graph based on gage readings.

Locust Fork near Cleveland, Ala.

Location.- Water-stage recorder, lat. 34°02', long 86°34', in NE¼ sec. 6, T. 12 S., R. 1 E., at bridge on State Highway 38, 2 miles north of Cleveland and 2½ miles downstream from Graves Creek. Datum of gage is 536.94 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark).
Drainage area.- 300 square miles.
Records available.- December 1936 to September 1948.
Average discharge.- 11 years (1937-48), 494 second-feet.
Extremes.- Maximum discharge during year, 12,500 second-feet Feb. 14 (gage height, 11.0 feet); minimum, 4.7 second-feet Oct. 2, 3.

1936-48: Maximum discharge observed, 47,000 second-feet (revised) Dec. 28, 1942 (gage height, 19.2 feet, from gage then in use); minimum since Oct. 1, 1943, 3.6 second-feet Sept. 28, 29, 1947; minimum prior to Oct. 1, 1943, not determined.

Revisions.- The maximum discharge for water year 1943 has been revised to 47,000 second-feet Dec. 28, 1942 (gage height, 19.2 feet, from gage then in use).
Remarks.- Records good except those below 10 second-feet and those for periods of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 20)

0.7	4.2	1.5	127	4.0	1,600
.8	8.6	1.8	207	5.0	2,450
.9	17	2.1	338	6.0	3,400
1.0	29	2.5	565	8.0	5,670
1.1	44	3.0	875	9.0	7,400
1.2	63	3.5	1,210	10.0	9,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	a11	a26	109	1,680	398	1,580	129	67	90	92	9.9
2	5.1	h12	a23	275	1,240	1,290	3,170	120	44	65	192	9.9
3	5.1	a12	a19	237	972	1,480	1,920	116	34	42	183	9.2
4	5.9	a11	19	167	856	1,210	1,260	123	28	30	338	9.9
5	9.9	a12	22	146	940	940	1,280	118	25	26	279	13
6	8.6	a11	22	132	972	1,220	2,760	127	22	22	151	12
7	6.8	a13	20	120	1,910	2,040	3,400	174	20	18	109	16
8	6.0	a16	26	114	6,090	1,720	2,090	159	19	20	80	26
9	6.6	a12	29	109	6,420	1,240	2,390	120	18	24	67	21
10	8.0	a25	82	105	5,180	1,000	1,520	101	17	20	59	36
11	6.6	a65	169	99	3,400	882	1,140	90	16	19	38	22
12	7.4	h26	201	97	5,690	714	972	84	15	65	30	16
13	6.6	a16	151	584	6,020	618	1,250	a78	14	67	36	14
14	6.4	a25	120	771	9,800	559	4,030	a69	13	57	34	13
15	5.5	a100	215	518	4,140	500	2,450	a61	14	61	44	11
16	5.5	a74	824	370	2,360	632	1,520	a54	787	76	63	11
17	5.5	a57	483	308	1,760	1,000	1,070	48	288	59	44	9.9
18	a6.2	a46	323	262	1,360	624	862	46	116	101	35	8.6
19	a6.4	a57	244	226	1,140	530	708	42	86	61	32	8.0
20	h6.4	h54	201	207	1,000	494	594	38	97	44	30	8.0
21	a6.0	a50	177	218	875	426	512	35	67	36	26	8.6
22	a5.7	a50	161	233	875	539	431	32	57	29	23	8.0
23	a6.7	a46	149	222	784	4,140	376	30	76	29	20	8.0
24	a7.3	a42	139	214	672	2,360	318	29	62	24	17	7.4
25	a7.0	a41	127	198	636	1,400	275	28	48	29	16	6.8
26	a7.0	a38	114	183	594	1,000	240	28	36	30	15	6.8
27	a7.0	a36	107	207	559	1,740	204	28	30	138	13	9.6
28	a7.0	a34	101	512	506	1,210	177	35	28	892	12	28
29	h7.4	a31	97	600	442	875	156	34	38	499	11	73
30	a8.0	h29	92	991	-	745	141	66	50	172	9.2	94
31	a9.0	-	90	1,960	-	1,300	-	103	-	103	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	212.5	9.9	5.1	6.85	0.023	0.03
November	1,054	100	11	35.1	.117	.13
December	4,373	624	19	141	.470	.54
Calendar year 1947	195,227.5	14,000	3.6	535	1.78	24.21
January	10,494	1,960	97	339	1.13	1.30
February	68,873	9,800	442	2,375	7.92	8.54
March	34,806	4,140	398	1,123	3.74	4.31
April	38,816	4,030	141	1,294	4.31	4.81
May	2,343	174	26	75.6	.252	.29
June	2,252	787	13	75.1	.250	.28
July	2,948	892	18	95.1	.317	.37
August	2,109.2	338	9.2	68.0	.227	.28
September	534.6	94	6.8	17.8	.059	.07
Water year 1947-48	168,815.3	9,800	5.1	461	1.54	20.93

Peak discharge (base, 11,000 sec.-ft.).- Feb. 14 (7 a.m.) 12,500 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for station at Trafford.

h Computed from tape-gage readings.

Locust Fork at Trafford, Ala.

Location.- Water-stage recorder, lat. 33°50', long. 86°45', in SW¼ 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. Datum of gage is 309.12 feet above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Drainage area.- 622 square miles.

Records available.- September 1930 to September 1948.

Average discharge.- 17 years (1930-31, 1932-48), 984 second-feet.

Extremes.- Maximum discharge during year, 22,600 second-feet Feb. 14; maximum gage height, 34.0 feet Feb. 14; minimum discharge, 12 second-feet Oct. 2.

1930-48: Maximum discharge, 55,800 second-feet Dec. 29, 1942 (gage height, 56.38 feet); minimum daily, 8 second-feet Oct. 20, 1931.

Remarks.- Records good. Diversion above station subsequent to 1938 from Inland Reservoir on Blackburn Fork (usable capacity, 60,000 acre-feet) for industrial water supply for city of Birmingham. Discharge above 5,700 second-feet computed by using rate of change of stage as a factor.

Revisions (water years).- W 782: 1934.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	37	63	218	3,290	698	3,110	242	155	155	158	28
2	14	37	57	342	2,350	2,160	7,160	232	118	151	225	28
3	22	39	55	430	1,790	3,620	4,140	222	84	110	270	25
4	23	33	55	306	1,490	2,750	2,750	222	69	72	264	28
5	53	37	60	254	1,700	2,010	2,750	222	63	57	415	29
6	35	34	57	232	1,700	2,350	6,070	258	53	51	297	30
7	26	39	60	215	4,590	4,430	6,960	267	53	45	194	28
8	30	47	88	198	13,400	3,670	4,550	270	53	39	151	37
9	29	39	125	198	14,600	2,650	3,560	229	49	37	114	31
10	26	43	511	191	12,000	2,010	2,750	191	47	43	99	39
11	25	180	698	180	6,890	1,610	2,100	169	43	49	87	51
12	27	173	494	187	8,960	1,330	1,700	162	41	47	69	53
13	25	114	375	1,500	11,000	1,110	1,740	155	39	78	55	39
14	21	81	288	1,650	20,100	962	7,770	147	37	151	57	34
15	18	251	768	1,110	12,300	890	5,390	132	35	114	60	35
16	19	235	1,410	785	5,330	838	3,180	125	103	92	56	31
17	25	198	1,030	630	3,560	1,370	2,150	118	785	99	88	27
18	25	158	732	528	2,700	1,030	1,610	110	238	92	78	25
19	22	155	545	462	2,150	838	1,290	99	155	121	57	26
20	23	132	430	406	1,830	750	1,070	88	121	92	49	28
21	22	110	357	406	1,570	681	890	81	125	69	45	27
22	18	99	312	430	1,530	802	750	75	92	53	47	25
23	25	99	288	415	1,410	6,690	647	66	81	53	34	26
24	26	88	264	409	1,180	5,090	545	63	99	57	31	19
25	22	88	242	363	1,070	2,860	478	60	110	49	43	20
26	25	88	222	327	998	1,920	415	60	81	39	34	25
27	23	81	208	406	926	3,230	369	60	69	41	31	24
28	24	75	198	1,110	872	2,750	324	75	57	706	39	78
29	23	60	187	1,260	785	1,880	294	103	78	647	34	129
30	24	63	180	2,140	-	1,490	264	114	116	378	31	102
31	28	-	173	4,200	-	1,830	-	140	-	191	28	-

Month	Observed				Per square mile	Runoff in inches	Change in reservoir contents†	Diversion from reservoir†
	Second-foot-days	Maximum	Minimum	Mean				
October	762	53	14	24.6	-	-	-65	71
November	2,913	251	33	97.1	-	-	-39	68
December	10,532	1,410	55	340	-	-	+23	67
Calendar year 1947	393,520	28,800	14	1,078	1.73	23.53	-25	70
January	21,488	4,200	180	693	-	-	+75	67
February	142,071	20,100	785	4,899	-	-	+287	68
March	66,299	6,690	681	2,139	-	-	+13	65
April	76,776	7,160	264	2,559	-	-	-18	61
May	4,557	270	60	147	-	-	-41	68
June	3,249	785	35	108	-	-	-82	72
July	3,978	706	37	128	-	-	-54	72
August	3,239	415	28	104	-	-	-58	75
September	1,127	129	19	37.8	-	-	-66	73
Water year 1947-48	336,991	20,100	14	921	1.48	20.15	-3	69

Peak discharge (base, 17,000 sec.-ft.).- Feb. 14 (5 p.m.) 22,600 sec.-ft.

† Inland Reservoir; figures are equivalents in second-feet.

Locust Fork at Sayre, Ala.

Location.- Wire-weight gage, lat. 33°42'35", long. 86°59'00", in NW¼ sec. 29, T. 15 S., R. 4 W., at bridge on county highway at Sayre, 1½ miles downstream from Camp Creek. Datum of gage is 258.64 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 885 square miles.

Records available.- May 1942 to September 1948. July 1928 to March 1932 at site 9 miles upstream, published as Locust Fork near Warrior.

Extremes.- Maximum discharge observed during year, 20,900 second-feet Feb. 15 (gage height, 27.9 feet, from graph based on gage readings); minimum daily, 25 second-feet Sept. 25.

1928-32, 1942-48: Maximum discharge, 58,500 second-feet Dec. 29, 1942 (gage height, 45.0 feet); minimum, 17 second-feet Sept. 28, Oct. 2, 1931.

Remarks.- Records fair. Diversion from 70 square miles above station for industrial water supply for city of Birmingham. Gage read twice daily.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	60	93	372	4,720	600	3,990	372	535	123	163	31
2	37	77	a93	650	3,410	2,340	7,780	353	557	145	185	41
3	33	72	96	580	2,580	5,090	6,410	353	535	146	261	43
4	35	51	98	580	2,400	4,210	4,500	353	126	113	372	35
5	39	49	96	450	2,400	3,210	3,210	372	116	106	471	47
6	43	43	93	430	2,340	3,210	6,490	410	108	75	353	55
7	47	68	98	372	4,300	5,690	8,520	410	96	82	232	53
8	57	43	121	334	14,600	5,240	6,570	372	86	86	492	51
9	57	43	243	334	18,600	3,840	4,280	334	86	91	319	51
10	80	39	1,770	316	17,900	2,950	4,060	298	86	113	123	64
11	53	100	1,800	279	11,600	2,460	3,620	279	79	84	121	49
12	47	353	1,060	279	8,950	1,960	2,700	261	79	145	113	53
13	45	218	800	1,750	12,200	1,620	2,580	240	82	132	123	82
14	47	163	750	3,340	18,700	1,380	8,860	195	77	261	334	53
15	43	261	1,390	1,980	19,900	1,330	9,040	195	84	198	123	47
16	43	492	2,640	1,330	10,500	1,220	4,940	172	121	126	243	45
17	41	298	1,660	1,060	5,010	1,220	3,280	137	198	123	410	45
18	37	243	1,330	650	3,890	1,560	2,580	148	232	132	175	41
19	33	281	900	750	3,080	1,160	1,980	132	298	118	142	57
20	41	261	800	650	2,640	1,060	1,620	142	198	106	93	a45
21	45	205	650	a600	2,160	950	1,380	123	121	100	73	a40
22	49	169	535	700	2,100	862	1,160	116	100	86	72	35
23	49	160	492	a640	1,660	5,540	1,000	116	110	86	77	37
24	41	166	471	a580	1,680	7,290	850	110	106	70	83	33
25	41	142	391	a520	1,500	4,130	700	100	113	88	70	25
26	51	137	372	a480	1,380	2,950	700	96	100	82	60	39
27	53	140	334	580	1,330	4,350	650	103	86	129	70	39
28	51	137	296	a1,600	1,220	4,350	557	160	100	300	51	372
29	51	113	296	a1,800	1,060	3,020	492	261	86	1,060	60	212
30	47	86	279	2,700	-	2,340	450	243	82	557	57	129
31	45	-	261	5,610	-	2,280	-	580	-	316	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,402	60	33	45.2	0.051	0.08
November	4,650	492	39	155	.175	.20
December	20,512	2,640	93	662	.748	.86
Calendar year 1947	549,979	29,100	33	1,507	1.70	23.12
January	32,496	5,610	279	1,048	1.18	1.37
February	183,870	19,900	1,060	6,340	7.16	7.73
March	89,632	7,290	800	2,691	3.27	3.77
April	104,949	9,040	450	3,498	3.95	4.41
May	7,536	580	96	243	.275	.32
June	4,783	557	77	159	.180	.20
July	5,361	1,060	68	173	.195	.23
August	5,574	492	47	180	.203	.23
September	1,929	372	25	64.3	.073	.08
Water year 1947-48	462,694	19,900	25	1,264	1.43	19.46

Peak discharge (base, 15,000 sec.-ft.).- Feb. 9 (10 p.m.) 19,400 sec.-ft.; Feb. 15 (6 a.m.) 20,900 sec.-ft.

a Doubtful or no gage-height record; discharge computed on basis of records for station at Trafford.

Turkey Creek at Morris, Ala.

Location.- Staff gage, lat. 33°44'25", long. 86°48'45", in SW¼ sec. 12, T. 15 S., R. 3 W., at bridge on U. S. Highway 31 at Morris, three-quarters of a mile downstream from Cunningham Creek and 4 miles upstream from mouth. Datum of gage is 345.15 feet above mean sea level, unadjusted.

Drainage area.- 81 square miles.

Records available.- January 1944 to September 1948.

Extremes.- Maximum and minimum discharges for the water years 1944 to 1948 are contained in the following table:

Water year	Maximum			Minimum observed		
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)	Gage height (feet)
1944†	Mar. 29	3,510	*11.0	Sept.18	12	0.58
1944-45	Feb. 13	6,250	*15.3	Oct. 18-21	10	-
1945-46	Feb. 10	8,550	*18.7	Oct. 3-5, 19-21	12	.60
1946-47	Jan. 15	8,750	*19.0	Sept.27	12	.60
1947-48	Feb. 9	2,480	*9.1	Sept.24,25	10	-

* From graph based on gage readings.
† January to September.

1944-48: Maximum discharge, 8,750 second-feet Jan. 15, 1947 (gage height, 19.0 feet, from graph based on gage readings); minimum observed, 10 second-feet Oct. 18-21, 1944, Sept. 24, 25, 1948.

Remarks.- Records fair. Occasional slight diversions by sawmills above station. Gage read twice daily.

Discharge, in second-feet, 1944-48

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	25	189	325	180	53	24	21	17
2				-	27	155	236	155	49	23	18	21
3				-	69	131	189	124	36	24	18	16
4				-	66	116	155	108	35	24	19	14
5				-	58	97	131	483	50	24	38	14
6				-	73	656	108	301	77	24	286	14
7				-	60	585	101	189	40	24	62	14
8				-	64	236	97	147	34	24	23	14
9				-	198	163	142	124	32	22	19	14
10				-	163	131	172	108	32	29	17	14
11				-	490	116	271	94	49	28	17	14
12				-	246	116	278	86	33	22	17	14
13				-	163	93	180	77	31	21	17	14
14				-	178	80	147	70	155	23	16	14
15				-	278	70	155	64	116	22	16	14
16				101	206	66	131	58	58	22	16	14
17				74	800	65	108	58	44	19	23	14
18				61	610	58	509	57	39	18	35	12
19				56	550	601	431	54	36	18	21	14
20				49	460	400	431	49	35	20	24	14
21				42	301	208	325	51	30	20	16	84
22				39	226	213	460	46	28	18	14	28
23				36	236	610	670	47	28	17	16	16
24				33	479	325	431	46	30	17	27	14
25				30	376	226	267	45	29	16	16	15
26				35	376	163	431	41	26	17	14	14
27				33	520	1,420	1,060	39	26	25	20	14
28				30	376	2,140	460	41	25	28	16	13
29		e10.7		30	246	2,620	325	37	24	21	17	23
30				28	-	910	217	36	24	19	16	18
31				27	-	460	-	40	-	21	14	-

Peak discharge (base, 2,000 sec.-ft.).- Mar. 29 (12 m.) 3,510 sec.-ft.
e Result of discharge measurement.

Discharge, in second-feet, of Turkey Creek at Morris, Ala., 1944-48--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	12	12	417	45	133	102	205	30	22	19	12
2	14	11	12	147	45	118	376	167	29	22	17	12
3	12	12	12	97	43	700	186	141	28	20	16	12
4	12	12	12	77	43	2,700	141	110	26	19	17	11
5	12	12	12	64	246	640	118	102	26	19	22	12
6	12	12	12	92	198	376	102	82	28	19	17	14
7	12	12	37	278	147	256	89	74	29	20	22	13
8	13	13	33	180	139	205	83	176	25	19	22	12
9	12	14	22	131	116	158	76	88	26	19	17	12
10	12	15	19	97	101	133	69	74	25	19	16	13
11	12	12	25	76	93	118	63	69	25	19	16	16
12	12	12	22	69	142	110	58	158	28	18	16	13
13	17	12	21	504	2,990	110	53	350	24	19	15	48
14	14	12	19	236	670	133	49	205	24	18	14	18
15	12	14	17	163	350	110	50	141	26	122	16	14
16	12	14	17	116	256	95	54	118	24	29	23	13
17	12	14	17	93	931	86	301	102	53	24	50	13
18	10	14	17	83	805	301	110	86	110	21	d20	12
19	10	40	21	124	376	205	84	74	60	20	14	12
20	10	25	18	83	490	235	73	65	42	19	13	38
21	10	15	17	79	460	235	66	56	30	20	14	18
22	12	14	17	77	840	186	67	51	26	19	15	14
23	10	14	18	68	490	150	150	47	26	18	14	13
24	10	12	17	63	301	133	102	43	24	41	17	13
25	10	13	16	58	225	110	431	41	24	45	14	14
26	10	13	22	81	186	499	235	41	23	22	13	15
27	10	13	29	65	215	290	158	41	23	20	13	14
28	10	12	90	63	158	205	689	37	21	31	13	13
29	12	13	65	57	-	158	550	36	22	25	12	13
30	12	14	95	51	-	133	290	33	25	22	12	26
31	12	-	91	49	-	118	-	32	-	20	12	-

Peak discharge (base, 2,000 sec.-ft.).- Feb. 13 (8 a.m.) 6,250 sec.-ft.; Mar. 4 (4 a.m.) 4,550 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of adjacent record.

1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	21	49	267	520	176	176	48	83	61	26	25
2	17	21	44	205	376	158	158	53	102	54	33	23
3	13	127	40	158	256	133	141	66	62	111	22	22
4	12	62	291	141	205	125	125	133	53	448	347	22
5	12	38	278	666	176	118	110	60	46	317	186	22
6	249	31	167	1,160	1,040	110	102	46	44	158	195	19
7	88	28	57	870	580	460	94	47	38	102	290	19
8	22	26	102	1,260	350	900	84	54	38	88	150	17
9	19	24	84	1,700	3,420	490	83	42	38	72	95	42
10	17	23	186	670	6,230	325	84	40	37	60	72	51
11	16	26	133	870	1,140	215	95	63	33	54	62	74
12	14	22	110	610	610	176	73	74	31	43	48	31
13	14	22	245	403	681	158	62	58	37	38	42	25
14	13	54	290	290	610	225	62	50	174	44	39	23
15	13	50	215	730	460	167	58	163	110	43	39	24
16	13	36	158	740	301	956	61	205	50	38	32	60
17	13	31	125	550	256	490	63	141	150	67	31	60
18	13	29	141	403	215	301	54	278	260	258	30	44
19	12	101	141	290	629	235	52	215	133	132	29	34
20	13	95	118	290	403	195	47	580	73	62	29	28
21	12	290	102	235	301	167	46	350	70	50	28	24
22	24	235	95	176	235	141	43	235	69	53	26	66
23	90	118	90	158	290	125	40	158	48	42	25	292
24	32	88	84	150	215	118	41	133	42	38	25	215
25	47	70	428	133	186	110	61	118	39	36	24	118
26	65	61	256	125	167	290	50	95	42	35	22	102
27	36	84	186	110	246	215	40	77	36	30	22	73
28	28	67	186	94	195	648	41	69	32	30	22	60
29	25	61	167	90	-	431	39	61	32	28	176	52
30	23	56	174	529	-	301	37	58	102	26	43	44
31	21	-	490	1,030	-	225	-	50	-	27	26	-

Peak discharge (base, 2,000 sec.-ft.).- Jan. 9 (9 a.m.) 2,430 sec.-ft.; Feb. 10 (7 a.m.) 8,550 sec.-ft.

Discharge, in second-feet, of Turkey Creek at Morris, Ala., 1944-48--Continued

1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	29	56	150	141	118	110	848	47	40	20	23
2	38	29	50	270	125	110	118	376	207	37	19	20
3	37	28	49	290	118	84	102	256	83	33	18	18
4	33	28	45	235	125	80	190	195	61	30	18	17
5	30	25	44	195	118	110	195	158	52	30	17	17
6	30	25	44	150	102	2,500	150	141	56	30	22	17
7	30	59	42	133	95	930	133	125	53	34	45	17
8	29	80	40	333	88	1,230	125	110	46	33	22	17
9	28	48	38	267	82	520	215	102	40	30	22	17
10	24	39	38	195	70	376	176	90	40	26	19	19
11	28	1,250	39	176	69	290	856	84	38	27	24	17
12	35	256	45	325	72	235	580	80	35	27	22	17
13	35	158	41	376	72	861	842	77	37	25	136	16
14	26	125	40	442	72	740	970	118	33	24	80	14
15	25	95	40	4,340	69	490	670	90	24	22	69	16
16	24	89	44	1,260	62	325	520	79	30	26	32	17
17	24	652	38	970	61	267	350	67	31	25	30	16
18	28	325	56	840	58	215	290	67	30	28	24	14
19	22	186	51	1,770	58	278	215	284	34	33	24	14
20	25	158	860	3,490	665	215	246	205	83	26	22	14
21	25	125	568	870	301	186	205	167	50	23	18	13
22	22	110	256	550	246	167	167	133	509	23	20	14
23	22	110	215	403	186	150	150	95	225	22	19	14
24	21	83	158	301	141	150	125	89	118	22	203	14
25	170	77	133	246	118	215	186	86	95	22	67	14
26	102	84	110	225	118	186	158	76	74	21	33	13
27	47	77	102	176	102	167	125	65	63	21	206	12
28	38	69	118	167	95	150	110	60	54	24	68	13
29	35	61	195	150	-	133	102	66	48	30	30	13
30	33	56	150	125	-	125	261	60	45	22	24	13
31	30	-	118	141	-	118	-	50	-	20	22	-

Peak discharge (base, 2,000 sec.-ft.).- Nov. 11 (6 a.m.) 3,630 sec.-ft.; Jan. 15 (6 a.m.) 8,750 sec.-ft.; Jan. 20 (3 a.m.) 8,140 sec.-ft.; Mar. 6 (5 a.m.) 5,520 sec.-ft.

1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	22	19	158	a400	125	348	60	34	22	40	13
2	14	22	19	141	278	1,340	750	a58	33	20	24	13
3	15	17	19	95	225	610	325	56	28	20	63	14
4	13	14	20	83	225	431	235	51	28	19	43	16
5	a16	14	20	66	278	301	290	47	24	18	65	29
6	16	15	19	57	267	738	1,060	95	26	24	38	17
7	16	22	19	50	920	800	697	54	28	22	31	16
8	17	22	51	47	1,780	431	376	49	24	19	29	15
9	15	17	74	47	2,030	325	256	a46	22	63	24	a15
10	14	16	752	47	1,060	235	225	43	20	34	22	a17
11	13	125	237	45	670	186	325	41	21	35	24	a14
12	13	41	133	40	770	141	256	38	20	31	21	13
13	13	24	95	280	1,010	125	445	38	20	24	20	14
14	13	22	80	225	1,580	110	1,450	38	22	102	21	14
15	13	256	215	150	580	102	610	35	28	38	56	13
16	13	48	278	125	460	110	403	36	56	47	77	13
17	14	36	167	102	325	95	325	33	36	35	47	12
18	13	51	125	84	246	84	246	31	28	24	33	11
19	12	63	102	79	215	80	205	28	30	22	24	12
20	12	45	89	74	176	73	176	28	24	20	23	12
21	12	37	89	94	a180	a100	150	30	24	19	21	12
22	12	32	76	79	167	337	133	31	22	19	20	11
23	12	34	57	66	150	652	125	28	21	18	17	11
24	12	31	51	65	141	267	110	25	22	19	18	10
25	11	29	47	66	125	186	102	25	22	a17	17	10
26	12	26	43	65	118	200	92	24	20	17	16	11
27	14	24	41	201	110	1,210	84	83	20	28	15	12
28	21	23	38	376	102	460	76	62	21	21	16	18
29	17	21	35	267	95	278	69	90	20	32	16	19
30	13	20	32	840	-	205	63	57	34	22	16	20
31	12	-	31	720	-	215	-	40	-	19	17	-

Peak discharge (base, 2,000 sec.-ft.).- Feb. 9 (7 a.m.) 2,480 sec.-ft.; Feb. 14 (4 a.m.) 2,100 sec.-ft.

a No gage-height record; discharge computed on basis of records for stations on nearby streams.

Monthly discharge, in second-feet, of Turkey Creek at Morris, Ala., 1944-48

Month	**Second-foot-days**	**Maximum**	**Minimum**	**Mean**	**Per square mile**	**Runoff in inches**
October						
November						
December						
Calendar year						
January 16-31, 1944	704	101	27	44.0	0.543	0.32
February	7,920	800	25	273	3.37	3.64
March	13,419	2,620	58	433	5.35	6.16
April	8,943	1,060	97	298	3.68	4.11
May	3,055	483	36	98.5	1.22	1.40
June	1,304	155	24	43.5	.537	.60
July	674	29	16	21.7	.268	.31
August	909	286	14	29.3	.362	.42
September	529	84	12	17.6	.217	.24
Water year	-	-	-	-	-	-
October 1944	364	17	10	11.7	.144	.17
November	427	40	11	14.2	.175	.20
December	854	95	12	27.5	.340	.39
Calendar year	-	-	-	-	-	-
January 1945	3,838	504	49	124	1.53	1.76
February	11,101	2,990	43	396	4.89	5.10
March	9,139	2,700	86	295	3.64	4.20
April	4,975	689	49	166	2.05	2.28
May	3,045	350	32	98.2	1.21	1.40
June	932	110	21	31.1	.384	.43
July	790	122	18	25.5	.315	.36
August	531	50	12	17.1	.211	.24
September	473	48	11	15.8	.195	.22
Water year 1944-45	36,469	2,990	10	99.9	1.23	16.75
October 1945	1,000	249	12	32.3	.399	.46
November	1,995	290	21	66.5	.821	.92
December	5,230	490	40	169	2.09	2.40
Calendar year 1945	43,049	2,990	11	118	1.46	19.77
January 1946	15,103	1,700	90	487	6.01	6.93
February	20,293	6,230	167	725	8.95	9.32
March	8,884	956	110	287	3.54	4.08
April	2,222	176	37	74.1	.915	1.02
May	3,820	580	40	123	1.52	1.75
June	2,104	260	31	70.1	.865	.97
July	2,645	448	26	85.3	1.05	1.21
August	2,235	347	22	72.1	.890	1.03
September	1,711	292	17	57.0	.704	.79
Water year 1945-46	67,242	6,230	12	184	2.27	30.88
October 1946	1,135	170	21	36.6	.452	.52
November	4,536	1,250	25	151	1.86	2.08
December	3,823	860	38	123	1.52	1.76
Calendar year 1946	68,511	6,230	17	188	2.32	31.46
January 1947	19,561	4,340	125	631	7.79	8.98
February	3,629	665	58	130	1.60	1.67
March	11,721	2,500	80	378	4.67	5.38
April	8,642	970	102	288	3.56	3.97
May	4,499	848	50	145	1.79	2.07
June	2,341	509	24	78.0	.963	1.07
July	836	40	20	27.0	.333	.38
August	1,395	206	17	45.0	.556	.64
September	470	23	12	15.7	.194	.22
Water year 1946-47	62,588	4,340	12	171	2.11	28.74
October 1947	427	21	11	13.8	.170	.20
November	1,169	256	14	39.0	.481	.54
December	3,073	752	19	99.1	1.22	1.41
Calendar year 1947	57,763	4,340	11	158	1.95	26.53
January 1948	4,834	840	40	156	1.93	2.22
February	14,683	2,030	95	506	6.25	6.74
March	10,552	1,340	73	340	4.20	4.84
April	10,007	1,450	63	334	4.12	4.59
May	1,400	95	24	45.2	.558	.64
June	778	56	20	25.9	.320	.36
July	870	102	17	28.1	.347	.40
August	914	77	15	29.5	.364	.42
September	427	29	10	14.2	.175	.20
Water year 1947-48	49,134	2,030	10	134	1.65	22.56

Time basis: Central war time up to 2 a.m., Sept. 30, 1945; central standard time thereafter. To convert war time to standard time, subtract 1 hour.

North River near Samantha, Ala.

Location.- Water-stage recorder, lat. 33°28'45", long. 87°35'50", in SW¼ sec. 16, T.18 S., R 10 W., at county highway bridge half a mile east of Crump's store, 1¼ miles upstream from Cripple Creek, and 4 miles north of Samantha. Datum of gage is 232.39 feet above mean sea level, datum of 1929.

Drainage area.- 220 square miles.

Records available.- December 1938 to September 1948.

Extremes.- Maximum discharge during year, 5,680 second-feet Feb. 9 (gage height, 13.1 feet); minimum, 3.0 second-feet Sept. 25 (gage height, 1.29 feet).

1938-48: Maximum discharge, 13,400 second-feet Feb. 28, 1939 (gage height, 22.96 feet), from rating curve extended above 6,100 second-feet on basis of velocity-area studies; minimum, 0.6 second-foot Sept. 1, 1943 (gage height, 1.21 feet).

Maximum stage known, about 31 feet in July 1916 and February 1936, from information by local residents.

Remarks.- Records good above 100 second-feet and fair below.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet
(Shifting-control method used May 27 to Sept. 30)

1.35	3.2	1.9	51	4.0	970
1.4	4.4	2.0	69	6.0	2,010
1.5	9.2	2.2	117	8.0	2,980
1.6	16	2.4	186	10.0	3,970
1.7	25	2.6	273	12.0	5,040
1.8	36	3.0	470	12.5	5,320

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	60	50	362	945	278	455	82	28	33	28	24
2	5.5	91	46	390	660	1,910	450	82	23	22	34	11
3	6.4	51	45	255	515	2,540	336	76	20	18	41	5.9
4	6.4	27	50	203	495	2,160	283	73	18	15	62	6.9
5	8.0	48	48	171	745	1,080	355	69	18	11	60	13
6	6.9	32	53	149	670	2,980	895	89	17	13	28	21
7	15	138	48	139	1,090	3,710	660	94	17	32	19	22
8	18	146	108	123	4,240	1,660	520	71	16	25	13	18
9	15	56	207	117	5,320	970	590	62	16	18	12	16
10	12	53	1,420	123	3,760	745	795	51	13	13	12	56
11	13	341	770	107	1,910	575	2,350	50	11	12	11	27
12	16	156	410	101	3,360	455	1,190	74	10	13	12	21
13	23	78	273	548	3,460	370	1,080	73	9.2	56	12	17
14	16	71	199	630	3,920	331	2,590	76	9.8	106	10	13
15	11	644	1,450	420	1,710	307	1,350	60	9.2	137	39	11
16	13	260	1,810	321	1,000	302	820	51	81	55	83	10
17	13	133	695	273	745	370	585	45	60	33	39	9.8
18	13	146	475	215	600	287	450	42	42	29	35	6.9
19	9.8	220	350	186	505	260	365	36	29	24	23	6.4
20	9.2	146	273	175	440	242	287	33	28	20	17	5.5
21	12	109	224	215	400	228	246	29	23	17	13	5.1
22	9.8	91	186	264	525	242	220	27	18	13	11	4.7
23	6.9	99	168	228	450	1,130	190	26	17	11	8.0	4.4
24	8.0	112	153	211	410	720	168	23	16	10	6.4	3.4
25	9.2	107	130	199	470	510	149	21	17	8.0	6.4	3.2
26	11	89	117	182	435	425	133	24	15	5.9	8.0	3.4
27	16	80	114	287	420	1,060	123	23	13	9.8	6.4	12
28	56	69	104	1,100	390	670	112	35	12	14	5.1	133
29	33	65	99	820	336	500	99	53	39	20	3.8	66
30	22	58	94	1,030	-	400	89	50	155	18	3.8	35
31	16	-	91	1,560	-	370	-	35	-	34	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	435.6	56	5.5	14.1	0.064	0.07
November	3,776	644	27	126	.573	.64
December	10,260	1,810	45	331	1.50	1.73
Calendar year 1947	133,475.6	5,920	5.1	336	1.66	22.56
January	11,104	1,560	101	358	1.63	1.88
February	39,916	5,320	336	1,376	6.25	6.75
March	27,787	3,710	228	896	4.07	4.70
April	17,935	2,590	89	598	2.72	3.03
May	1,635	94	21	52.7	.240	.28
June	800.2	155	9.2	26.7	.121	.14
July	845.7	137	5.9	27.3	.124	.14
August	698.9	83	3.8	22.5	.102	.12
September	591.6	133	3.2	19.7	.090	.10
Water year 1947-48	115,785.0	5,320	3.2	316	1.44	19.58

Peak discharge (base, 4,800 sec.-ft.).-Feb. 9 (1 p.m.) 5,680 sec.-ft.

Prairie Creek near Gallion, Ala.

Location.- Water-stage recorder, lat. 32°32', long. 87°41', in SE¼ sec. 9, T. 18 N., R. 4 E., at bridge on State Highway 13, 4 miles upstream from Little Prairie Creek and 4 miles northeast of Gallion. Auxiliary staff gages at locks 4 and 5 on Black Warrior River, 12 miles downstream and three-quarters of a mile upstream, respectively, from mouth of Prairie Creek.

Drainage area.- 170 square miles.

Records available.- January 1940 to September 1948.

Extremes.- Maximum discharge during year, 21,100 second-feet Mar. 23 (gage height, 17.1 feet); minimum, 4.7 second-feet Oct. 1.

1940-48: Maximum discharge, 39,000 second-feet Dec. 28, 1942 (gage height in well, 19.30 feet; from outside gage, 20.1 feet); minimum since Oct. 1, 1944, 3.6 second-feet Sept. 5, 1945 (gage height, 0.05 foot); minimum prior to Oct. 1, 1944, not determined.

Remarks.- Records good except those below 30 second-feet, those for period of backwater, and those for periods of no gage-height record, which are fair. Discharge for periods of backwater from Black Warrior River computed by using fall as determined by once-daily readings of auxiliary gages as a factor.

Cooperation.- Prior to May 1, 1948, base data collected by Corps of Engineers.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	10	41	a500	658	278	757	38	26	14	11	5.5
2	5.5	25	39	146	166	4,350	518	38	20	13	15	6.0
3	6.1	22	38	a100	125	7,200	184	35	18	11	18	5.5
4	5.8	17	38	a80	138	4,410	125	37	18	9.8	55	5.4
5	5.8	13	38	a70	789	c987	111	54	16	9.2	25	39
6	5.8	26	42	a62	808	4,550	128	46	15	10	32	34
7	12	26	42	58	513	3,500	117	84	14	10	16	16
8	10	93	74	56	2,950	c858	239	46	15	12	13	12
9	12	29	170	55	3,700	c273	1,080	34	13	21	12	9.8
10	8.8	21	1,070	56	2,710	c259	229	30	12	28	14	8.8
11	8.0	870	1,760	52	846	c195	544	28	12	18	15	8.4
12	7.2	1,530	456	49	970	c160	168	28	11	225	15	10
13	7.0	349	686	446	c680	c131	725	32	10	108	13	8.8
14	6.8	71	1,300	347	1,610	c116	5,310	50	10	205	11	9.0
15	6.8	883	1,120	98	c1,020	106	1,760	34	11	134	9.8	10
16	5.5	1,070	2,960	76	c202	163	256	26	66	78	9.8	11
17	5.1	113	827	71	c199	1,080	137	30	329	41	11	8.8
18	6.5	281	152	62	a260	1,260	106	89	196	43	14	7.4
19	7.2	971	117	54	c352	1,020	94	47	62	47	11	6.7
20	6.8	153	101	55	c417	345	84	28	42	46	9.0	6.4
21	6.3	88	91	131	c756	143	76	23	36	25	8.2	6.4
22	6.1	76	81	183	c1,200	616	68	20	26	20	7.4	6.2
23	5.8	74	74	122	c609	11,900	62	20	23	16	6.7	6.0
24	5.8	210	68	198	c183	2,700	57	18	20	15	6.0	5.8
25	5.8	232	66	198	c163	495	58	18	18	14	6.0	5.7
26	6.0	88	64	468	c160	202	58	17	16	14	5.7	5.5
27	6.8	62	58	793	c145	480	58	16	15	14	5.5	6.2
28	16	51	55	1,430	c118	613	55	18	15	13	5.8	6.6
29	25	45	54	992	96	176	44	159	15	13	5.8	14
30	12	43	52	1,290	-	140	40	60	13	13	5.5	11
31	10	-	62	2,500	-	388	-	34	-	11	5.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	249.2	25	4.9	8.04	0.047	0.05
November	7,542	1,530	10	251	1.48	1.65
December	11,796	2,960	38	381	2.24	2.58
Calendar year 1947	136,881.8	12,500	4.4	375	2.21	29.94
January	10,798	2,500	49	348	2.05	2.36
February	22,543	3,700	96	777	4.57	4.93
March	49,094	11,900	106	1,584	9.32	10.74
April	13,248	5,310	40	442	2.60	2.90
May	1,237	159	16	39.9	.235	.27
June	1,113	329	10	37.1	.218	.24
July	1,249.0	225	9.2	40.3	.237	.27
August	397.9	55	5.5	12.8	.075	.09
September	301.9	39	5.4	10.1	.059	.07
Water year 1947-48	119,569.0	11,900	4.9	327	1.92	26.15

Peak discharge (base, 6,000 sec.-ft.).- Mar. 3 (7 p.m.) 8,900 sec.-ft.; Mar. 6, (5 p.m.) 7,200 sec.-ft.; Mar. 23 (10 a.m.) 21,100 sec.-ft.; Apr. 14 (10 a.m.) 7,200 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for nearby streams.

c Backwater from Black Warrior River.

Sucarnoochee River at Livingston, Ala.

Location.- Water-stage recorder, lat. 32°34', long. 88°12', in SE¼ sec. 33, T. 19 N., R. 2 W., at bridge on U. S. Highway 80, 500 feet upstream from Southern Railway bridge, three-quarters of a mile southwest of Livingston, and 9 miles upstream from Alamuchee Creek. Datum of gage is 90.04 feet above mean sea level, datum of 1929, supplementary adjustment of 1944.

Drainage area.- 635 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 796 second-feet.

Extremes.- Maximum discharge during year, 11,100 second-feet Mar. 6 (gage height, 24.4 feet); minimum, 118 second-feet Oct. 1, 2, 21, 22.

1938-48: Maximum discharge, 12,200 second-feet Jan. 20, 1947 (gage height, 24.7 feet); minimum, 61 second-feet Aug. 28, 1943.

Remarks.- Records good.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 18				Nov. 19 to Sept. 30					
4.0	118	7.0	463	4.2	144	12.0	1,470	22.0	5,360
5.0	222	9.0	786	6.0	344	16.0	2,410	23.0	7,280
6.0	332	12.7	1,620	7.0	477	18.0	2,970	24.0	9,910
				8.0	630	20.0	3,700	24.2	10,500
				9.0	808	21.0	4,290		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	202	356	791	2,620	1,130	1,920	752	551	241	332	164
2	118	700	344	1,130	2,590	2,820	2,490	536	369	246	258	159
3	123	524	332	1,110	2,490	4,860	2,760	477	320	219	208	154
4	122	493	332	867	2,060	6,020	2,760	449	285	192	186	164
5	133	379	332	614	1,600	7,280	2,540	449	268	175	175	208
6	126	288	344	506	1,740	10,500	1,780	491	252	164	164	800
7	126	405	369	463	1,900	9,330	1,220	698	246	159	154	1,130
8	133	448	568	421	2,510	7,280	1,410	734	241	154	144	1,060
9	128	493	1,040	a410	3,300	6,830	2,020	536	241	164	144	598
10	138	478	1,780	a400	4,290	5,670	1,760	435	252	164	154	320
11	138	1,450	1,970	a380	4,210	4,290	1,710	395	290	192	175	274
12	133	1,410	1,920	382	4,550	3,300	1,650	395	296	180	274	274
13	133	1,250	1,780	977	a5,400	2,210	1,780	477	258	170	449	268
14	127	1,010	1,560	1,290	a5,400	1,260	3,030	551	224	164	598	258
15	128	1,570	2,070	1,110	a4,600	949	3,740	491	214	241	949	344
16	124	1,550	2,360	734	4,010	949	3,700	408	208	180	908	395
17	121	1,410	2,460	566	3,890	1,110	4,010	421	230	175	681	344
18	119	1,620	2,460	506	3,790	1,220	3,790	752	356	214	614	274
19	120	1,880	2,380	477	3,230	1,220	2,940	789	421	285	506	241
20	120	1,810	2,040	463	2,310	1,150	1,530	521	332	308	356	219
21	118	1,690	1,110	566	1,900	929	808	382	302	421	280	208
22	118	1,310	698	847	2,040	1,320	681	332	369	320	241	197
23	121	734	614	867	2,090	2,790	614	308	320	263	214	192
24	122	789	566	808	2,160	2,850	566	290	263	197	197	186
25	122	867	536	734	2,280	2,760	536	280	241	170	208	180
26	133	734	506	752	2,230	2,490	506	274	224	170	186	170
27	148	566	477	1,130	1,990	2,570	647	280	320	180	180	164
28	148	477	449	1,670	1,600	2,360	1,020	302	421	236	180	175
29	158	421	435	1,710	1,220	2,210	1,110	981	344	408	175	252
30	190	382	421	2,090	-	2,040	1,200	1,470	274	521	170	356
31	184	-	421	2,460	-	1,880	-	1,260	-	395	164	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,091	190	118	132	0.208	0.24
November	27,340	1,880	202	911	1.43	1.60
December	33,030	2,460	332	1,065	1.88	1.93
Calendar year 1947	389,069	11,400	116	1,066	1.68	22.76
January	27,231	2,460	380	878	1.38	1.59
February	84,000	5,400	1,220	2,897	4.56	4.92
March	103,577	10,500	929	3,341	5.26	6.07
April	56,228	4,010	506	1,874	2.95	3.29
May	16,916	1,470	274	546	.860	.99
June	8,932	551	208	298	.469	.52
July	7,268	521	154	234	.369	.43
August	9,624	949	144	310	.488	.56
September	9,728	1,130	154	324	.510	.57
Water year 1947-48	387,965	10,500	118	1,060	1.67	22.71

Peak discharge (base, 5,000 sec.-ft.).- Feb. 13 (time unknown) 5,840 sec.-ft.; Mar. 6 (7 p.m.) 11,100 sec.-ft.

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

Leaf River near Collins, Miss.

Location.- Water-stage recorder, lat. 31°41', long. 89°24', in NE¼ sec. 33, T. 9 N., R. 14 W. St. Stephens meridian, at bridge on U. S. Highway 84, 2 miles downstream from Oakahay Creek, 8 miles upstream from Rahoma Creek, and 9½ miles northeast of Collins. Datum of gage is 197.48 feet above mean sea level (Mississippi State Highway bench mark).

Drainage area.- 752 square miles.

Records available.- September 1938 to September 1948.

Average discharge.- 10 years (1938-48), 1,059 second-feet.

Extremes.- Maximum discharge during year, 16,400 second-feet Mar. 6 (gage height, 23.54 feet); minimum, 108 second-feet Sept. 2, 3 (gage height, 4.86 feet).
1938-48: Maximum discharge, 22,800 second-feet May 2, 1940 (gage height, 26.36 feet); minimum, 74 second-feet Oct. 9, 11, 16, 1938, Aug. 27-29, 1943; minimum gage height, 4.59 feet Oct. 26, 1941.

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-11)

Oct. 1 to May 6

5.1	125	8.0	1,040	18.0	8,480
5.7	244	9.0	1,540	21.0	12,100
6.2	372	11.0	2,800	23.2	15,800
7.0	626	14.0	4,900		

May 7 to Sept. 30

4.9	115	7.0	664
5.3	193	7.5	834
5.9	340	8.0	1,040

Note.- Same as preceding table above 8.0 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	127	141	207	1,090	3,780	1,860	1,020	312	233	245	324	112
2	125	151	201	800	3,290	4,900	884	296	211	200	217	110
3	125	158	195	701	2,380	8,690	740	286	193	176	176	110
4	121	147	191	663	1,660	10,500	644	328	185	156	156	591
5	121	149	187	539	1,160	11,600	1,030	386	178	148	146	2,020
6	123	151	193	445	1,060	15,800	1,720	536	170	141	129	1,440
7	123	191	235	386	1,340	15,200	1,020	696	166	180	120	746
6	123	224	361	347	1,440	11,600	800	542	162	176	122	468
9	125	203	608	325	3,290	9,680	701	439	170	142	828	425
10	123	195	1,540	309	3,990	5,870	863	368	215	133	970	1,440
11	123	390	1,540	296	4,270	3,990	1,260	337	211	128	798	1,240
12	123	590	1,440	289	4,620	3,010	1,040	321	178	128	572	483
13	123	386	1,290	389	3,570	2,260	2,020	303	168	148	425	410
14	123	309	1,140	821	6,680	1,780	7,310	287	162	142	343	1,040
15	123	1,460	2,570	884	9,680	1,440	5,870	270	154	148	272	1,110
16	120	1,180	3,570	821	9,900	1,260	6,050	257	150	142	248	696
17	120	663	3,080	590	7,200	1,340	g4,270	248	204	152	337	483
18	120	415	3,010	491	3,430	1,190	g1,900	243	316	178	362	346
19	125	320	2,320	445	2,320	1,090	1,140	231	238	176	321	272
20	195	299	1,440	430	1,840	972	740	220	193	160	245	231
21	179	286	780	507	1,390	884	608	215	174	152	208	202
22	160	267	590	556	2,200	842	539	208	178	133	174	182
23	145	272	507	663	2,660	2,640	475	204	172	120	154	170
24	143	289	460	1,020	2,660	3,150	430	197	166	115	141	160
25	141	286	415	972	2,450	3,710	401	211	156	112	131	154
26	139	294	401	972	2,140	3,500	491	297	152	115	128	150
27	141	281	372	1,750	1,840	2,660	491	292	150	115	133	141
28	141	253	355	3,640	1,490	2,590	430	282	150	176	144	189
29	136	235	336	3,080	1,160	2,380	372	290	152	273	131	303
30	132	220	325	3,920	-	1,780	335	308	252	696	120	264
31	136	-	382	4,200	-	1,340	-	274	-	542	117	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,124	195	120	133	0.177	0.20
November	10,405	1,460	141	347	.461	.51
December	30,241	3,570	187	976	1.30	1.50
Calendar year 1947	509,411	21,600	106	1,396	1.86	25.20
January	32,321	4,200	289	1,043	1.39	1.60
February	94,890	9,900	1,060	3,272	4.35	4.69
March	139,508	15,800	842	4,500	5.98	6.90
April	45,594	7,310	335	1,520	2.02	2.25
May	9,684	696	197	312	.415	.48
June	5,559	316	150	185	.246	.27
July	5,748	696	112	185	.246	.28
August	8,692	970	117	280	.372	.43
September	15,688	2,020	110	523	.695	.78
Water year 1947-48	402,454	15,800	110	1,100	1.46	19.89

Peak discharge (base, 8,000 sec.-ft.).- Feb. 15 (10 p.m.) 10,000 sec.-ft.; Mar. 6 (6 p.m.) 16,400 sec.-ft.

g Computed from graph based on gage readings.

Leaf River at Hattiesburg, Miss.

Location.- Water-stage recorder, lat. 31°21', long. 89°17', in NW¼ sec. 2, T. 4 N., R. 13 W. St. Stephens meridian, at bridge on U. S. Highway 11, 300 feet downstream from Bowie Creek, 3,000 feet upstream from New Orleans & Northeastern Railroad bridge, and three-quarters of a mile northeast of Hattiesburg. Datum of gage is 118.23 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 1,760 square miles.

Records available.- September 1938 to September 1948. Gage-height records collected at site 3,000 feet downstream since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 10 years, 2,739 second-feet.

Extremes.- Maximum discharge during year, 32,900 second-feet Mar. 7 (gage height, 24.98 feet); minimum, 605 second-feet Sept. 3; minimum gage height, 5.12 feet Oct. 16-18.
1938-48: Maximum discharge, 71,300 second-feet Mar. 22, 1943 (gage height, 28.91 feet); minimum, 410 second-feet Oct. 26, 27, 1941 (gage height, 4.93 feet).
Flood of April 1900 reached a stage of about 33.6 feet, present datum, from reports of U. S. Weather Bureau.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 12 to Aug. 9, Aug. 12 to Sept. 4)

5.1	630	9.0	3,590	17.0	13,700
6.0	1,190	10.0	4,590	20.0	18,800
7.0	1,890	12.0	6,810	22.0	23,400
8.0	2,690	14.0	9,250	24.9	32,500

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	690	900	990	1,470	9,250	2,780	3,050	1,360	1,080	1,400	1,540	636
2	690	870	990	2,610	7,530	7,530	4,490	1,290	990	1,470	1,190	642
3	690	840	960	2,870	6,130	15,600	3,410	1,260	930	1,150	1,020	610
4	690	810	930	2,370	4,700	20,000	2,450	1,260	900	930	930	1,540
5	690	810	930	1,930	3,590	23,100	2,210	1,430	870	840	870	5,250
6	684	810	930	1,640	2,960	30,100	4,700	1,640	840	810	840	4,590
7	684	1,400	930	1,500	2,780	32,500	4,490	1,970	840	780	840	2,960
8	690	1,540	1,800	1,400	2,960	31,500	3,050	2,010	840	840	840	1,970
9	690	1,260	4,140	1,330	5,250	25,600	2,530	1,680	840	900	1,570	1,430
10	690	1,120	15,000	1,330	7,530	18,400	2,210	1,430	1,080	870	3,140	1,610
11	690	2,130	11,000	1,290	7,410	13,500	2,290	1,290	1,120	810	2,870	2,780
12	690	2.370	7,410	1,260	7,170	8,250	2,370	1,220	1,020	930	2,210	2,130
13	672	2,050	6,690	1,290	7,290	5,910	3,010	1,190	900	870	1,710	1,470
14	672	1,680	6,570	1,570	7,530	4,700	10,800	1,150	840	840	1,780	1,780
15	666	3,220	7,290	2,010	9,120	3,990	14,700	1,080	840	840	1,640	2,870
16	642	4,490	10,300	1,970	12,700	3,500	12,600	1,080	900	900	1,190	2,610
17	642	3,690	9,120	1,820	13,400	5,140	9,770	1,050	870	960	1,080	1,890
16	648	2,610	7,170	1,640	11,200	4,390	7,650	1,020	990	1,020	1,190	1,430
19	684	2,010	6,020	1,570	6,570	3,500	4,390	990	1,080	990	1,120	1,150
20	810	1,540	4,590	1,500	4,190	3,050	3,140	990	990	900	990	1,020
21	930	1,400	3,320	1,500	3,590	2,780	2,450	960	930	870	870	930
22	1,120	1,360	2,450	1,750	4,700	2,610	2,050	930	900	810	780	900
23	960	1,570	2,130	2,010	5,030	4,590	1,850	930	870	780	720	840
24	900	1,850	1,930	2,450	5,030	5,580	1,710	930	840	780	684	810
25	810	1,640	1,820	2,780	5,030	5,360	1,640	1,050	810	780	666	780
26	780	1,430	1,680	2,870	4,490	5,470	1,610	1,290	780	900	642	780
27	810	1,290	1,610	4,070	3,990	5,580	1,710	1,500	780	840	648	750
28	780	1,190	1,540	9,900	3,410	4,590	1,780	1,640	810	900	654	780
29	750	1,120	1,470	9,250	2,960	4,390	1,640	1,360	870	1,260	660	840
30	732	1,050	1,430	9,120	-	3,890	1,470	1,290	1,190	1,570	648	960
31	732	-	1,400	10,500	-	3,500	-	1,260	-	1,750	620	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	23,008	1,120	642	742	0.421	0.49
November	50,050	4,490	810	1,668	.948	1.06
December	124,540	15,000	930	4,017	2.28	2.63
Calendar year 1947	1,435,846	40,000	605	3,934	2.24	30.34
January	90,570	10,500	1,260	2,922	1.66	1.91
February	177,490	13,400	2,780	6,120	3.48	3.75
March	311,380	32,500	2,610	10,040	5.70	6.58
April	121,220	14,700	1,470	4,041	2.30	2.56
May	39,530	2,010	930	1,275	.724	.84
June	27,540	1,190	780	918	.522	.58
July	30,290	1,750	780	977	.555	.64
August	36,152	3,140	620	1,166	.662	.76
September	48,738	5,250	610	1,625	.923	1.03
Water year 1947-48	1,080,508	32,500	610	2,952	1.68	22.83

Peak discharge (base, 12,000 sec.-ft.).- Dec. 10 (9 a.m.) 16,000 sec.-ft.; Feb. 17 (1 a.m.) 13,900 sec.-ft.; Mar. 7 (2:30 a.m.) 32,900 sec.-ft.; Apr. 15 (4 p.m.) 15,000 sec.-ft.

Leaf River near McLain, Miss.

Location.- Water-stage recorder, lat. 31°06', long. 88°48', in SE¼ sec. 29, T. 2 N., R. 8 W. St. Stephens meridian, at bridge on State Highway 15, 1¼ miles east of McLain, 2 miles downstream from Rogers Creek, and 6 miles upstream from Oaktibbie Creek. Datum of gage is 42.15 feet above mean sea level, datum of 1929, supplementary adjustment of 1941.

Drainage area.- 3,510 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 65,500 second-feet Mar. 9 (gage height, 25.74 feet); minimum, 900 second-feet Oct. 19 (gage height, 3.22 feet).
1939-48: Maximum discharge, 88,300 second-feet Mar. 24, 1943 (gage height, 27.76 feet); minimum, 640 second-feet Oct. 26, 27, 1941 (gage height, 2.95 feet).
Flood in April 1900 reached a stage about 4 feet higher than that of Mar. 24, 1943, from information by local residents.

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 11 to July 27)

Oct. 1 to July 27

3.3	940	9.5	6,600	21.0	30,000
4.0	1,270	11.0	8,750	22.5	38,000
5.5	2,240	13.0	12,000	23.5	44,900
6.5	3,080	17.0	18,800	24.5	53,600
8.0	4,660	19.0	23,000	25.5	63,500

July 28 to Sept. 30

3.5	1,140	6.5	3,480
4.0	1,450	8.0	4,960
5.5	2,600	9.5	6,600

Note.- Same as preceding table above 9.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,120	1,140	2,030	2,990	19,700	6,460	7,860	2,990	2,100	1,690	3,120	1,170
2	1,070	1,240	1,890	3,170	19,700	8,750	7,300	2,810	1,890	1,890	2,680	1,800
3	1,070	1,240	1,820	4,310	18,600	19,600	7,860	2,640	1,690	1,960	2,280	2,040
4	1,040	1,190	1,750	4,660	16,400	27,600	7,440	2,480	1,630	1,750	1,880	3,140
5	1,020	1,140	1,690	4,540	13,800	33,000	6,600	2,400	1,510	1,510	1,620	7,440
6	1,000	1,120	1,630	4,090	11,300	48,200	7,020	2,640	1,450	1,390	1,480	8,300
7	980	1,420	1,630	3,560	9,200	59,500	9,050	2,900	1,390	1,420	1,350	7,860
8	980	3,260	1,630	3,080	7,580	63,500	9,660	3,260	1,360	1,390	1,290	5,760
9	980	3,260	3,800	2,720	8,450	65,500	8,450	3,360	1,330	1,360	1,660	4,360
10	980	2,400	17,400	2,640	11,400	62,500	7,020	3,170	1,390	1,420	3,390	3,480
11	960	6,910	28,800	2,480	13,100	54,500	6,050	2,810	1,630	1,420	5,760	3,210
12	960	8,300	34,000	2,400	14,000	44,900	5,530	2,560	1,750	1,390	6,000	3,960
13	960	5,920	31,500	2,640	14,200	36,800	5,270	2,320	1,630	1,570	4,960	3,570
14	940	4,420	27,200	2,640	14,300	28,000	11,100	2,320	1,510	1,570	5,160	4,060
15	940	8,270	23,000	2,720	14,800	20,100	16,000	2,240	1,420	1,420	4,160	6,120
16	920	11,400	22,100	3,080	15,000	14,700	18,400	2,100	1,360	1,420	3,300	6,600
17	920	10,100	22,100	3,260	16,000	11,400	20,100	2,100	1,510	2,140	2,520	5,660
18	920	8,000	21,600	3,260	17,400	12,600	20,200	1,960	1,890	2,100	2,280	4,460
19	920	6,600	19,700	2,990	18,100	12,600	19,200	1,820	1,750	1,750	2,200	3,480
20	1,140	5,270	16,700	2,810	16,500	10,500	16,400	1,750	1,690	1,690	2,040	2,760
21	1,570	4,200	13,300	2,900	11,600	8,900	12,100	1,690	1,570	1,630	1,920	2,280
22	1,420	3,760	10,300	2,990	10,100	8,150	8,300	1,630	1,510	1,480	1,800	2,000
23	1,570	3,360	8,000	3,080	10,100	8,150	5,270	1,630	1,480	1,390	1,590	1,760
24	1,480	4,660	6,320	4,310	9,980	10,300	4,200	1,570	1,420	1,330	1,550	1,620
25	1,300	5,020	4,780	4,900	9,980	11,800	3,660	1,960	1,390	1,390	1,690	1,520
26	1,220	3,870	4,090	5,270	9,820	11,300	3,460	2,320	1,360	1,480	1,480	1,410
27	1,240	3,170	3,660	5,660	9,350	11,800	3,560	2,480	1,330	1,570	1,350	1,380
28	1,330	2,720	3,460	10,800	8,600	12,500	3,660	2,720	1,300	1,800	1,320	1,350
29	1,240	2,400	3,170	15,900	7,440	11,400	3,560	2,990	1,360	5,820	1,260	1,320
30	1,140	2,170	3,080	18,100	-	9,820	3,260	2,560	1,630	6,980	1,200	1,380
31	1,090	-	2,990	19,500	-	8,600	-	2,240	-	3,570	1,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	34,420	1,570	920	1,110	0.316	0.36
November	127,930	11,400	1,120	4,264	1.21	1.36
December	344,920	34,000	1,630	11,130	3.17	3.65
Calendar year 1947	3,057,670	60,600	920	8,377	2.39	32.41
January	157,450	19,500	2,400	5,079	1.45	1.67
February	376,500	19,700	7,440	12,980	3.70	3.99
March	753,430	65,500	6,460	24,300	6.92	7.98
April	267,540	20,200	3,260	8,918	2.54	2.83
May	74,420	3,360	1,570	2,401	.684	.79
June	46,230	2,100	1,300	1,541	.439	.49
July	60,690	6,980	1,330	1,958	.558	.64
August	75,490	6,000	1,200	2,435	.694	.80
September	105,250	8,300	1,170	3,508	.999	1.12
Water year 1947-48	2,424,270	65,500	920	6,624	1.89	25.68

Peak discharge (base, 21,000 sec.-ft.).- Dec. 12 (11 a.m.) 34,500 sec.-ft.; Mar. 9 (2 p.m.) 65,500 sec.-ft.

Pascagoula River at Merrill, Miss.

Location.- Water-stage recorder, lat. 30°59', long. 88°44', in SW¼ sec. 18, T. 1 S., R. 7 W. St. Stephens meridian, at bridge on old State Highway 15, half a mile downstream from confluence of Leaf and Chickasawhay Rivers and half a mile west of Merrill. Datum of gage is 26.31 feet above mean sea level, datum of 1929.

Drainage area.- 6,600 square miles.

Records available.- December 1930 to September 1948. Gage-height records collected at same site since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 17 years (1931-48), 10,040 second-feet.

Extremes.- Maximum discharge during year, 103,000 second-feet Mar. 10 (gage height, 25.95 feet); minimum, 1,580 second-feet Oct. 18, 19; minimum gage height, 3.64 feet Oct. 19.

1930-48: Maximum discharge, 154,000 second-feet Apr. 13, 1938 (gage height, 29.71 feet); minimum, 696 second-feet Nov. 3, 1936 (gage height, 2.37 feet).

Maximum stage known, 32.5 feet in April 1900 (from information by U. S. Weather Bureau). Flood of July 9, 1916, reached a stage of 31 feet, present datum (from reports of U. S. Weather Bureau).

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 2-22, Apr. 23 to June 8)

Oct. 1 to Jan. 22

3.7	1,610	10.0	8,170	21.0	34,000
4.4	2,100	13.0	12,800	22.0	41,500
5.0	2,580	16.0	17,800	23.2	54,500
6.0	3,460	18.0	22,400		
8.0	5,560	20.0	29,200		

Jan. 23 to Sept. 30

4.1	1,950	15.5	19,900	23.5	64,500
5.0	2,800	18.0	25,900	24.5	78,100
7.0	5,060	20.0	33,100	25.5	94,100
10.0	9,150	21.0	37,200		
13.0	14,100	22.0	43,000		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,030	2,100	4,340	6,160	31,800	16,000	18,900	7,010	4,570	2,800	9,000	2,080
2	1,960	2,420	4,040	6,280	33,100	16,300	17,900	6,360	4,450	3,220	8,230	2,400
3	1,890	2,340	3,840	7,190	33,100	26,500	16,900	5,710	4,100	3,440	4,810	3,330
4	1,820	2,340	3,640	8,450	31,800	42,200	16,300	5,060	3,770	3,330	3,880	4,240
5	1,820	2,420	3,550	8,900	28,600	55,200	15,400	4,690	3,330	2,800	3,330	11,300
6	1,820	2,260	3,460	8,600	g25,300	71,000	15,600	4,810	3,110	2,500	2,800	12,200
7	1,750	3,340	3,370	7,750	g21,500	89,000	16,500	5,710	3,000	2,350	2,600	11,800
8	1,750	5,920	3,460	6,930	g17,100	95,800	17,500	6,100	2,900	2,260	2,310	9,960
9	1,710	6,280	5,000	6,160	g16,000	99,400	18,100	6,360	2,800	2,130	5,280	8,400
10	1,710	5,330	16,300	5,800	g18,900	101,000	16,700	6,360	3,000	2,130	13,700	7,010
11	1,680	9,860	32,400	5,560	g21,500	97,600	14,300	5,840	3,110	2,130	13,000	5,840
12	1,680	16,000	49,700	5,330	g23,500	90,700	12,700	5,320	3,220	2,080	10,700	5,840
13	1,640	13,400	54,500	7,190	g25,000	81,100	12,200	4,930	3,110	2,170	8,850	5,710
14	1,640	9,800	50,800	7,330	25,600	73,800	18,700	4,890	3,000	2,400	8,260	7,010
15	1,610	11,500	44,400	6,540	26,200	64,500	24,700	4,450	2,800	2,130	8,850	10,400
16	1,610	16,200	39,700	6,540	27,100	55,200	28,000	4,210	2,600	2,080	7,280	12,200
17	1,610	16,700	36,600	7,060	28,000	45,100	30,600	4,330	2,800	2,900	5,580	11,300
18	1,580	15,500	34,600	7,330	29,400	39,200	32,600	4,570	3,330	3,770	4,570	8,700
19	1,580	13,800	32,900	7,060	31,000	35,200	33,600	4,810	3,110	3,330	4,210	6,620
20	1,750	g11,200	30,000	6,540	31,400	30,600	32,200	4,450	3,000	2,700	4,100	5,320
21	2,340	g9,200	25,400	6,540	28,600	25,000	28,600	3,990	2,800	2,400	3,990	4,330
22	2,420	g7,890	21,100	7,060	25,600	19,900	24,400	3,660	2,800	2,170	3,770	3,660
23	2,420	g7,470	17,300	6,880	25,000	17,100	19,700	3,440	2,800	2,040	3,440	3,220
24	2,420	g8,600	13,800	8,120	24,100	16,700	15,200	3,220	2,700	g1,950	3,110	3,000
25	2,180	g11,400	10,600	9,450	23,500	18,700	9,960	3,440	2,500	g1,990	3,440	2,700
26	2,030	9,200	8,750	9,960	21,800	20,700	8,120	4,210	2,400	g2,700	3,220	2,500
27	2,030	7,060	7,750	10,300	20,200	21,800	8,120	5,190	2,310	g2,400	3,000	2,400
28	2,420	5,920	7,060	13,400	18,700	23,800	7,840	5,190	2,260	g2,900	2,600	2,350
29	2,420	5,220	6,670	19,700	17,500	24,100	7,840	5,710	2,260	g8,740	2,400	2,400
30	2,100	4,780	6,410	25,300	-	22,600	7,700	5,320	2,500	17,500	2,260	2,600
31	1,960	-	6,160	29,400	-	20,700	-	4,690	-	13,900	2,170	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	59,380	2,420	1,580	1,915	0.290	0.33
November	245,450	16,700	2,100	8,182	1.24	1.38
December	587,600	54,500	3,370	18,950	2.87	3.31
Calendar year 1947	5,391,210	86,500	1,580	14,770	2.24	30.38
January	284,810	29,400	5,330	9,187	1.39	1.60
February	730,900	33,100	16,000	25,200	3.82	4.12
March	1,456,500	101,000	16,000	46,980	7.12	8.21
April	546,880	33,600	7,700	18,230	2.76	3.08
May	153,830	7,010	3,220	4,962	.752	.87
June	90,440	4,570	2,260	3,015	.456	.51
July	111,340	17,500	1,950	3,592	.544	.63
August	162,740	13,700	2,170	5,250	.795	.92
September	180,820	12,200	2,080	6,027	.913	1.02
Water year 1947-48	4,610,690	101,000	1,580	12,600	1.91	25.98

Peak discharge (base, 38,000 sec.-ft.).- Dec. 13 (7 a.m.) 54,500 sec.-ft.; Mar. 10 (12 m.) 103,000 sec.-ft.

g Computed from graph based on gage readings.

Oakahay Creek at Mize, Miss.

Location.- Water-stage recorder, lat. 31°52', long. 89°31', in NW¼ sec. 6, T. 10 N., R. 15 W. St. Stephens meridian, at bridge on State Highway 20, 0.4 mile east of Mize, 1½ miles downstream from Hatchapaloo Creek, and 17 miles upstream from mouth. Datum of gage is 274.18 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 217 square miles (authority, Corps of Engineers).

Records available.- October 1943 to September 1948.

Extremes.- Maximum discharge during year, 6,070 second-feet Feb. 14 (gage height, 12.50 feet); minimum, 23 second-feet Oct. 15-18; minimum gage height, 1.82 feet Sept. 2.

1943-48: Maximum discharge, 9,710 second-feet Jan. 20, 1947 (gage height, 13.49 feet); minimum observed, 13 second-feet at times during October and November 1943 (gage height, 1.8 feet).

Remarks.- Records fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 19 to Mar. 2, Mar. 12-23, Mar. 28 to Apr. 13)

Oct. 1 to Feb. 14								Feb. 15 to Sept. 30	
2.1	28	4.0	147	8.2	740	10.9	2,290	1.8	23
2.6	47	6.0	349	8.4	1,070	11.3	2,880	2.2	35
3.1	74	6.6	422	9.8	1,230	11.8	4,010	2.8	59
3.4	94	7.2	525	10.3	1,600	12.4	5,780	3.1	74

Note.- Same as preceding table above 3.1 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	33	48	139	920	441	267	82	51	49	47	24
2	26	31	46	182	789	989	242	58	43	39	44	25
3	25	30	46	182	564	2,360	217	55	39	33	39	27
4	25	30	46	142	317	2,980	197	70	35	31	33	134
5	26	33	47	114	267	2,800	182	75	34	31	29	317
6	27	34	48	93	257	4,140	192	134	33	30	27	247
7	26	57	49	84	287	2,880	227	182	33	32	28	137
8	26	52	104	78	277	2,220	202	110	32	31	27	78
9	28	40	132	75	614	1,700	177	79	41	32	220	53
10	25	64	277	72	893	1,280	152	68	60	31	187	48
11	24	187	297	89	1,010	1,010	182	66	39	29	119	45
12	24	110	252	68	948	740	182	89	34	30	147	41
13	24	84	237	112	2,230	506	595	56	32	34	110	84
14	24	113	242	277	4,580	371	1,580	82	32	33	73	154
15	23	349	520	287	2,640	327	1,650	48	30	33	48	217
16	23	207	670	177	1,980	317	1,260	46	41	56	90	128
17	23	114	670	137	1,360	317	1,070	45	83	59	80	72
18	23	84	605	128	1,040	338	797	43	46	42	60	55
19	29	78	364	128	720	297	297	41	43	65	57	45
20	55	65	207	123	453	267	187	39	37	49	53	40
21	32	64	152	142	422	247	147	38	34	39	42	36
22	28	61	128	167	605	247	123	37	33	32	31	34
23	26	75	114	202	740	539	102	35	33	29	31	32
24	26	74	102	277	789	814	91	35	33	27	30	31
25	28	70	99	277	740	866	82	40	33	28	30	30
26	32	76	93	257	648	893	100	88	34	28	31	29
27	32	66	91	427	825	920	119	70	29	27	30	30
28	30	55	86	814	437	817	106	88	24	62	30	55
29	28	53	60	814	371	437	79	110	172	297	28	60
30	27	50	78	1,010	-	338	68	70	89	182	25	60
31	28	-	79	1,010	-	287	-	54	-	60	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	847	55	23	27.3	0.126	0.15
November	2,439	349	30	81.3	.375	.42
December	6,009	670	48	194	.894	1.03
Calendar year 1947	125,488	8,750	20	344	1.59	21.52
January	8,064	1,010	68	260	1.20	1.38
February	27,383	4,580	257	944	4.35	4.69
March	32,465	4,140	247	1,047	4.82	5.56
April	10,812	1,650	68	360	1.66	1.85
May	2,034	162	35	68.6	.302	.35
June	1,312	172	24	43.7	.201	.22
July	1,580	297	27	51.0	.235	.27
August	1,848	220	24	59.6	.275	.32
September	2,338	317	24	77.9	.359	.40
Water year 1947-48	97,131	4,560	23	265	1.22	16.64

Peak discharge (base, 2,500 sec.-ft.).- Feb. 14 (12:30 a.m.) 6,070 sec.-ft.; Mar. 6 (6 a.m.) 4,560 sec.-ft.

Bowie Creek near Hattiesburg, Miss.

Location.- Water-stage recorder, lat. 31°26', long. 89°26', in sec. 5, T. 5 N., R. 14 W. St. Stephens meridian, at bridge on U. S. Highway 49, 2 miles southwest of Lux, 2 miles upstream from Okatoma Creek, and 10 miles northwest of Hattiesburg. Datum of gage is 160.04 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).
Drainage area.- 304 square miles.
Records available.- September 1938 to September 1948.
Average discharge.- 10 years, 494 second-feet.
Extremes.- Maximum discharge during year, 6,820 second-feet Mar. 6 (gage height, 18.48 feet); minimum, 156 second-feet Sept. 26-28; minimum gage height, 3.47 feet Sept. 2, 3.
1938-48: Maximum discharge, 20,100 second-feet Mar. 21, 1943 (gage height, 25.70 feet); minimum observed, 100 second-feet Sept. 23-30, Oct. 4-13, 16, 1938; minimum gage height, 3.44 feet Sept. 7, 1947.
Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second feet)
(Shifting-control method used May 29 to July 11, July 13 to Sept. 4)

3.6	168	6.0	748	14.0	4,020
4.0	220	7.0	1,100	16.0	5,090
4.4	292	9.0	1,900	18.0	6,440
5.0	443	12.0	3,130		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180	206	227	292	1,700	390	623	243	220	261	220	186
2	180	220	220	471	1,100	1,500	991	235	206	292	206	180
3	180	206	220	651	832	4,300	529	235	199	227	193	180
4	180	193	227	429	667	5,740	416	235	193	193	186	375
5	180	186	227	339	559	4,910	643	261	193	186	186	866
6	180	186	227	292	500	6,230	1,260	327	199	180	186	574
7	180	252	227	281	457	6,370	815	377	199	174	193	351
8	180	303	350	271	429	4,370	544	390	199	174	193	243
9	180	327	1,170	271	1,200	2,380	416	327	206	180	227	199
10	180	252	3,750	271	1,420	1,540	377	261	416	174	303	353
11	180	371	2,540	271	1,140	1,180	339	243	261	185	327	243
12	180	559	1,820	271	919	919	315	235	220	220	292	213
13	174	471	1,580	292	866	731	745	227	206	193	271	199
14	174	364	1,460	429	1,420	620	3,610	235	199	193	437	277
15	174	694	2,140	416	1,460	544	3,000	227	199	193	377	403
16	174	1,060	2,580	327	2,340	574	1,660	220	199	186	252	339
17	174	1,030	1,980	292	1,420	1,100	991	220	193	186	271	252
18	174	731	1,220	292	815	781	635	220	199	193	243	199
19	174	457	849	303	604	635	457	213	206	193	227	186
20	193	303	635	292	500	529	390	206	206	186	213	174
21	227	261	500	303	471	471	351	199	193	180	199	168
22	271	261	443	390	955	471	315	199	193	174	199	168
23	220	315	403	471	815	1,380	303	199	186	168	193	162
24	206	514	364	574	683	798	281	199	186	168	186	162
25	193	443	339	620	635	731	271	220	180	174	186	182
26	193	339	327	604	589	559	271	261	180	193	186	156
27	193	271	303	1,220	514	683	303	252	180	206	193	156
28	186	243	292	2,830	471	620	339	271	174	220	193	156
29	186	235	281	1,980	416	544	292	281	180	351	186	162
30	180	227	281	2,060	-	544	261	261	351	292	186	162
31	180	-	281	2,220	-	529	-	235	-	252	186	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	5,806	271	174	187	0.615	0.71
November	11,380	1,060	186	379	1.25	1.39
December	27,463	3,750	220	886	2.91	3.36
Calendar year 1947	268,215	8,940	152	735	2.42	32.79
January	20,025	2,830	271	646	2.12	2.45
February	25,897	2,340	416	893	2.94	2.17
March	52,673	6,370	390	1,699	5.59	6.44
April	21,743	3,610	261	725	2.38	2.66
May	7,714	390	199	249	.819	.94
June	6,321	416	174	211	.694	.77
July	6,348	351	168	205	.674	.78
August	7,096	437	186	229	.753	.87
September	7,606	866	156	254	.836	.93
Water year 1947-48	200,072	6,370	156	547	1.80	24.47

Peak discharge (base, 4,000 sec.- ft.).- Dec. 10 (12:30 p.m.) 4,120 sec.-ft.; Mar. 4 (8:30 p.m.) 5,880 sec.-ft.; Mar. 6 (7 p.m.) 6,820 sec.-ft.

Tallahala Creek at Laurel, Miss.

Location.- Water-stage recorder, lat. 31°41', long. 89°07', in NE¼ sec. 8, T. 8 N., R. 11 W. St. Stephens meridian, at bridge on State Highway 15, half a mile upstream from Gulf, Mobile & Ohio Railroad bridge, three-quarters of a mile southeast of Laurel, and 6 miles upstream from Tallahoma Creek. Datum of gage is 201.37 feet above mean sea level (Mississippi State Highway bench mark).

Drainage area.- 233 square miles.

Records available.- September 1938 to September 1948.

Average discharge.- 10 years, 362 second-feet.

Extremes.- Maximum discharge during year, 6,920 second-feet Mar. 6; maximum gage height, 17.30 feet Mar. 8; minimum discharge, 12 second-feet Oct. 18, 19; minimum gage height, 2.14 feet Oct. 19.

1938-48: Maximum discharge, 13,700 second-feet Jan. 21, 1947; minimum observed, 2.4 second-feet Oct. 15, 16, 1938.

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 1-7, Mar. 27 to Apr. 4, May 5 to July 12)

2.2	13	4.0	83	9.0	602	15.0	2,440
2.6	22	4.8	142	11.0	908	15.8	3,390
3.0	34	6.0	245	12.5	1,280	16.6	4,970
3.5	55	8.0	472	14.0	1,810	17.3	6,480

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	20	61	122	1,430	558	352	90	73	22	67	16
2	16	24	55	315	1,710	1,300	448	86	49	21	36	16
3	16	25	50	550	1,670	2,150	730	72	40	21	29	16
4	15	28	48	630	1,590	2,290	823	81	34	22	23	136
5	15	33	47	563	1,460	4,830	672	81	31	23	20	260
6	15	26	47	285	947	6,480	644	107	28	21	18	524
7	15	34	47	182	472	6,040	715	126	26	18	17	472
8	16	32	74	150	412	6,040	658	186	26	16	17	302
9	15	58	201	130	589	4,150	658	204	27	15	63	128
10	14	62	576	118	760	2,440	589	130	29	15	62	75
11	14	122	745	114	823	1,970	388	90	37	22	97	56
12	14	222	760	107	856	1,630	472	78	40	24	111	77
13	13	158	791	107	926	1,310	667	68	29	25	118	186
14	13	255	823	126	1,080	900	1,340	61	26	33	114	236
15	13	376	965	195	1,220	537	1,460	69	24	28	118	296
16	13	436	1,030	251	1,190	424	1,760	52	26	26	69	307
17	13	364	965	209	1,080	498	2,610	48	26	22	60	275
18	12	388	890	154	1,030	436	1,970	45	24	20	75	160
19	13	364	856	138	1,060	400	1,590	44	24	22	78	86
20	17	178	890	126	804	388	976	44	23	20	77	60
21	17	114	986	126	424	307	318	38	27	18	64	48
22	18	130	788	154	485	307	218	39	31	22	39	41
23	17	134	307	227	602	602	178	35	30	20	33	35
24	16	118	213	318	644	630	150	36	27	16	28	31
25	17	107	178	364	715	672	130	33	26	54	24	28
26	17	93	158	424	730	700	122	40	24	20	22	25
27	16	100	142	524	644	775	138	38	20	26	21	24
28	16	130	130	823	550	775	178	44	22	27	20	28
29	19	100	122	986	424	602	166	69	47	48	18	44
30	18	73	114	1,110	-	576	122	76	36	134	18	72
31	19	-	114	1,280	-	511	-	65	-	134	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	480	19	12	15.5	0.067	0.08
November	4,304	436	20	143	.614	.69
December	13,173	1,030	47	425	1.82	2.10
Calendar year 1947	199,579	12,500	12	547	2.35	31.87
January	10,908	1,280	107	352	1.51	1.74
February	26,327	1,710	412	908	3.90	4.20
March	51,228	6,480	307	1,653	7.09	8.18
April	21,242	2,610	122	708	3.04	3.39
May	2,265	204	33	73.1	.314	.36
June	932	73	20	31.1	.133	.15
July	955	134	15	30.8	.132	.15
August	1,573	118	17	50.7	.218	.25
September	4,060	524	16	135	.579	.65
Water year 1947-48	137,447	6,480	12	376	1.61	21.94

Peak discharge (base, 3,000 sec.-ft.).- Mar. 6 (2:30 p.m.) 6,920 sec.-ft.

Tallahala Creek near Runnelstown, Miss.

Location.- Water-stage recorder, lat. 31°20', long. 89°07', in NE¼ sec. 8, T. 4 N., R. 11 W. St. Stephens meridian, at bridge on county road between Sunrise and Runnelstown, 3 miles south of Runnelstown and 9 miles upstream from mouth.

Drainage area.- 612 square miles.

Records available.- November 1939 to September 1948.

Extremes.- Maximum discharge during year, 13,500 second-feet Mar. 8 (gage height, 19.12 feet); minimum, 62 second-feet Oct. 16; minimum gage height, 1.42 feet Sept. 1.
1939-48: Maximum discharge, 19,300 second-feet Jan. 23, 1947 (gage height, 21.70 feet); minimum, 46 second-feet Oct. 26, 27, 1941 (gage height, 1.35 feet).

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 19

1.5	65	4.3	775	16.0	8,950
1.8	113	4.6	900	18.0	11,600
2.0	150	5.5	1,340	19.0	13,300
2.8	326	8.0	2,740		
3.5	505	13.0	6,060		

Apr. 20 to Sept. 30

1.5	80	3.3	473
1.8	128	4.1	705
2.1	185	4.6	900
2.5	274		

Note.- Same as preceding table above 4.6 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	129	277	462	3,230	1,080	1,250	408	191	187	447	85
2	91	131	247	505	2,980	2,620	1,010	358	185	142	383	176
3	86	126	227	630	2,980	5,190	1,230	322	171	105	235	79
4	83	115	212	1,080	3,110	5,330	1,650	305	152	92	161	436
5	80	115	206	1,180	3,050	5,540	1,760	320	156	84	128	1,280
6	77	117	202	1,010	2,860	8,730	1,600	358	130	80	106	1,710
7	72	490	197	700	2,380	11,000	1,870	408	121	83	90	1,340
8	68	520	497	535	1,440	13,300	2,040	408	114	90	82	1,080
9	66	263	1,460	462	1,820	12,600	1,760	447	128	83	181	740
10	66	202	5,610	437	2,200	11,200	1,550	473	291	79	640	539
11	65	430	3,620	400	2,200	9,070	1,310	383	202	80	740	460
12	66	900	2,920	387	2,260	6,720	922	317	177	80	800	371
13	66	700	2,980	400	2,260	5,120	1,310	284	173	82	539	334
14	66	520	2,980	400	2,380	4,070	3,300	258	141	83	460	823
15	65	1,630	3,550	412	2,380	3,110	3,750	237	114	82	371	1,340
16	64	1,650	3,420	475	2,440	1,980	3,550	224	120	97	317	1,080
17	64	1,150	2,920	565	2,500	2,680	3,360	215	233	256	310	905
18	65	922	2,440	565	2,380	2,150	3,490	204	130	175	267	670
19	129	855	2,150	475	2,200	1,650	3,880	189	123	106	210	486
20	174	815	1,930	437	2,150	1,310	3,750	177	111	95	228	346
21	122	565	1,870	425	2,090	1,180	2,980	169	105	83	221	258
22	191	437	1,930	425	1,930	1,060	1,270	161	98	80	204	213
23	168	462	1,820	490	1,650	1,710	705	146	97	76	167	183
24	140	612	1,010	717	1,550	2,680	580	146	98	76	130	161
25	120	505	700	815	1,710	1,870	512	152	100	84	113	141
26	118	412	595	945	1,710	1,760	486	300	95	103	100	125
27	144	350	535	1,550	1,650	2,040	460	226	94	120	92	114
28	135	326	505	3,170	1,490	1,930	434	293	98	159	86	114
29	111	326	475	2,740	1,230	1,600	473	256	285	249	82	125
30	98	326	450	3,110	-	1,340	460	202	142	210	80	126
31	98	-	437	3,420	-	1,390	-	206	-	355	77	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,054	191	64	98.5	0.161	0.19
November	16,101	1,650	115	537	.877	.98
December	48,372	5,610	197	1,560	2.55	2.94
Calendar year 1947	517,583	17,800	64	1,418	2.32	31.47
January	29,324	3,420	387	946	1.55	1.78
February	64,210	3,230	1,230	2,214	3.62	3.90
March	133,010	13,300	1,060	4,291	7.01	8.08
April	52,702	3,880	434	1,757	2.87	3.20
May	8,552	473	146	276	.451	.52
June	4,375	291	94	146	.239	.27
July	3,756	355	76	121	.198	.23
August	8,047	800	77	260	.425	.49
September	15,840	1,710	79	528	.863	.96
Water year 1947-48	387,343	13,300	64	1,058	1.73	23.54

Peak discharge (base, 5,000 sec.-ft.).- Dec. 10 (3:30 a.m.) 6,540 sec.-ft.; Mar. 8 (1 p.m.) 13,500 sec.-ft.

Tallahoma Creek near Laurel, Miss.

Location.- Wire-weight gage, lat. 31°47', long. 89°11', in NE¼ sec. 3, T. 9 N., R. 12 W. St. Stephens meridian, at bridge on State Highway 15, three-quarters of a mile upstream from Cypress Creek, 1½ miles downstream from Gulf, Mobile & Ohio Railroad bridge, 7 miles northwest of Laurel, and 15 miles upstream from mouth. Datum of gage is 233.73 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 149 square miles (authority, Corps of Engineers).

Records available.- February 1941 to June 1948 (discontinued).

Extremes.- Maximum discharge observed during period October 1947 to June 1948, 4,960 second-feet Mar. 7 (gage height, 12.29 feet); minimum observed, 2.4 second-feet Oct. 18, 19 (gage height, 0.55 foot).

1941-48: Maximum discharge observed, 9,410 second-feet Jan. 20, 1947 (gage height, 13.82 feet); minimum observed, 2.2 second-feet Oct. 20, 1945 (gage height, 0.33 foot).

Remarks.- Records fair. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

0.6	3.0	3.2	107	9.5	683
.8	6.2	4.0	160	10.0	775
1.0	10	5.0	235	10.5	940
1.2	15	6.5	355	10.9	1,240
1.4	22	8.0	495	11.3	2,070
2.1	50	9.0	611	12.0	4,090

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	8.7	38	173	1,310	251	211	46	11			
2	5.0	8.7	34	539	1,180	856	586	42	10			
3	4.5	7.3	32	485	940	2,070	485	38	9			
4	4.2	21	30	299	753	4,380	291	42	8.9			
5	4.0	15	30	167	382	3,650	267	75	8			
6	3.9	13	30	125	283	4,670	506	85	7			
7	3.6	15	32	101	267	4,670	528	146	7			
8	3.4	46	113	90	267	3,650	506	125	7.3			
9	3.4	44	227	85	436	2,490	364	80	8.1			
10	3.3	44	475	75	586	1,580	259	52	26			
11	3.2	130	528	75	667	1,130	267	46	18			
12	3.0	146	539	75	699	667	315	38	11			
13	3.0	203	550	85	753	485	331	34	5.5			
14	3.3	146	517	139	990	347	990	30	6.8			
15	2.7	267	539	195	860	275	1,130	24	6.2			
18	2.6	364	638	211	734	275	1,940	21	5.0			
17	2.6	347	652	132	683	251	1,580	18	4.8			
18	2.6	331	624	107	734	235	990	16	5.2			
19	2.6	153	716	95	654	243	582	14	4.8			
20	4.4	85	716	101	364	203	188	12	4.7			
21	4.8	95	465	113	227	174	139	12	6			
22	4.8	90	203	181	315	160	113	11				
23	4.5	85	153	275	475	315	85	10				
24	11	90	132	275	517	562	80	9.8				
25	8.5	85	113	291	539	539	70	9.6				
26	7.3	80	107	267	382	517	75	11				
27	8.5	95	95	347	307	291	101	12				
28	8.5	75	85	586	267	331	101	16				
29	7.0	55	80	775	219	331	75	13				
30	5.2	44	80	990	-	251	55	12				
31	5.4	-	75	1,580	-	181	-	11	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	146.3	11	2.6	4.72	0.032	0.04
November	3,188.7	364	7.3	106	.711	.80
December	8,648	716	30	279	1.87	2.16
Calendar year 1947	121,695.2	9,110	2.6	333	2.23	30.39
January	9,034	1,580	75	291	1.95	2.25
February	16,790	1,310	219	579	3.89	4.19
March	35,830	4,670	160	1,156	7.79	8.94
April	13,210	1,940	55	440	2.95	3.30
May	1,111.4	146	9.6	35.9	.241	.28
June	234.3	26	-	7.81	.052	.06
July	-	-	-	-	-	-
August	-	-	-	-	-	-
September	-	-	-	-	-	-
Water year	-	-	-	-	-	-

Note.- Doubtful or no gage-height record May 30 to June 3, June 5-7, 21-30; discharge computed on basis of records for Tallahala Creek at Laurel.

Chunky Creek near Chunky, Miss.

Location.- Water-stage recorder, lat. 32°20', long. 88°54', in SW¼ sec. 30, T. 6 N., R. 14 E., Choctaw meridian, at bridge on U. S. Highway 80, 2,500 feet upstream from Alabama & Vicksburg Railway bridge, 1¼ miles east of Chunky, 3¼ miles upstream from Tallahatta Creek, and 5½ miles downstream from Concobona Creek.

Drainage area.- 368 square miles.

Records available.- August 1938 to September 1948.

Average discharge.- 10 years, 490 second-feet.

Extremes.- Maximum discharge during year, 8,340 second-feet Mar. 4 (gage height, 16.80 feet); minimum, 17 second-feet Aug. 8 (gage height, 2.52 feet).
1938-48: Maximum discharge, 11,800 second-feet Feb. 11, 1946 (gage height, 20.49 feet); minimum, 6.4 second-feet Aug. 27-29, 1943 (gage height, 2.28 feet).

Remarks.- Records good except those for period of no gage-height record, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 15 to Sept. 4)

Oct. 1 to May 29

2.6	22	4.1	342	10.0	3,370
2.8	44	4.5	479	12.0	4,660
3.0	72	5.0	675	14.0	6,010
3.3	129	6.0	1,110	16.0	7,620
3.7	225	8.0	2,200	16.3	7,890

May 30 to Sept. 30

2.6	21	3.2	90
2.8	35	3.5	161
3.0	57	4.1	342

Note.- Same as preceding table above 4.1 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	35	130	310	1,800	498	888	147	98	94	46	29
2	23	45	120	615	1,300	2,080	932	142	77	66	43	32
3	23	60	120	498	675	4,660	695	133	68	47	33	26
4	23	60	120	323	556	7,890	498	133	63	37	30	192
5	23	45	140	255	954	5,590	428	144	60	32	23	675
6	23	35	170	225	1,520	4,920	575	172	58	29	20	498
7	24	80	170	204	1,580	6,160	655	220	60	27	18	239
8	24	120	275	194	1,690	5,590	498	199	64	31	17	109
9	24	130	517	189	2,490	3,430	556	153	63	27	19	68
10	25	130	779	184	2,950	2,080	1,230	129	70	23	25	60
11	24	300	976	179	3,130	1,230	1,690	133	66	22	87	133
12	24	400	801	176	2,660	910	1,260	123	62	25	98	76
13	23	380	556	382	2,080	695	761	114	60	24	69	58
14	23	220	556	635	2,950	595	2,140	127	56	24	53	68
15	22	350	1,020	435	5,520	556	3,310	125	53	23	69	85
16	22	600	1,690	287	4,400	536	3,620	108	50	26	208	88
17	21	580	1,970	255	2,490	635	2,140	100	46	34	348	68
18	21	370	1,690	247	1,070	635	737	97	51	55	242	51
19	20	600	869	241	737	575	517	93	56	53	128	43
20	21	840	468	241	655	498	407	89	52	35	74	37
21	22	800	377	308	716	432	345	84	49	31	55	34
22	27	380	320	498	1,210	432	305	77	52	27	45	33
23	23	260	290	449	1,260	1,140	272	75	50	23	39	30
24	24	310	266	387	1,070	1,970	241	74	44	20	40	29
25	25	380	249	377	932	2,080	220	74	41	20	43	26
26	26	300	233	418	844	1,630	212	79	36	24	36	26
27	27	220	222	675	716	910	217	84	38	72	34	27
28	30	180	207	1,070	615	1,630	209	114	56	70	33	80
29	30	160	199	1,070	517	1,740	184	333	43	60	30	192
30	35	140	196	1,310	-	1,110	160	298	162	72	34	156
31	25	-	194	1,690	-	655	-	153	-	58	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	750	35	20	24.2	0.066	0.08
November	8,510	840	35	284	.772	.86
December	15,890	1,970	120	513	1.39	1.61
Calendar year 1947	230,280	8,970	16	631	1.71	23.30
January	14,327	1,690	176	462	1.26	1.45
February	49,087	5,520	517	1,693	4.60	4.96
March	63,492	7,890	432	2,048	5.57	6.42
April	25,902	3,620	106	863	2.35	2.62
May	4,126	333	74	133	.361	.42
June	1,804	162	36	60.1	.163	.18
July	1,211	94	20	39.1	.106	.12
August	2,077	348	17	67.0	.182	.21
September	3,268	675	26	109	.296	.33
Water year 1947-48	190,444	7,890	17	520	1.41	19.26

Peak discharge (base, 5,000 sec.-ft.).- Feb. 15 (10 a.m.) 6,160 sec.-ft.; Mar. 4 (6:30 a.m.) 8,340 sec.-ft.; Mar. 7 (7:30 p.m.) 6,400 sec.-ft.

Note.- No gage-height record Oct. 28 to Dec. 7; discharge computed on basis of records for other stations in basin.

Chickasawhay River at Enterprise, Miss.

Location.- Water-stage recorder, lat. 32°10', long. 88°49', in NW¼ sec. 24, T. 4 N., R. 14 E. Choctaw meridian, at county bridge in Enterprise, half a mile downstream from confluence of Chunky and Okatibbee Creeks. Datum of gage is 212.62 feet above mean sea level, datum of 1929, supplementary adjustment of 1941.

Drainage area.- 913 square miles.

Records available.- August 1938 to September 1948. Gage-height records collected at same site since 1904 are published in reports of U. S. Weather Bureau.

Average discharge.- 10 years, 1,257 second-feet.

Extremes.- Maximum discharge during year, 16,900 second-feet Mar. 7 (gage height, 25.45 feet); minimum, 62 second-feet Oct. 19, 20 (gage height, -0.11 foot).

1938-48: Maximum discharge, 22,500 second-feet Jan. 21, 1947 (gage height, 27.98 feet); minimum observed, 30 second-feet Aug. 28, 1943 (gage height, -0.53 foot).

Maximum stage known, 37.2 feet, from floodmark, in April 1900 (from reports of U. S. Weather Bureau).

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 2 to July 14)

Oct. 1 to July 14						July 15 to Sept. 30			
-0.1	63	3.5	857	21.5	11,000	0.3	81	2.2	419
.3	107	6.0	1,750	24.0	14,500	.6	111	3.2	711
.8	181	10.0	3,320	25.0	16,200	1.0	165	4.5	1,150
1.6	333	15.5	5,900			1.5	255	6.5	1,900
2.4	524	18.5	7,900						

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	151	354	857	4,110	1,490	2,480	609	365	343	203	94
2	80	159	333	1,270	3,490	5,430	3,360	552	292	262	178	106
3	78	146	322	1,270	2,560	9,700	2,960	497	251	196	153	93
4	75	148	322	1,020	1,900	14,200	2,250	566	225	162	124	284
5	75	148	381	760	2,050	15,500	1,750	552	205	136	104	1,900
6	76	124	609	638	3,040	16,400	1,790	906	193	120	91	1,590
7	75	324	524	580	3,240	16,900	1,750	923	193	114	84	1,120
8	76	441	760	538	3,800	15,800	1,560	668	195	115	82	743
9	75	343	1,380	510	5,670	11,500	1,750	552	205	119	86	368
10	74	343	1,980	497	6,620	7,430	2,600	471	322	100	101	268
11	73	1,310	2,170	484	6,800	5,720	3,000	446	242	100	169	287
12	72	1,130	1,900	471	6,380	4,610	2,880	497	209	121	458	253
13	71	808	1,710	824	5,660	3,360	3,290	497	190	108	419	243
14	70	609	1,560	1,380	7,220	2,290	6,500	410	179	96	445	445
15	69	1,100	2,596	1,240	8,500	1,830	7,150	387	170	86	272	380
16	67	1,380	3,980	890	9,400	1,680	7,360	376	155	95	581	332
17	66	1,060	3,930	729	7,230	1,790	5,900	365	211	92	743	270
18	64	1,160	3,400	668	5,200	1,790	4,250	354	232	127	528	214
19	63	1,270	2,600	638	4,070	1,750	3,040	322	221	159	368	178
20	64	1,640	1,750	623	2,880	1,600	1,710	292	190	136	239	156
21	71	1,340	1,200	760	2,020	1,380	1,240	272	176	126	170	142
22	72	957	957	1,020	2,920	1,790	1,020	253	191	119	139	132
23	71	683	857	1,100	2,960	4,110	923	240	214	98	121	124
24	72	808	776	1,060	2,760	4,160	808	232	167	84	146	117
25	72	890	713	991	2,720	4,160	729	230	144	111	132	109
26	73	760	668	1,020	2,440	3,400	1,020	230	154	166	110	106
27	74	594	638	1,670	2,170	2,960	1,420	240	399	368	108	115
28	77	484	594	2,880	1,900	3,450	991	496	312	393	117	402
29	91	422	566	2,600	1,600	3,360	991	923	236	380	108	458
30	92	376	552	3,280	-	2,800	776	890	302	332	94	393
31	94	-	524	4,340	-	2,170	-	524	-	259	100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,302	94	63	74.3	0.081	0.09
November	21,108	1,640	124	704	.771	.86
December	40,600	3,980	322	1,310	1.43	1.65
Calendar year 1947	592,662	22,100	63	1,624	1.78	24.12
January	36,608	4,340	471	1,181	1.29	1.49
February	121,310	9,400	1,600	4,183	4.58	4.93
March	174,910	16,900	1,380	5,642	6.18	7.12
April	77,248	7,360	729	2,575	2.82	3.15
May	14,772	923	230	477	.522	.60
June	6,740	399	144	225	.246	.27
July	5,223	393	84	168	.184	.21
August	6,773	743	82	218	.239	.28
September	11,422	1,900	93	381	.417	.47
Water year 1947-48	519,016	16,900	63	1,418	1.55	21.12

Peak discharge (base, 10,000 sec.-ft.).- Mar. 7 (4 a.m.) 16,900 sec.-ft.

Chickasawhay River near Waynesboro, Miss.

Location.- Water-stage recorder, lat. 31°41', long. 88°41', in NW¼ sec. 10, T. 8 N., R. 7 W. St. Stephens meridian, at bridge on U. S. Highway 84, 2 miles west of Waynesboro. Datum of gage is 119.91 feet above mean sea level (Mississippi State Highway bench mark).

Drainage area.- 1,660 square miles.

Records available.- September 1938 to September 1948.

Average discharge.- 10 years, 2,395 second-feet.

Extremes.- Maximum discharge during year, 24,700 second-feet Mar. 9 (gage height, 38.10 feet); minimum, 237 second-feet Oct. 19 (gage height, 3.32 feet).

1938-48: Maximum discharge, 26,000 second-feet Jan. 24, 1947 (gage height, 39.00 feet); minimum, 149 second-feet Aug. 28, 1943 (gage height, 2.48 feet).

A stage of about 50 feet occurred sometime in 1900. A stage of 47.1 feet, from floodmarks, occurred Apr. 11, 1938; a discharge of 53,100 second-feet was measured by Corps of Engineers on preceding day.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

3.4	252	9.0	1,850	26.0	11,100
4.0	352	11.0	2,680	30.0	14,400
4.8	526	14.0	4,090	34.0	18,800
5.8	790	18.0	6,200	38.0	24,500
7.0	1,150	22.0	8,480		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	292	361	790	1,350	7,490	3,940	4,390	1,630	1,220	679	819	268
2	276	456	734	2,380	7,140	6,700	4,240	1,380	877	665	600	260
3	276	479	706	2,910	6,700	10,200	5,650	1,220	679	562	502	300
4	268	434	679	2,550	5,980	12,600	5,710	1,250	600	467	456	456
5	268	391	665	2,040	4,600	13,800	4,810	1,420	538	391	391	762
6	260	391	665	1,630	3,410	17,000	4,140	1,560	502	343	343	2,210
7	260	1,250	819	1,380	3,700	21,700	3,700	1,630	479	325	308	2,770
8	268	1,030	1,150	1,250	4,340	24,200	3,410	2,000	467	334	284	2,000
9	268	1,030	1,920	1,150	5,540	24,700	3,130	1,700	456	317	300	1,420
10	260	819	5,280	1,120	6,750	24,100	3,030	1,380	467	317	334	967
11	260	1,280	5,980	1,090	7,200	22,400	3,510	1,250	502	317	401	706
12	252	2,250	5,330	1,060	7,540	19,900	4,190	1,120	575	300	467	600
13	252	2,290	4,960	1,090	7,950	17,200	5,070	1,090	490	292	600	639
14	252	1,770	4,960	1,250	8,850	14,200	7,660	1,120	434	317	877	1,150
15	252	3,600	5,330	1,850	9,420	10,800	8,790	1,030	423	317	848	1,630
16	244	3,890	6,810	2,080	9,230	6,920	8,980	937	401	334	790	1,420
17	244	2,860	7,430	1,770	9,100	5,170	8,790	1,520	412	361	734	997
18	244	2,250	6,750	1,450	9,290	4,390	8,910	1,350	412	300	1,150	762
19	252	1,850	6,040	1,320	9,610	3,990	8,980	1,030	502	308	1,030	600
20	317	1,630	5,380	1,250	9,480	3,650	8,420	907	514	371	819	502
21	292	2,080	4,240	1,250	8,420	3,320	6,090	790	526	391	639	434
22	292	2,090	2,770	1,380	6,860	3,230	2,910	734	502	352	490	391
23	300	1,880	2,000	1,740	5,600	6,260	2,120	665	434	317	401	352
24	292	1,560	1,770	2,170	5,220	7,430	1,880	626	412	300	343	334
25	284	1,350	1,630	2,210	5,710	7,200	1,700	600	423	292	317	317
26	276	1,420	1,520	2,170	5,430	6,860	1,660	613	371	361	334	300
27	276	1,350	1,420	2,860	4,810	6,860	2,000	639	352	402	352	300
28	276	1,220	1,350	5,490	4,190	6,590	2,730	679	371	600	308	423
29	268	1,030	1,280	6,590	3,600	5,820	2,210	1,030	587	937	300	734
30	268	877	1,220	6,750	-	5,380	1,850	1,490	600	1,030	292	937
31	284	-	1,180	7,310	-	5,170	-	1,490	-	1,060	284	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	8,373	317	244	270	0.163	0.19
November	45,158	3,890	361	1,505	.907	1.01
December	92,758	7,430	665	2,992	1.80	2.08
Calendar year 1947	1,179,463	25,700	229	3,231	1.95	26.44
January	71,890	7,310	1,060	2,319	1.40	1.61
February	193,160	9,610	3,410	6,681	4.01	4.33
March	331,680	24,700	3,230	10,699	6.45	7.43
April	140,660	8,980	1,660	4,689	2.82	3.15
May	35,880	2,000	600	1,157	.697	.80
June	15,528	1,220	352	518	.312	.35
July	13,659	1,060	292	441	.266	.31
August	16,113	1,150	284	520	.313	.36
September	24,941	2,770	260	831	.501	.56
Water year 1947-48	989,800	24,700	244	2,704	1.63	22.18

Peak discharge (base, 10,000 sec.-ft.).- Mar. 9 (9 a.m.) 24,700 sec.-ft.

Chickasawhay River at Leakesville, Miss.

Location.- Water-stage recorder, lat. 31°08', long. 88°33', in SW¼ sec. 12, T. 2 N., R. 6 W. St. Stephens meridian, at bridge on State Highway 63, a quarter of a mile downstream from logging railroad bridge, half a mile southeast of Leakesville, and 25 miles upstream from confluence with Leaf River. Datum of gage is 51.13 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 2,680 square miles.

Records available.- September 1938 to September 1948.

Average discharge.- 10 years, 4,026 second-feet.

Extremes.- Maximum discharge during year, 35,800 second-feet Mar. 11 (gage height, 29.33 feet); minimum, 425 second-feet Oct. 19 (gage height, 8.31 feet).

1938-48: Maximum discharge, 39,600 second-feet Apr. 29, 1944 (gage height, 30.13 feet); minimum observed, 260 second-feet Oct. 15-17, 1938; minimum gage height, 7.41 feet Nov. 4, 5, 1943.

Maximum stage known, 34.12 feet Apr. 12, 1938; a discharge of 65,600 second-feet was measured by Corps of Engineers on preceding day (gage height, 33.36 feet).

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 23 to July 29)

8.4	452	13.0	2,720	24.5	17,100
9.3	755	15.5	4,770	26.0	21,100
10.5	1,250	18.5	7,870	28.0	28,900
11.5	1,740	21.5	11,800	29.0	34,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	594	594	1,530	2,510	11,100	6,330	9,330	3,180	1,800	970	2,230	611
2	560	628	1,430	2,580	11,100	6,770	8,590	2,790	1,740	1,010	1,740	611
3	544	755	1,340	3,100	10,700	12,000	7,760	2,440	1,480	1,010	1,430	611
4	528	910	1,300	3,740	9,980	16,300	7,760	2,160	1,250	910	1,210	982
5	512	870	1,250	3,820	9,200	18,100	8,230	2,160	1,120	811	1,030	2,070
6	496	755	1,210	3,500	8,110	23,200	7,990	2,440	1,010	700	910	2,580
7	481	1,110	1,210	3,100	6,550	27,900	7,760	2,720	950	628	811	2,300
6	481	1,720	1,300	2,720	5,620	30,900	7,430	2,790	910	577	811	2,860
9	481	2,580	1,920	2,370	6,440	33,400	7,210	2,940	870	560	2,770	2,510
10	481	1,860	10,100	2,160	8,350	35,800	6,550	2,720	870	544	3,530	2,040
11	481	3,900	16,300	2,040	9,200	35,800	5,820	2,440	870	528	1,920	1,580
12	466	5,130	17,400	1,960	9,720	34,600	5,520	2,160	870	544	1,630	1,340
13	466	3,740	15,600	2,230	9,980	32,900	6,120	2,040	870	577	1,430	1,160
14	452	3,340	13,300	2,440	10,400	30,400	9,590	1,860	870	544	1,430	1,480
15	452	4,110	11,700	2,230	11,100	27,500	10,800	1,800	830	528	2,300	3,660
16	452	6,550	11,400	2,440	11,800	24,700	11,600	1,740	811	870	1,830	4,140
17	438	6,660	11,000	2,790	12,200	21,100	12,000	1,860	811	1,090	1,530	2,860
16	438	5,220	11,000	2,790	12,000	17,400	12,000	2,300	792	1,250	1,330	2,040
19	452	4,230	10,700	2,510	11,800	13,400	11,800	2,230	792	811	1,430	1,580
20	466	3,660	9,720	2,230	11,600	10,400	11,700	1,860	773	611	1,530	1,300
21	528	2,940	8,590	2,230	11,600	8,470	11,800	1,680	830	560	1,330	1,090
22	577	2,860	7,430	2,300	11,800	7,320	11,600	1,480	870	560	1,230	950
23	544	3,020	5,820	2,300	11,800	6,770	8,350	1,340	870	560	1,120	850
24	528	3,580	4,320	2,790	10,500	7,870	4,680	1,300	811	512	1,030	773
25	512	3,660	3,580	3,340	8,950	9,980	3,660	1,300	736	512	970	718
26	512	2,790	3,180	3,500	8,350	11,200	3,420	1,680	700	544	830	664
27	577	2,370	2,940	3,420	8,350	11,800	3,340	1,530	682	594	755	646
28	646	2,100	2,720	5,220	7,870	11,600	3,580	1,530	664	736	718	664
29	577	1,920	2,580	8,110	7,100	11,100	3,900	1,580	664	3,310	682	773
30	544	1,740	2,440	9,460	-	10,500	3,660	1,530	718	6,120	646	950
31	512	-	2,440	10,800	-	9,980	-	1,680	-	4,140	628	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	15,778	646	438	509	0.190	0.22
November	85,302	6,660	594	2,843	1.06	1.18
December	196,750	17,400	1,210	6,347	2.37	2.73
Calendar year 1947	2,059,438	34,600	438	5,642	2.11	28.58
January	106,750	10,800	1,980	3,444	1.29	1.48
February	283,270	12,200	5,620	9,768	3.64	3.93
March	565,490	35,800	6,330	18,240	8.81	7.85
April	233,550	12,000	3,340	7,785	2.90	3.24
May	63,260	3,180	1,300	2,041	.762	.88
June	27,834	1,800	664	928	.346	.39
July	33,221	6,120	512	1,072	.400	.46
August	43,091	3,580	628	1,390	.519	.60
September	46,393	4,140	611	1,546	.577	.64
Water year 1947-48	1,700,689	35,800	438	4,647	1.73	23.60

Peak discharge (base, 15,000 sec.-ft.).- Dec. 12 (4 a.m.) 17,600 sec.-ft.; Mar. 11 (6 a.m.) 35,800 sec.-ft.

Okatibbee Creek near Meridian, Miss.

Location.- Water-stage recorder, lat. 32°21'15", long. 88°45'25", in NW¼ sec. 22, T. 6 N., R. 15 E. Choctaw meridian, at bridge on U. S. Highway 80, half a mile upstream from Alabama & Vicksburg Railway bridge, 2 miles downstream from Loper Creek, 3 miles west of Meridian, and 4 miles upstream from Sowashee Creek. Datum of gage is 269.43 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 239 square miles.

Records available.- August 1938 to September 1948.

Average discharge.- 10 years, 330 second-feet.

Extremes.- Maximum discharge during year, 4,950 second-feet Mar. 7 (gage height, 22.31 feet); minimum, 7.6 second-feet Oct. 23-25 (gage height, 5.30 feet).

1938-48: Maximum discharge, 8,890 second-feet Mar. 21, 1942 (gage height, 23.59 feet); minimum, 3.3 second-feet Aug. 28, 1943; minimum gage height, 3.52 feet Oct. 19, 20, 1939.

Maximum stage known, about 29.5 feet sometime in April 1938.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 2-25, Aug. 11-20)

5.4	11	8.5	241	18.3	2,020
5.7	26	10.0	415	19.5	2,670
6.0	44	13.0	815	21.3	3,990
6.4	70	15.0	1,130	21.9	4,530
7.5	149	17.0	1,570		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	16	84	169	1,090	415	675	157	80	82	52	21
2	11	24	79	355	1,070	1,110	932	141	64	54	49	18
3	10	37	76	452	829	3,220	932	133	54	42	40	19
4	10	40	73	279	517	4,340	661	126	49	31	30	41
5	10	27	83	192	621	4,160	439	129	46	27	25	455
6	10	21	94	161	902	4,530	439	196	43	24	22	675
7	10	39	98	145	1,020	4,530	478	169	42	24	20	595
8	10	64	149	133	1,230	3,510	403	149	40	20	19	206
9	10	83	263	126	1,600	2,870	403	126	43	18	18	98
10	9.6	85	478	122	1,940	1,940	787	108	55	21	20	71
11	9.6	149	582	119	1,820	1,350	1,010	101	48	31	74	60
12	9.6	226	647	115	1,820	843	1,130	112	43	22	226	54
13	10	268	595	216	1,720	582	1,110	98	40	18	221	63
14	10	133	415	427	2,220	465	1,520	94	37	16	165	98
15	9.6	203	582	319	2,170	415	1,690	98	34	17	105	108
16	9.3	415	887	216	2,070	379	1,630	91	32	16	161	98
17	9.0	452	962	178	2,070	415	1,570	85	35	16	137	76
18	9.0	216	992	165	1,540	517	1,230	90	66	34	169	57
19	8.6	415	917	157	947	504	634	91	49	42	112	47
20	8.3	634	517	153	582	403	379	82	42	48	67	41
21	8.3	608	307	174	530	331	296	71	64	53	43	37
22	8.3	250	241	274	745	424	252	64	98	33	34	33
23	7.6	165	211	331	829	815	221	61	51	22	30	31
24	7.6	216	192	274	801	801	196	57	40	29	27	30
25	7.6	252	174	241	759	815	178	55	36	57	24	27
26	7.9	201	161	252	801	595	206	54	46	174	22	25
27	8.6	149	149	391	731	634	296	52	60	119	21	29
28	9.6	119	141	634	582	731	491	98	77	112	22	68
29	16	105	133	675	491	857	379	296	87	149	22	94
30	12	91	129	759	-	829	196	188	62	86	20	126
31	15	-	129	1,010	-	530	-	108	-	71	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	303.1	16	7.6	9.78	0.041	0.05
November	5,703	634	16	190	.795	.89
December	10,540	992	73	340	1.42	1.64
Calendar year 1947	155,600.1	5,200	7.6	426	1.78	24.22
January	9,214	1,010	115	297	1.24	1.43
February	34,047	2,220	491	1,174	4.91	5.30
March	43,860	4,530	331	1,415	5.92	6.82
April	20,763	1,690	178	692	2.90	3.23
May	3,480	296	52	112	.469	.54
June	1,563	98	32	52.1	.218	.24
July	1,508	174	16	48.6	.203	.23
August	2,017	226	18	65.1	.272	.31
September	3,401	675	18	113	.473	.53
Water year 1947-48	136,399.1	4,530	7.6	373	1.56	21.21

Peak discharge (base, 3,000 sec.-ft.).- Mar. 7 (1 a.m.) 4,950 sec.-ft.

Bucatunna Creek at Denham, Miss.

Location.- Wire-weight gage, lat. 31°40', long. 88°31', in SE¼ sec. 18, T. 8 N., R. 5 W. St. Stephens meridian, at bridge on county road, 0.3 mile east of Denham and 9 miles southeast of Waynesboro. Datum of gage is 134.49 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 468 square miles (authority, Corps of Engineers).

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge observed during year, 11,600 second-feet Mar. 7 (gage height, 25.35 feet); minimum observed, 36 second-feet Oct. 17, 18 (gage height, 0.87 foot).

1939-48: Maximum discharge, 16,400 second-feet Apr. 27, 1944 (gage height, 28.0 feet, from floodmark); minimum observed, 22 second-feet Oct. 25-28, 1941; minimum gage height observed, 0.35 foot Oct. 11-13, 1943.

Maximum stage known, about 34 feet in April 1900, from information by local residents.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1947-48 (gage height in feet, and discharge, in second-feet

0.9	38	5.4	667	17.0	3,900
1.3	67	6.8	956	19.0	5,000
1.8	113	8.4	1,310	21.0	6,500
2.4	183	10.0	1,690	23.0	8,400
3.2	291	12.0	2,230	25.0	11,000
4.2	446	15.0	3,160		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	67	209	480	2,320	1,290	1,640	498	320	196	209	48
2	55	84	196	552	2,050	2,960	1,590	413	249	159	209	45
3	52	88	183	628	1,890	4,880	1,470	381	196	159	159	45
4	48	63	183	767	1,760	5,210	1,360	429	171	108	118	169
5	48	71	183	872	1,690	4,580	1,360	446	147	79	113	350
6	45	71	183	872	1,500	7,810	1,690	534	129	67	108	183
7	45	447	183	647	1,040	11,300	1,790	667	124	75	88	171
8	45	489	252	516	956	10,300	1,760	628	113	59	75	263
9	45	222	590	446	1,550	8,520	1,550	609	118	55	79	249
10	45	196	2,470	413	1,940	7,500	1,200	534	124	59	108	183
11	42	397	2,740	381	1,740	6,340	978	429	108	59	118	159
12	42	446	2,050	365	1,790	6,140	914	365	103	55	98	124
13	42	397	1,840	413	1,920	4,000	851	350	108	55	71	166
14	42	498	2,110	397	2,410	3,160	2,140	335	124	52	135	727
15	39	1,290	2,020	397	2,380	2,410	2,290	305	113	55	118	642
16	38	1,400	2,440	413	2,170	1,760	2,050	320	98	63	135	350
17	37	788	2,170	413	1,960	2,290	2,020	590	135	71	196	335
18	37	767	1,820	381	1,790	2,230	2,170	381	108	75	209	263
19	39	628	1,620	350	1,690	1,590	2,470	446	98	63	196	196
20	48	446	1,500	335	1,500	1,340	2,410	350	93	59	263	159
21	44	365	1,430	350	1,180	1,270	1,820	277	153	59	209	129
22	38	350	1,180	365	1,690	1,150	978	249	147	71	147	103
23	43	335	788	429	1,620	2,090	727	222	113	75	118	93
24	42	397	647	667	1,430	3,030	628	196	98	63	103	84
25	48	365	571	628	1,640	2,840	571	183	84	67	84	71
26	48	320	516	628	1,620	2,440	552	209	124	141	75	67
27	52	305	480	914	1,520	2,290	571	183	113	88	71	63
28	59	291	463	1,920	1,450	2,350	590	196	118	263	71	118
29	52	263	429	1,820	1,360	2,470	628	183	98	1,290	67	113
30	45	235	446	2,020	-	2,170	628	196	93	412	59	108
31	45	-	446	2,590	-	1,760	-	305	-	159	52	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,409	59	37	45.5	0.097	0.11
November	12,081	1,400	63	403	.861	.96
December	32,338	2,740	183	1,043	2.23	2.57
Calendar year 1947	375,102	11,200	36	1,028	2.20	29.81
January	22,369	2,590	335	722	1.54	1.78
February	49,470	2,410	956	1,709	3.65	3.94
March	118,470	11,300	1,150	3,822	8.17	9.41
April	41,396	2,470	552	1,380	2.95	3.29
May	11,409	667	183	368	.786	.91
June	3,920	320	84	131	.280	.31
July	4,311	1,290	52	139	.297	.34
August	3,861	263	52	125	.267	.31
September	5,776	727	45	193	.412	.46
Water year 1947-48	306,996	11,300	37	839	1.79	24.39

Escatawpa River near Wilmer, Ala.

Location.- Water-stage recorder, lat. 30°52', long. 88°25', in NW¼ sec. 19, T. 2 S., R. 4 W., at bridge on Alabama State Highway 42 at Alabama-Mississippi State line, a quarter of a mile upstream from Gulf, Mobile & Ohio Railroad bridge, half a mile upstream from Rocky Creek, and 4 miles northwest of Wilmer.

Drainage area.- 506 square miles.

Records available.- August 1945 to September 1948.

Extremes.- Maximum discharge during year, 16,600 second-feet Mar. 7 (gage height, 20.9 feet); minimum, 126 second-feet Oct. 16, 17.

1945-48: Maximum discharge, that of Mar. 7, 1948; minimum, 101 second-feet Sept. 5, 1945.

Remarks.- Records good above 1,300 second-feet and fair below.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 10)

Oct. 1 to Nov. 13

3.4	122	6.0	850
3.7	164	8.0	1,770
4.0	215	12.0	3,800
4.5	330	15.1	5,520
5.0	483		

Nov. 14 to Sept. 30

3.2	163	6.0	897	18.0	8,120
3.6	230	8.0	1,660	19.0	9,730
4.0	312	11.0	3,100	20.0	12,400
4.5	434	15.0	5,410	20.7	15,500
5.0	574	17.0	7,020		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	500	780	1,000	3,370	829	1,100	487	396	371	589	207
2	166	605	666	1,100	2,900	1,860	1,040	421	312	460	666	236
3	161	500	589	1,040	2,100	5,500	863	359	265	421	635	335
4	155	402	559	931	1,660	8,120	780	335	230	408	796	1,580
5	150	320	544	812	1,340	8,120	780	408	212	347	897	2,450
6	149	268	589	714	1,100	11,800	846	460	197	335	449	1,180
7	145	450	544	650	965	15,500	780	620	190	396	290	714
8	148	1,330	698	604	846	12,800	666	501	184	280	236	515
9	149	1,470	1,460	559	1,460	10,200	666	421	200	204	1,340	447
10	148	950	2,800	559	2,300	7,880	763	359	247	177	3,150	434
11	142	2,440	6,000	544	2,300	5,480	796	324	261	163	2,550	460
12	138	4,740	10,700	544	1,950	3,640	635	312	243	202	2,000	408
13	136	5,520	14,500	2,640	1,780	2,600	700	290	209	230	1,220	371
14	134	5,150	10,200	2,800	1,740	2,050	2,450	267	184	214	863	1,420
15	130	4,140	7,650	1,740	1,700	1,740	3,210	251	176	302	1,040	2,400
16	126	4,030	6,480	1,260	1,460	1,540	3,100	240	171	730	635	1,540
17	126	3,260	5,410	1,100	1,220	1,380	2,950	408	230	436	474	965
18	127	3,210	4,430	1,070	1,070	1,220	1,900	604	286	347	396	698
19	131	3,260	3,420	965	931	1,140	1,300	487	335	335	312	589
20	182	2,450	2,500	897	846	1,100	931	371	249	359	267	574
21	233	2,150	1,950	1,340	763	1,220	682	301	406	324	265	460
22	282	2,150	1,580	1,380	1,000	1,380	530	269	515	241	312	312
23	292	2,050	1,340	1,140	1,380	1,340	460	240	501	197	267	253
24	277	2,100	1,140	965	1,260	1,260	421	226	408	248	724	225
25	235	3,000	1,000	897	1,140	1,070	396	269	312	335	730	205
26	197	3,000	897	863	1,100	931	615	485	234	269	635	193
27	235	2,100	846	863	1,070	829	1,100	698	219	280	460	192
28	418	1,420	780	1,460	1,000	863	965	863	214	301	347	249
29	466	1,140	746	1,580	863	1,000	763	1,620	195	640	280	290
30	338	931	730	2,600	-	897	589	931	227	1,000	247	269
31	263	-	780	3,530	-	897	-	574	-	730	217	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	6,156	466	126	199	0.393	0.45
November	65,036	5,520	268	2,168	4.28	4.78
December	92,308	14,500	544	2,978	5.89	6.78
Calendar year 1947	559,607	14,500	110	1,533	3.03	41.13
January	38,147	3,530	544	1,231	2.43	2.80
February	42,614	3,370	763	1,469	2.90	3.13
March	116,186	15,500	829	3,748	7.41	8.54
April	32,777	3,210	396	1,093	2.16	2.41
May	14,401	1,620	226	465	.919	1.06
June	8,008	515	171	267	.528	.59
July	11,282	1,000	163	364	.719	.83
August	23,289	3,150	217	751	1.48	1.71
September	20,171	2,450	192	672	1.33	1.48
Water year 1947-48	470,375	15,500	126	1,285	2.54	34.56

Peak discharge (base, 5,000 sec.-ft.).- Nov. 13 (8 p.m.) 5,730 sec.-ft.; Dec. 13 (6 a.m.) 15,500 sec.-ft.; Mar. 7 (6:30 a.m.) 16,600 sec.-ft.

Big Creek near Mobile, Ala.

Location.- Wire-weight gage, lat. 30°43'45", long. 88°20'10", in NW¼ sec. 1, T. 4 S., R. 4 W., at bridge on county road 1 mile upstream from Hamilton Creek, 6 miles downstream from Gulf, Mobile & Ohio Railroad bridge, and 19 miles west of Mobile.

Drainage area.- 84 square miles.

Records available.- November 1944 to September 1948.

Extremes.- Maximum discharge during year, 1,730 second-feet Mar. 6 (gage height, 13.9 feet, from graph based on gage readings); minimum observed, 87 second-feet Oct. 14-17.

1944-48: Maximum discharge observed, 3,080 second-feet Nov. 27, 1944 (gage height, 16.6 feet); minimum observed, 65 second-feet Oct. 18-21, 1945.

Remarks.- Records fair. Gage read twice daily.

Cooperation.- Subsequent to May 1, 1948, base data collected by Corps of Engineers.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

1.8	87	6.0	582
2.0	106	10.0	1,110
3.0	216	13.0	1,540

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	a200	159	228	216	159	582	142	276	192	256	a190
2	101	a350	159	204	a210	440	886	137	216	181	432	192
3	96	a270	148	181	a200	868	420	137	192	116	504	192
4	96	a210	148	170	a190	868	300	137	142	101	504	a1,000
5	96	a180	170	170	a190	1,300	294	192	126	a92	a450	a1,500
6	96	a160	192	159	a180	1,540	634	264	a120	a90	384	a800
7	96	264	159	148	181	790	336	228	a120	204	216	a500
8	106	a300	219	148	181	738	a290	181	a120	170	323	348
9	101	204	288	148	216	a600	288	148	116	159	1,540	264
10	101	159	384	148	228	a480	228	132	a120	132	1,310	276
11	96	458	608	148	300	a410	216	126	a120	228	855	396
12	96	556	855	159	336	348	204	132	a120	264	608	556
13	96	396	686	438	216	312	216	126	111	216	504	712
14	92	336	556	360	204	276	420	137	111	170	396	1,020
15	87	504	492	348	192	252	396	126	328	276	240	1,250
16	87	408	480	336	181	240	300	126	246	336	396	935
17	87	252	384	336	170	240	276	a120	530	228	276	530
18	96	557	288	324	159	252	240	a120	408	181	170	324
19	96	569	252	312	159	252	192	a110	288	216	264	288
20	132	396	228	204	159	228	170	111	216	324	360	264
21	159	396	204	276	159	216	159	126	216	240	517	a250
22	204	348	181	264	170	204	159	126	170	336	348	a230
23	170	396	192	240	159	204	159	132	148	276	181	216
24	148	569	192	204	159	192	148	142	132	204	170	216
25	126	384	181	181	159	192	148	446	106	142	159	204
26	a120	276	192	170	159	181	142	660	96	204	a180	204
27	126	240	181	192	159	181	181	751	96	170	a250	204
28	132	204	170	396	159	181	206	444	96	252	a270	192
29	204	170	170	372	159	170	170	569	101	264	a240	181
30	148	159	181	312	-	a170	148	312	116	276	a220	170
31	a130	-	216	240	-	324	-	300	-	192	a200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,622	204	87	117	1.39	1.60
November	9,871	569	159	329	3.92	4.37
December	8,915	855	148	288	3.43	3.95
Calendar year 1947	96,096	1,360	83	263	3.13	42.56
January	7,516	438	148	242	2.88	3.33
February	5,510	336	159	190	2.26	2.44
March	12,808	1,540	159	413	4.92	5.67
April	8,318	686	142	277	3.30	3.68
May	6,940	751	110	224	2.67	3.07
June	5,303	530	96	177	2.11	2.35
July	6,432	336	90	207	2.46	2.85
August	12,723	1,540	159	410	4.88	5.63
September	31,604	1,500	170	453	5.39	6.02
Water year 1947-48	101,562	1,540	87	277	3.30	44.96

Peak discharge (base, 1,000 sec.-ft.).- Mar. 6 (1 a.m.) 1,730 sec.-ft.; Aug. 9 (2 p.m.) 1,620 sec.-ft.; Sept. 5 (time and discharge unknown).

a Doubtful or no gage-height record; discharge computed on basis of weather records and records for Escatawpa River near Wilmer.

Wolf River near Lyman, Miss.

Location.- Staff gage, lat. 30°36', long. 89°20', in SW¼ sec. 19, T. 5 S., R. 13 W. St. Stephens meridian, at highway bridge half a mile upstream from Mill Creek, 2 miles downstream from Crane Creek, 4 miles upstream from Bell Creek, and 15 miles northwest of Lyman.

Drainage area.- 253 square miles.

Records available.- October 1944 to June 1948 (discontinued).

Extremes.- Maximum discharge during period October 1947 to June 1948, 13,800 second-feet Mar. 6 (gage height, 20.3 feet, from graph based on gage readings), from rating curve extended above 7,200 second-feet; minimum not determined.

1944-48: Maximum discharge, 18,500 second-feet Mar. 13, 1947 (gage height, 22.1 feet); minimum observed, 35 second-feet Nov. 1, 1944.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Gage read twice daily.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	72	306	348	987	814	873	141	84			
2	100	74	286	348	756	3,080	741	135	74			
3	94	69	286	327	588	6,660	527	123	64			
4	86	64	267	286	486	7,230	364	141	60			
5	82	56	267	267	462	3,950	298	165	57			
6	76	62	286	249	415	10,800	318	185	55			
7	70	80	286	232	370	10,800	364	298	54			
8	66	600	327	232	327	2,760	364	261	52			
9	62	250	929	232	1,020	2,610	389	185	50			
10	58	160	4,010	249	1,350	2,040	470	153	129			
11	55	150	4,910	267	786	1,690	340	129	106			
12	53	1,100	4,230	267	698	1,260	261	117	95			
13	50	951	2,920	1,550	670	944	337	141	84			
14	47	786	2,810	1,120	786	806	2,090	141	74			
15	46	3,080	2,810	511	642	709	1,640	129	66			
16	44	3,190	3,900	370	486	678	908	112	63			
17	42	1,590	1,840	438	438	647	556	101	61			
18	41	1,020	1,180	615	392	616	389	90	74			
19	39	1,150	882	486	348	556	261	90	74			
20	39	1,300	698	438	327	527	228	84	69			
21	45	1,100	588	786	306	470	213	79	74			
22	130	1,300	536	849	817	415	199	74	79			
23	306	1,260	511	588	786	389	185	69	74			
24	150	1,590	438	1,140	588	389	165	67	101			
25	100	1,690	415	698	536	389	159	65	90			
26	98	1,020	392	536	462	340	244	65	79			
27	92	727	348	588	415	709	415	79	65			
28	80	670	327	1,260	370	873	298	279	53			
29	68	615	327	1,100	327	527	213	174	51			
30	65	450	327	1,260	-	389	165	123	54			
31	67	-	348	1,350	-	527	-	112	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	2,461	306	39	79.4	0.314	0.36
November	26,226	3,190	56	874	3.45	3.86
December	37,987	4,910	267	1,225	4.84	5.58
Calendar year 1947	266,286	11,600	39	730	2.89	39.14
January	18,987	1,550	232	612	2.42	2.79
February	16,941	1,350	306	584	2.31	2.49
March	64,594	10,800	340	2,084	8.24	9.50
April	13,974	2,090	159	466	1.84	2.05
May	4,107	298	65	132	.522	.60
June	2,165	129	50	72.2	.285	.32
July	-	-	-	-	-	-
August	-	-	-	-	-	-
September	-	-	-	-	-	-
Water year	-	-	-	-	-	-

Note.- No gage-height record Oct. 1-22, Oct. 24 to Nov. 11, Nov. 30; discharge computed on basis of records for other stations in vicinity and weather records.

Pearl River at Edinburg, Miss.

Location.- Water-stage recorder, lat. 32°47', long. 89°20', in SW¼ sec. 13, T. 11 N., R. 9 E. Choctaw meridian, at bridge on State Highway 16 in Edinburg, 1,100 feet downstream from Hooper Mill Creek, 3 miles upstream from Rice Creek, and 11¼ miles northeast of Carthage. Datum of gage is 341.67 feet above mean sea level, datum of 1929, supplementary adjustment of 1941.

Drainage area.- 898 square miles.

Records available.- August 1928 to September 1948. Gage-height records collected in same vicinity since 1908 are contained in reports of U. S. Weather Bureau.

Average discharge.- 20 years, 1,018 second-feet.

Extremes - Maximum discharge during year, 9,270 second-feet Feb. 13 (gage height, 23.37 feet); minimum, 4.4 second-feet Oct. 21; minimum gage height, 1.69 feet July 16.

1928-48: Maximum discharge observed, 31,400 second-feet Mar. 8, 1935 (gage height, 26.20 feet); minimum, 2.7 second-feet Aug. 29, 1943; minimum gage height, 1.63 feet Sept. 8, 1929.

Remarks.- Records good except those below 80 second-feet, which are fair.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 1, Apr. 28 to June 26, Sept. 23-30)

Oct. 1 to June 26						June 27 to Sept. 30			
1.6	4	6.6	506	20.0	5,050	1.7	14	4.0	181
2.0	23	9.0	930	21.7	6,630	2.0	27	5.2	313
2.7	65	11.5	1,460	23.0	8,490	2.4	49	6.6	506
3.4	114	13.5	2,000	23.2	8,860	2.9	86		
3.9	156	15.0	2,500						
5.0	280	18.0	3,820						

Note.- Same as preceding table above 6.6 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	102	147	797	1,490	1,740	2,220	220	45	65	163	42
2	12	156	138	816	1,460	3,080	2,500	181	43	55	172	37
3	11	122	126	797	1,370	3,720	2,360	156	33	49	181	32
4	10	107	122	740	1,350	4,260	1,970	142	29	47	163	55
5	10	110	122	689	1,460	4,980	1,660	134	27	45	127	216
6	10	96	138	655	1,610	6,720	1,440	192	33	41	92	295
7	9.0	220	138	621	1,820	8,320	1,300	203	40	37	63	289
8	8.5	192	238	604	2,660	8,860	1,150	176	40	34	47	289
9	8.0	156	319	587	3,870	8,490	1,260	151	42	26	40	301
10	8.5	209	1,070	570	4,500	7,830	1,390	130	45	21	318	313
11	8.0	604	1,150	538	5,810	6,750	1,440	118	48	19	461	325
12	8.0	554	1,090	475	7,830	5,720	1,170	107	48	20	206	338
13	7.6	490	1,070	538	8,670	4,770	1,320	103	43	22	163	338
14	6.8	406	1,030	522	8,490	3,920	2,430	100	37	20	248	325
15	6.8	706	1,720	490	7,830	3,210	2,700	91	58	17	243	289
16	6.0	638	2,030	475	7,250	2,500	3,260	82	45	14	301	237
17	6.0	570	2,030	475	6,630	2,000	3,350	92	40	18	377	191
18	5.6	570	2,090	475	6,100	1,710	3,440	80	44	53	364	145
19	4.8	621	1,880	460	5,450	1,510	3,440	77	51	39	325	114
20	4.8	587	1,610	445	4,910	1,370	3,170	68	48	63	325	92
21	4.4	506	1,490	506	4,320	1,230	2,660	61	57	100	313	76
22	4.8	445	1,460	554	3,920	1,190	2,120	55	75	96	301	h70
23	4.8	415	1,490	554	3,530	1,280	1,690	52	63	76	265	h55
24	6.4	401	1,440	554	3,120	1,300	1,370	49	56	74	232	a51
25	7.6	359	1,350	554	2,780	1,260	1,150	47	46	99	167	a47
26	9.5	312	1,210	570	2,430	1,130	970	46	53	127	118	a43
27	14	262	1,090	673	2,190	1,370	778	43	127	76	88	g40
28	28	220	970	894	2,000	1,560	587	42	99	96	69	g181
29	26	187	854	932	1,850	1,740	415	52	80	80	57	g186
30	22	166	723	1,150	-	1,660	293	57	75	185	57	h191
31	34	-	587	1,350	-	1,710	-	53	-	201	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	324.9	34	4.4	10.5	0.012	0.01
November	10,489	706	96	350	.390	.43
December	30,922	2,090	122	997	1.11	1.28
Calendar year 1947	419,921.9	9,960	4.4	1,150	1.28	17.37
January	20,060	1,350	445	647	.720	.83
February	116,700	8,670	1,350	4,024	4.48	4.83
March	106,890	8,860	1,130	3,448	3.84	4.43
April	55,003	3,440	293	1,833	2.04	2.28
May	3,160	220	42	102	.114	.13
June	1,570	127	27	52.3	.058	.07
July	1,915	201	14	61.8	.069	.08
August	6,094	461	40	197	.219	.25
September	5,203	338	32	173	.193	.22
Water year 1947-48	358,330.9	8,860	4.4	979	1.09	14.84

Peak discharge (base, 7,000 sec.-ft.).- Feb. 13 (10 p.m.) 9,270 sec.-ft.; Mar. 8 (10 a.m.) 9,060 sec.-ft.

a No gage-height record; discharge computed on basis of records for other stations in basin.
g Computed from graph based on gage readings.
h Computed from once-daily gage readings.

Pearl River near Lena, Miss.

Location.- Staff gage, lat. 32°40', long. 89°38', in SW¼ sec. 36, T. 10 N., R. 6 E. Choctaw meridian, at bridge on county road three-quarters of a mile downstream from Tuscolameta Creek, 3¾ miles upstream from Yockanookany River, 6 miles north of Lena, and 8 miles southwest of Carthage. Datum of gage is 299.50 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 1,995 square miles (authority, Corps of Engineers).

Records available.- November 1936 to September 1948.

Extremes.- Maximum discharge observed during year, 20,600 second-feet Mar. 8 (gage height, 24.90 feet); minimum observed, 97 second-feet Oct. 17-26 (gage height, 1.00 foot).

1936-48: Maximum discharge observed, 43,700 second-feet Mar. 31, 1944 (gage height, 28.28 feet); minimum, about 40 second-feet Aug. 27, 28, 1943, occurred during period of doubtful gage-height record.

Remarks.- Records fair. Gage read twice daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to July 28

1.2	114	4.5	833	12.5	3,750	20.0	10,500
1.7	169	6.0	1,300	14.5	5,100	22.0	13,400
2.3	272	8.0	1,940	16.0	6,220	23.6	16,500
3.5	558	10.5	2,840	18.0	8,020	24.9	20,600

July 29 to Sept. 30

1.4	159	4.0	697
1.9	234	4.5	833
2.8	412		

Note.- Same as preceding table above 4.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	123	138	532	1,420	3,990	3,430	3,690	980	293	198	621	186
2	114	224	457	2,040	4,120	5,310	3,690	804	252	183	501	186
3	114	385	433	2,190	3,870	9,460	3,480	747	224	169	412	165
4	114	338	433	2,080	3,280	12,200	3,280	691	206	169	369	289
5	114	338	409	1,940	3,110	13,800	3,030	637	198	150	348	412
6	114	315	482	1,810	3,530	16,200	2,880	637	d200	144	289	548
7	114	361	532	1,710	3,930	19,500	2,520	637	d200	144	270	646
8	114	532	584	1,460	5,100	20,600	2,410	637	d200	136	217	621
9	109	637	804	1,260	7,420	19,800	2,560	691	d200	133	201	548
10	109	637	1,680	1,170	9,980	18,300	3,070	637	198	133	234	501
11	109	775	2,700	1,100	11,900	14,800	3,030	584	198	123	750	501
12	105	1,420	2,840	1,040	13,000	13,000	3,110	532	198	123	1,330	478
13	105	1,650	2,770	1,070	14,500	10,500	3,190	482	183	118	1,300	478
14	105	1,780	2,520	1,140	16,000	8,840	5,450	433	183	114	980	478
15	105	1,840	2,700	1,100	16,500	7,220	7,520	433	183	114	750	501
16	105	1,870	3,870	1,170	16,000	5,980	8,840	385	190	190	777	501
17	97	1,840	4,820	1,200	15,400	4,960	9,200	361	190	190	920	456
18	97	1,840	5,100	1,200	14,300	4,050	8,480	361	198	183	891	412
19	97	2,040	4,890	d1,180	12,200	3,630	6,940	338	183	183	723	328
20	97	2,110	4,050	1,170	10,800	3,330	6,060	338	198	215	596	289
21	97	1,940	3,530	1,040	9,200	2,950	5,310	338	215	198	548	252
22	97	1,650	2,990	1,300	8,480	2,700	4,470	338	215	206	501	234
23	97	1,260	2,740	1,390	7,920	2,990	3,580	293	190	224	478	201
24	97	1,040	2,220	1,460	7,220	3,480	3,110	272	198	198	456	186
25	97	1,010	2,040	1,490	6,460	3,580	2,370	272	198	169	456	172
26	97	920	1,910	1,490	5,820	3,480	2,080	409	198	183	390	172
27	101	862	1,740	1,550	5,170	3,070	1,810	338	183	338	289	186
28	114	747	1,680	1,970	4,680	3,480	1,580	272	183	747	270	348
29	123	691	1,550	2,410	4,190	4,050	1,420	338	198	697	252	434
30	133	584	1,460	2,810	-	4,330	1,140	338	198	621	217	548
31	133	-	1,360	3,480	-	3,990	-	338	-	723	201	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	3,347	133	97	108	0.054	0.06
November	31,774	2,110	138	1,059	.531	.59
December	65,826	5,100	409	2,123	1.06	1.23
Calendar year 1947	979,060	21,800	97	2,682	1.34	18.24
January	48,840	3,480	1,040	1,575	.789	.91
February	248,070	16,500	3,110	8,554	4.29	4.62
March	253,010	20,600	2,700	8,162	4.09	4.72
April	119,300	9,200	1,140	3,977	1.99	2.22
May	14,891	980	272	480	.241	.28
June	6,051	293	183	202	.101	.11
July	7,418	747	114	239	.120	.14
August	16,537	1,330	201	533	.267	.31
September	11,257	646	165	375	.188	.21
Water year 1947-48	826,321	20,600	97	2,258	1.13	15.40

d Doubtful gage-height record; discharge computed on basis of records for other stations in basin.

Pearl River at Meeks Bridge, near Canton, Miss.

Location.- Water-stage recorder, lat. 32°30'50", long. 89°56'25", in NE¼ sec. 25, T. 8 N., R. 3 E. Choctaw meridian, at Meeks Bridge, 3½ miles northeast of Goshen Springs, 5½ miles upstream from Mill Creek, 9 miles southeast of Canton, and 10 miles downstream from Fannegusha Creek. Datum of gage is 270.53 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 2,780 square miles.

Records available.- July 1939 to September 1948.

Extremes.- Maximum discharge during year, 25,500 second-feet Mar. 10 (gage height, 22.98 feet); minimum, 129 second-feet Oct. 25 (gage height, 0.43 foot).

1939-48: Maximum discharge, 56,200 second-feet Feb. 15, 1946 (gage height, 26.20 feet); minimum observed, 87 second-feet Oct. 26, Nov. 2, 1943 (gage height, 0.11 foot), but may have been less during period of no gage-height record in October and November, 1943.

Flood in December 1932 reached a stage of 26.4 feet, from floodmarks.

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 11 to July 28)

0.5	136	4.5	1,260	18.0	11,900
.9	187	7.0	2,320	20.0	15,900
1.3	259	11.0	4,530	21.0	18,400
2.2	482	13.0	5,930	22.0	21,400
3.5	886	16.5	9,530	22.9	25,000

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	176	190	819	1,700	4,410	5,930	5,610	1,700	498	261	954	274
2	169	200	754	1,950	4,790	6,880	5,460	1,500	428	247	930	251
3	163	224	690	2,470	4,980	10,000	5,320	1,340	389	235	722	233
4	159	352	643	2,580	4,920	11,900	5,050	1,220	364	224	568	249
5	158	468	613	2,520	4,530	15,100	4,720	1,140	340	213	510	428
6	154	455	583	2,420	4,410	18,200	4,350	1,060	316	217	455	628
7	153	468	583	2,320	4,660	21,100	3,900	1,020	304	198	415	706
8	149	468	659	2,180	5,180	23,400	3,620	1,020	295	187	377	754
9	149	598	786	1,900	6,880	24,600	3,460	1,060	290	180	340	835
10	147	738	1,220	1,660	8,380	25,000	3,680	1,060	290	176	328	819
11	146	802	2,420	1,540	10,200	25,000	4,120	1,020	277	189	315	722
12	146	1,020	3,290	1,420	12,500	23,400	4,230	920	272	168	625	643
13	145	1,580	3,340	1,360	14,700	21,400	4,600	852	266	163	1,330	598
14	144	1,780	3,240	1,340	17,400	18,700	6,110	786	268	180	1,500	598
15	143	1,780	3,510	1,420	19,600	15,900	7,880	738	279	159	1,300	583
16	142	1,900	4,060	1,540	21,100	13,100	9,410	690	268	153	1,140	583
17	139	2,130	4,860	1,580	21,400	10,400	10,600	674	288	214	1,100	583
16	138	2,220	5,250	1,580	21,400	8,380	11,700	643	340	340	1,180	568
19	135	2,470	5,460	1,580	20,800	6,880	11,700	628	441	288	1,100	524
20	134	2,800	5,530	1,460	19,900	5,770	10,600	598	352	245	939	496
21	133	2,740	5,250	1,380	17,900	5,050	9,290	568	283	259	835	415
22	131	2,370	4,790	1,380	15,900	4,720	7,980	539	316	299	738	384
23	130	1,860	4,230	1,580	14,300	4,600	6,680	496	352	328	674	304
24	130	1,500	3,730	1,700	12,700	4,980	5,460	468	340	340	628	281
25	130	1,340	3,240	1,780	11,100	5,120	4,410	455	316	316	598	255
26	130	1,260	2,740	1,820	9,790	5,120	3,560	441	295	263	538	239
27	133	1,180	2,420	1,860	8,820	5,120	2,960	568	274	230	539	224
28	136	1,100	2,220	2,180	7,780	4,920	2,520	613	253	330	438	237
29	136	1,020	2,040	2,740	6,780	4,980	2,180	496	245	840	428	241
30	142	920	1,860	3,240	-	5,320	1,950	468	251	954	352	352
31	164	-	1,740	3,900	-	5,530	-	539	-	886	316	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,484	176	130	145	0.052	0.06
November	37,933	2,800	190	1,264	.455	.51
December	82,570	5,530	583	2,664	.958	1.10
Calendar year 1947	1,445,469	25,500	130	3,960	1.42	19.33
January	60,100	3,900	1,340	1,939	.697	.80
February	337,210	21,400	4,410	11,630	4.18	4.51
March	366,500	25,000	4,600	11,820	4.25	4.90
April	173,110	11,700	1,950	5,770	2.08	2.32
May	25,320	1,700	441	817	.294	.34
June	9,468	496	245	316	.114	.13
July	9,242	954	153	298	.107	.12
August	22,363	1,500	316	721	.259	.30
September	13,987	835	224	466	.168	.19
Water year 1947-48	1,142,287	25,000	130	3,121	1.12	15.28

Peak discharge (base, 10,000 sec.-ft.).- Feb. 17 (7 p.m.) 22,000 sec.-ft.; Mar. 10 (2 p.m.) 25,500 sec.-ft.; Apr. 19 (5 a.m.) 12,700 sec.-ft.

Note.- Discharge Aug. 26 to Sept. 22 computed from outside gage readings.

Pearl River at Jackson, Miss.

Location.- Water-stage recorder, lat. 32°17'20", long. 90°10'45", in SE¼ sec. 10, T. 5 N., R. 1 E. Choctaw meridian, at bridge on U. S. Highway 80 (old) in Jackson, 0.2 mile upstream from Alabama & Vicksburg Railway bridge, a quarter of a mile upstream from Town Creek, and 4½ miles upstream from Richland Creek. Datum of gage is 234.90 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 3,100 square miles.

Records available.- June 1901 to December 1913 (prior to 1903 and for 1913, gage heights only), August 1928 to September 1948. Gage-height records collected at same site since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 29 years (1903-12, 1928-48), 3,636 second-feet.

Extremes.- Maximum discharge during year, 25,600 second-feet Mar. 11 (gage height, 30.63 feet); minimum, 125 second-feet Oct. 25, 26 (gage height, 2.14 feet).

1901-13, 1928-48: 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.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.1	119	10.0	3,140	26.0	14,000
2.3	154	16.0	5,560	28.5	18,700
2.5	198	17.5	6,220	30.0	23,200
2.8	288	20.7	8,190	30.6	25,600
4.0	745	23.8	11,000		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	193	154	881	2,220	5,300	10,100	5,100	1,900	550	299	842	317
2	182	180	803	2,140	5,520	10,200	5,220	1,620	512	310	881	278
3	171	193	725	2,580	5,560	11,000	5,260	1,420	474	302	881	254
4	167	214	667	2,980	5,600	11,900	5,180	1,300	436	288	745	368
5	162	324	647	2,940	6,080	12,800	5,020	1,180	409	288	589	470
6	154	413	589	2,820	6,360	15,900	4,780	1,140	380	302	531	569
7	152	550	589	2,660	6,360	18,700	4,380	1,020	361	306	474	764
8	152	466	647	2,540	6,680	21,200	3,900	960	350	268	569	784
9	150	451	706	2,340	8,270	24,000	3,540	960	346	248	667	784
10	144	667	1,260	2,060	9,350	25,200	3,340	980	331	236	667	823
11	143	1,020	1,900	1,780	10,200	25,600	3,500	960	324	233	589	784
12	141	842	2,860	1,580	11,100	25,200	3,820	920	313	221	504	706
13	143	960	3,580	1,500	12,300	24,400	4,740	982	320	216	686	667
14	141	1,540	3,700	1,420	14,200	22,800	6,620	784	310	214	1,220	647
15	141	2,220	4,620	1,380	15,600	20,900	7,900	725	310	219	1,380	608
16	137	1,900	5,520	1,460	16,900	18,700	8,750	686	317	206	1,740	589
17	137	1,940	5,730	1,580	18,300	16,900	9,530	667	320	214	1,500	569
18	130	2,740	5,860	1,620	19,100	14,900	10,200	628	324	278	1,140	569
19	133	2,940	5,900	1,620	19,700	13,000	10,700	589	387	425	1,140	569
20	133	2,860	5,900	1,580	20,000	11,100	11,100	569	470	402	1,100	531
21	132	3,060	5,860	1,580	20,300	9,260	11,100	550	474	342	960	474
22	130	2,940	5,820	1,460	20,000	7,550	10,900	531	380	320	823	425
23	129	2,540	5,560	1,500	18,900	6,260	10,300	489	391	354	725	380
24	127	2,020	5,100	1,700	17,900	5,600	9,260	466	432	384	567	331
25	127	1,540	4,460	1,860	16,700	5,390	8,040	784	432	482	628	295
26	125	1,340	3,700	1,980	15,400	5,220	6,560	647	398	589	589	299
27	127	1,220	3,060	2,500	14,000	5,060	4,940	531	368	406	550	261
28	127	1,140	2,660	3,260	12,800	4,940	3,340	608	339	324	512	313
29	129	1,060	2,420	3,700	11,500	4,900	2,580	647	335	394	451	261
30	132	980	2,180	4,380	-	4,860	2,180	550	310	725	406	254
31	154	-	2,020	4,940	-	4,940	-	508	-	881	354	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	4,445	193	125	143	0.046	0.05
November	40,414	3,060	154	1,347	.435	.48
December	95,924	5,900	589	3,094	.998	1.15
Calendar year 1947	1,609,750	25,600	125	4,410	1.42	19.30
January	69,660	4,940	1,380	2,247	.725	.84
February	369,980	20,300	5,300	12,760	4.12	4.44
March	418,480	25,600	4,860	13,500	4.35	5.02
April	191,780	11,100	2,180	6,393	2.06	2.30
May	26,181	1,900	508	845	.273	.31
June	11,403	550	310	380	.123	.14
July	10,686	881	206	345	.111	.13
August	24,510	1,740	354	791	.255	.29
September	14,943	823	254	498	.161	.18
Water year 1947-48	1,278,406	25,600	125	3,493	1.13	15.33

Peak discharge (base, 14,000 sec.-ft.).- Feb. 21 (8 p.m.) 20,600 sec.-ft.; Mar. 11 (6 a.m.) 25,600 sec.-ft.

Pearl River near Rockport, Miss.

Location.- Water-stage recorder, lat. 31°47'25", long. 90°08'35", in SW¼ sec. 31, T. 10 N., R. 11 E. Washington meridian, at county highway bridge, 1½ miles upstream from Sinkler Creek, 2 miles east of Rockport, and 7½ miles downstream from Strong River. Datum of gage is 180.19 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 4,600 square miles.

Records available.- June 1939 to September 1948.

Extremes.- Maximum discharge during year, 27,700 second-feet Mar. 6 or 7 (gage height, 27.87 feet, from recorded range in stage); minimum, 327 second-feet Oct. 30 (gage height, 4.79 feet).

1939-48: Maximum discharge, 54,600 second-feet Feb. 20, 1946 (gage height, 34.31 feet); minimum, 262 second-feet Oct. 25-31, 1943; minimum gage height, 4.11 feet Oct. 25-28, 1943.

Maximum stage known, 35.25 feet Apr. 9, 1938, from floodmarks; a discharge of 55,200 second-feet was measured by Corps of Engineers on same day (gage height, 35.0 feet).

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	476	354	1,270	3,360	10,000	16,000	6,600	2,880	835	672	1,160	672
2	448	376	1,180	4,210	8,340	16,000	6,600	2,600	810	560	1,110	650
3	436	379	1,080	3,540	7,560	17,500	6,500	2,390	810	540	1,080	605
4	416	379	1,010	3,200	6,820	20,000	6,500	2,180	785	540	1,080	740
5	404	400	960	3,360	7,060	23,000	6,200	2,050	740	520	1,040	1,320
6	400	416	1,400	3,200	8,080	25,000	6,000	1,990	695	480	910	1,350
7	396	582	1,350	3,040	8,470	26,000	5,700	1,930	672	500	810	1,300
8	382	810	1,240	2,880	10,400	26,000	5,200	1,750	650	480	810	1,270
9	379	810	1,350	2,740	16,600	26,000	4,700	1,630	627	476	1,160	1,240
10	376	740	2,050	2,600	18,600	25,900	4,400	1,570	627	448	1,570	1,180
11	376	1,060	2,670	2,320	18,200	25,500	4,300	1,520	605	440	1,570	1,180
12	368	1,520	2,740	2,110	16,900	24,900	4,700	1,460	582	448	1,630	1,180
13	365	1,320	3,280	2,110	16,300	24,700	5,700	1,460	605	440	1,350	1,180
14	362	1,180	4,210	2,600	18,500	24,900	8,000	1,350	582	416	1,240	1,300
15	354	1,990	7,500	2,250	18,800	24,900	11,500	1,300	560	468	1,300	1,270
16	351	2,530	11,000	1,930	18,000	24,700	14,000	1,210	540	520	1,400	1,160
17	344	2,250	9,770	1,870	17,400	23,900	13,500	1,140	540	582	1,600	1,080
18	344	2,110	8,080	1,930	17,300	22,900	12,500	1,110	605	582	1,800	1,060
19	344	2,880	7,180	1,930	17,700	21,400	11,100	1,060	605	560	1,900	1,010
20	348	3,040	6,580	1,930	18,200	19,900	10,700	1,010	560	650	1,900	1,010
21	348	2,880	6,340	1,990	19,000	17,700	10,800	960	582	717	1,800	985
22	340	2,960	6,220	2,180	19,500	15,400	11,100	935	650	650	1,570	960
23	340	2,960	6,100	2,250	20,000	15,300	11,100	910	650	582	1,400	910
24	337	2,810	5,860	2,390	20,500	13,600	10,900	885	605	540	1,380	860
25	334	2,390	5,520	2,460	20,500	11,200	10,600	860	582	582	1,300	835
26	337	1,930	4,860	2,600	20,000	9,500	9,980	1,160	627	672	1,180	785
27	337	1,690	4,010	4,430	20,000	8,000	8,780	1,400	717	785	1,060	762
28	334	1,520	3,360	9,390	19,000	7,500	6,860	1,140	582	835	965	762
29	330	1,400	2,880	8,210	18,000	6,800	4,640	1,040	560	740	865	785
30	327	1,320	2,670	9,650	-	6,600	3,280	1,010	695	885	785	835
31	334	-	2,460	11,500	-	6,600	-	935	-	810	717	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	11,367	476	327	367	0.080	0.09
November	46,986	3,040	354	1,566	.340	.38
December	126,180	11,000	960	4,070	.885	1.02
Calendar year 1947	2,462,704	49,500	327	6,747	1.47	19.90
January	110,160	11,500	1,870	3,554	.773	.89
February	455,730	20,500	6,820	15,710	3.42	3.68
March	577,300	26,000	6,600	18,620	4.05	4.67
April	242,440	14,000	3,280	8,081	1.76	1.96
May	44,825	2,880	860	1,446	.314	.36
June	19,285	835	540	643	.140	.16
July	18,120	885	416	585	.127	.15
August	39,482	1,900	717	1,274	.277	.32
September	30,236	1,350	605	1,008	.219	.24
Water year 1947-48	1,722,111	26,000	327	4,705	1.02	13.92

Peak discharge (base, 18,000 sec.-ft.).- Feb. 10 (12 m.) 18,800 sec.-ft.; Mar. 6 or 7 (time unknown) 27,700 sec.-ft.

Note.- No gage-height record Feb. 21 to Mar. 9, Nar. 26 to Apr. 18, Aug. 16-21; discharge computed on basis of records for other stations in basin.

Pearl River near Monticello, Miss.

Location.- Water-stage recorder, lat. 31°33', long. 90°05', in SW¼ sec. 23, T. 7 N., R. 21 W. St. Stephens meridian, at bridge on U. S. Highway 84, 1.0 mile east of Monticello, 2½ miles upstream from Halls Creek, and 3 miles upstream from Silver Creek. Datum of gage is 158.66 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 5,040 square miles.

Records available.- October 1938 to September 1948. Gage-height records collected since 1924 at site 1¼ miles upstream from station are contained in reports of U. S. Weather Bureau.

Average discharge.- 10 years, 6,017 second-feet.

Extremes.- Maximum discharge during year, 32,100 second-feet Mar. 6 (gage height, 24.41 feet); minimum, 420 second-feet Oct. 18 (gage height, 4.38 feet).

1938-48: Maximum discharge, 51,200 second-feet Feb. 21, 1946, Jan. 21, 1947; maximum gage height, 27.7 feet Jan. 21, 1947; minimum discharge, 330 second-feet Oct. 26-28, 1943 (gage height, 3.79 feet).

Flood of April 1902 reached a stage of about 33 feet, from reports of U. S. Weather Bureau. A discharge of 69,900 second-feet was measured Apr. 8, 1938, by Corps of Engineers (gage height, 30.15 feet, from floodmark).

Remarks.- Records good.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 1 to July 25, Sept. 1-30)

4.4	435	9.6	4,830	22.0	24,100
5.4	1,200	11.6	7,260	23.5	28,600
6.4	2,000	14.0	10,400	24.3	31,700
7.4	2,850	20.2	19,900		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	622	442	1,480	3,540	13,000	20,300	7,780	3,710	984	840	960	728
2	592	472	1,400	5,050	10,700	22,900	7,520	3,280	908	780	1,200	690
3	570	480	1,280	4,620	8,950	28,000	7,520	2,850	892	698	1,120	652
4	555	480	1,200	3,710	7,910	29,300	7,390	2,590	878	660	1,120	915
5	525	518	1,160	3,710	7,520	28,300	7,390	2,420	848	645	1,120	1,600
6	518	525	1,200	3,620	8,040	31,700	7,390	2,420	825	645	1,010	1,560
7	510	600	1,640	3,450	8,560	32,100	7,130	2,340	788	622	885	1,360
8	502	825	1,600	3,280	9,340	30,900	6,610	2,090	780	630	818	1,240
9	495	945	1,760	3,100	13,900	30,100	6,000	1,880	788	630	1,400	1,200
10	488	922	4,080	2,930	17,200	29,700	5,400	1,760	825	600	2,040	1,160
11	480	1,120	3,980	2,760	18,100	28,600	5,050	1,720	788	585	1,760	1,120
12	465	1,520	3,540	2,510	17,800	27,700	4,830	1,640	750	622	1,760	1,120
13	458	1,680	3,800	2,510	18,100	26,800	6,580	1,600	720	615	1,600	1,160
14	442	1,600	4,940	2,850	19,900	26,200	16,300	1,560	705	608	1,360	1,360
15	435	4,940	8,430	2,930	19,700	25,900	19,900	1,440	698	592	1,200	1,400
16	435	3,620	12,700	2,340	19,000	25,900	19,500	1,360	690	705	1,360	1,200
17	435	3,020	12,400	2,170	18,000	25,900	17,000	1,280	675	712	1,640	1,040
18	428	2,510	10,200	2,170	17,400	25,300	14,800	1,240	720	750	1,920	968
19	428	2,680	8,430	2,250	17,000	24,400	13,200	1,200	788	705	1,800	930
20	442	3,360	7,520	2,250	17,000	22,900	12,100	1,120	720	705	1,480	900
21	428	3,280	6,870	2,590	17,500	21,300	11,800	1,120	690	788	1,400	885
22	435	3,190	6,610	2,850	18,800	19,500	11,800	1,040	742	810	1,320	855
23	435	3,350	6,480	3,020	20,700	19,200	11,800	1,020	772	735	1,240	810
24	435	3,280	6,360	3,540	21,700	18,000	11,800	992	758	682	1,080	780
25	435	2,930	6,000	3,360	22,300	15,200	11,600	1,080	720	750	992	742
26	435	2,420	5,520	3,280	22,600	11,800	11,400	1,920	720	918	938	712
27	442	2,000	4,720	5,640	22,100	11,600	10,700	1,600	772	802	908	675
28	435	1,760	3,970	12,600	21,500	10,700	9,080	1,480	758	892	862	675
29	435	1,640	3,450	12,300	20,500	9,890	6,610	1,280	675	900	832	690
30	428	1,560	3,100	12,300	-	8,950	4,520	1,160	825	855	802	720
31	435	-	2,850	13,800	-	8,300	-	1,080	-	1,000	758	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	14,603	622	428	471	0.094	0.11
November	57,679	4,940	442	1,923	.382	.43
December	148,550	12,700	1,160	4,792	.951	1.10
Calendar year 1947	2,841,272	50,600	428	7,784	1.54	20.98
January	137,030	13,800	2,170	4,420	.877	1.01
February	474,820	22,600	7,520	16,370	3.25	3.50
March	697,340	32,100	8,300	22,490	4.46	5.15
April	300,500	19,900	4,520	10,020	1.99	2.22
May	53,272	3,710	992	1,718	.341	.39
June	23,202	984	675	773	.153	.17
July	22,381	1,000	585	722	.143	.17
August	38,685	2,040	758	1,248	.248	.29
September	29,847	1,600	652	995	.197	.22
Water year 1947-48	1,997,909	32,100	428	5,459	1.08	14.76

Peak discharge (base, 22,000 sec.-ft.).- Feb. 26 (6 a.m.) 22,600 sec.-ft.; Mar. 6 (10 p.m.) 32,100 sec.-ft.

Pearl River near Columbia, Miss.

Location.- Water-stage recorder, lat. 31°14', long. 89°51', in E½ sec. 7, T. 3 N., R. 18 W. St. Stephens meridian, at bridge on State Highway 24, 1½ miles southwest of Columbia, 2 miles downstream from Fernwood, Columbia & Gulf Railroad bridge, 2¼ miles upstream from Silver Creek, and 2¾ miles downstream from Jones Creek. Datum of gage is 115.81 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 5,690 square miles.

Records available.- May 1934 to September 1948. August 1928 to May 1934 at site 1 mile downstream. Gage-height records collected in vicinity since 1904 are contained in reports of U. S. Weather Bureau.

Average discharge.- 19 years (1928-29, 1930-48), 7,174 second-feet.

Extremes.- Maximum discharge during year, 39,300 second-feet Mar. 7 (gage height, 22.11 feet); minimum, 1,180 second-feet Oct. 19 (gage height, 2.08 feet).

1928-48: Maximum discharge, 72,600 second-feet Apr. 9, 1938 (gage height, 26.40 feet); minimum, 736 second-feet Oct. 20-31, Nov. 5, 6, 1936; minimum gage height, 1.61 feet Oct. 27, 28, 1943.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)

2.2	1,230	7.0	5,500	17.0	24,100
3.0	1,710	9.0	8,200	20.0	32,300
4.0	2,470	11.0	11,400	22.0	38,900
5.0	3,350	12.5	14,200		
6.0	4,350	14.0	17,200		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,430	1,250	2,470	4,460	17,000	24,400	10,300	6,280	2,070	1,640	1,710	1,460
2	1,370	1,280	2,310	5,630	16,000	26,900	9,550	5,260	1,990	1,710	1,710	1,370
3	1,370	1,250	2,230	6,800	13,600	31,700	9,250	4,680	1,850	1,640	1,780	1,340
4	1,340	1,250	2,150	6,150	11,500	35,000	9,100	4,250	1,780	1,490	1,780	1,580
5	1,310	1,250	1,990	5,260	10,200	36,500	9,100	3,950	1,780	1,430	1,710	2,310
6	1,280	1,310	1,920	5,020	9,700	38,500	9,100	3,950	1,710	1,430	1,710	2,720
7	1,280	1,580	1,920	4,900	10,000	38,900	9,100	4,050	1,710	1,430	1,640	2,470
8	1,250	1,850	2,550	4,790	10,500	38,900	8,800	3,850	1,640	1,400	1,640	2,150
9	1,250	1,710	3,450	4,570	12,400	37,700	8,200	3,450	1,640	1,460	1,710	1,920
10	1,230	1,780	7,360	4,350	16,000	36,200	7,640	3,170	1,710	1,460	2,310	1,920
11	1,230	2,470	9,250	4,150	18,300	35,000	6,940	2,990	1,710	1,400	3,080	2,150
12	1,230	2,990	7,360	3,950	19,900	33,800	6,410	2,900	1,640	1,400	2,720	1,850
13	1,200	2,900	6,540	3,850	20,300	32,600	6,670	2,810	1,580	h1,400	2,550	1,920
14	1,200	2,810	7,080	3,950	21,900	31,400	11,900	2,720	1,520	h1,400	2,390	2,070
15	1,200	4,150	9,400	4,150	24,100	30,500	18,100	2,630	1,520	h1,520	2,150	2,390
16	1,180	7,920	14,600	4,050	24,600	29,600	21,200	2,470	1,520	a1,600	1,990	2,390
17	1,180	6,670	16,000	3,550	23,600	29,600	22,400	2,390	1,580	h1,710	2,070	1,990
18	1,180	4,790	15,200	3,350	22,100	29,300	21,200	2,310	1,710	a1,650	2,310	1,780
19	1,180	3,850	12,600	3,350	20,800	29,000	18,600	2,230	1,780	a1,600	2,550	1,640
20	1,400	3,850	10,500	3,350	19,900	28,400	16,200	2,150	1,780	a1,550	2,470	1,580
21	1,640	4,350	9,400	3,450	19,700	27,600	14,800	2,070	1,640	h1,520	2,230	1,520
22	1,430	4,350	8,800	3,950	20,300	26,600	14,000	1,990	1,520	a1,450	2,070	1,520
23	1,280	4,570	8,350	4,250	21,200	25,400	13,800	1,990	1,520	h1,400	1,990	1,490
24	1,250	4,900	8,200	4,790	22,100	23,900	13,800	1,920	1,580	1,430	1,920	1,460
25	1,230	4,680	7,920	5,140	23,600	22,600	13,800	1,920	1,580	1,370	1,780	1,400
26	1,230	4,150	7,640	4,900	24,600	20,100	14,000	2,070	1,520	1,640	1,710	1,340
27	1,250	3,550	7,080	5,630	25,100	16,600	13,800	3,030	1,490	1,990	1,640	1,280
28	1,250	3,030	8,280	12,600	25,400	14,800	12,800	3,260	1,490	1,780	1,580	1,280
29	1,230	2,810	5,500	16,000	25,100	13,400	11,000	2,900	1,520	1,780	1,520	1,250
30	1,200	2,550	4,900	16,600	-	12,100	8,350	2,630	1,490	1,780	1,490	1,250
31	1,200	-	4,460	17,000	-	11,200	-	2,310	-	1,580	1,460	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	39,480	1,640	1,180	1,274	0.224	0.26
November	95,900	7,920	1,250	3,197	.562	.63
December	215,410	16,000	1,920	6,949	1.22	1.41
Calendar year 1947	3,484,240	51,700	1,180	9,546	1.68	22.77
January	183,940	17,000	3,350	5,933	1.04	1.20
February	549,500	25,400	9,700	18,950	3.33	3.59
March	868,200	38,900	11,200	28,010	4.92	5.67
April	369,910	22,400	6,410	12,330	2.17	2.42
May	94,630	6,280	1,920	3,053	.537	.62
June	49,570	2,070	1,490	1,652	.290	.32
July	48,040	1,990	1,370	1,550	.272	.31
August	61,370	3,080	1,460	1,980	.348	.40
September	52,790	2,720	1,250	1,760	.309	.35
Water year 1947-48	2,628,740	38,900	1,180	7,182	1.26	17.18

Peak discharge (base, 28,000 sec.-ft.).- Mar. 7 (5 p.m.) 39,300 sec.-ft.

a No gage-height record; discharge computed on basis of records for station near Rockport.

h Computed from once-daily gage readings.

Pearl River near Bogalusa, La.

Location.- Wire-weight gage, lat. 30°47'35", long. 89°49'15", on line between secs. 17 and 18, T. 3 S., R. 14 E., at bridge on State Highway 35, 2 miles east of Bogalusa and 2 miles upstream from Bogue Lusa. Datum of gage is 55.00 feet above mean sea level, datum of 1929 (levels by Corps of Engineers).

Drainage area.- 6,630 square miles.

Records available.- October 1938 to September 1948.

Average discharge.- 10 years, 8,724 second-feet.

Extremes.- Maximum discharge during year, 59,200 second-feet Mar. 7 (gage height, 20.27 feet); minimum, 1,700 second-feet Oct. 17-19; minimum gage height, 6.66 feet Oct. 19.

1938-48: Maximum discharge, 60,000 second-feet Jan. 25, 26, 1947; maximum gage height, 20.30 feet Jan. 25, 1947; minimum discharge, 1,290 second-feet Oct. 27-29, 1943 (gage height, 5.54 feet).

Flood of Apr. 11, 1938, reached a stage of 21.0 feet.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 2 to Sept. 30)

6.70	1,700	14.50	9,310	18.50	24,600
7.00	1,880	16.00	12,600	19.00	31,100
9.00	3,230	17.00	15,500	19.50	40,900
11.00	4,860	17.50	17,700	20.00	52,100
13.00	7,000	18.00	20,700	20.20	56,800

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,330	2,070	3,520	5,960	22,100	29,500	14,300	10,300	3,230	2,260	2,670	2,200
2	2,260	2,140	3,300	6,180	21,400	29,500	13,400	7,820	2,950	2,330	2,530	2,260
3	2,200	2,070	3,230	6,520	19,400	34,800	12,400	6,520	2,740	2,460	2,530	2,200
4	2,140	1,940	3,160	6,880	16,700	40,900	11,600	5,960	2,600	2,400	2,530	2,810
5	2,140	1,880	3,090	6,520	14,300	45,200	11,000	5,440	2,530	2,260	2,530	4,770
6	2,070	2,000	2,880	6,180	12,900	56,800	11,200	5,150	2,460	2,140	2,460	5,440
7	2,070	2,260	2,810	6,180	11,900	56,800	11,400	5,240	2,460	2,260	2,460	4,500
8	2,000	3,160	2,810	6,070	12,100	54,400	11,000	5,240	2,400	2,600	2,400	3,680
9	2,000	3,380	3,520	5,960	12,900	49,800	10,500	4,860	2,530	2,460	2,950	3,160
10	1,940	2,880	11,400	5,630	15,200	47,500	9,890	4,500	2,740	2,530	2,950	2,950
11	1,940	3,230	25,600	5,440	16,700	43,000	8,950	4,160	3,020	2,460	3,300	3,020
12	1,880	4,340	20,700	5,340	18,200	40,900	8,280	3,920	2,810	2,330	3,760	3,020
13	1,880	4,590	17,700	5,240	22,100	38,800	7,820	3,760	2,530	2,260	3,680	2,880
14	1,820	4,160	15,200	5,150	23,700	36,800	10,500	3,680	2,400	2,330	3,380	3,230
15	1,820	5,850	15,900	5,060	24,600	36,800	15,500	3,520	2,330	2,260	3,230	4,420
16	1,760	7,680	18,200	5,240	25,600	34,800	18,800	3,450	2,260	2,260	2,950	4,770
17	1,700	9,310	20,700	5,060	26,700	34,800	21,400	3,380	2,260	2,330	2,810	3,840
18	1,700	8,280	20,700	4,770	26,700	32,900	22,900	3,300	2,460	2,600	2,670	3,230
19	1,700	6,760	18,800	4,590	26,700	32,900	22,900	3,230	2,950	2,530	2,950	2,810
20	1,880	5,440	17,700	4,420	25,600	32,900	22,100	3,090	2,950	2,400	3,160	2,600
21	2,070	5,060	16,300	4,680	25,600	32,900	20,000	3,020	2,670	2,260	3,230	2,400
22	2,400	5,340	15,500	4,860	24,600	31,100	17,700	2,950	2,530	2,200	3,020	2,260
23	2,260	5,630	14,900	5,150	23,700	31,100	15,900	2,880	2,460	2,140	2,810	2,260
24	2,140	6,520	12,600	5,630	24,600	29,500	15,500	2,740	2,400	2,140	2,740	2,260
25	2,000	6,880	11,000	6,070	24,600	29,500	15,200	2,740	2,330	2,140	2,670	2,200
26	2,000	6,180	9,500	6,640	25,600	28,000	15,200	2,670	2,330	2,400	2,530	2,140
27	1,940	5,340	9,130	6,760	25,600	26,700	15,500	2,810	2,260	2,460	2,460	2,000
28	1,940	4,340	8,280	8,280	26,700	24,600	15,500	3,520	2,200	3,020	2,400	2,000
29	1,940	3,920	7,820	14,600	28,000	22,100	14,600	4,250	2,200	3,020	2,330	1,940
30	1,880	3,680	7,000	18,200	-	18,200	13,100	4,000	2,200	3.160	2,260	1,940
31	1,940	-	6,180	20,700	-	15,500	-	3,520	-	3,020	2,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	61,740	2,400	1,700	1,992	0.300	0.35
November	136,310	9,310	1,880	4,544	.685	.76
December	349,130	25,600	2,810	11,260	1.70	1.96
Calendar year 1947	4,396,790	60,000	1,700	12,050	1.82	24.67
January	213,960	20,700	4,420	6,902	1.04	1.20
February	624,500	28,000	11,900	21,530	3.25	3.50
March	1,009,000	56,800	15,500	35,450	5.35	6.16
April	434,040	22,900	7,820	14,470	2.18	2.43
May	131,620	10,300	2,670	4,246	.640	.74
June	76,190	3,230	2,200	2,540	.383	.43
July	75,420	3,160	2,140	2,433	.367	.42
August	86,550	3,760	2,200	2,792	.421	.49
September	89,190	5,440	1,940	2,973	.448	.50
Water year 1947-48	3,377,650	56,800	1,700	9,229	1.39	18.94

Lobutcha Creek near Carthage, Miss.

Location.- Wire-weight gage, lat. 32°46', long. 89°28', in NE¼ sec. 34, T. 11 N., R. 8 E. Choctaw meridian, at bridge on State Highway 16, 3 miles upstream from mouth and 5 miles northeast of Carthage.

Drainage area.- 313 square miles.

Records available.- July 1937 to July 1938, January 1939 to September 1948.

Extremes.- Maximum discharge observed during year, 4,150 second-feet Feb. 11 (gage height, 15.15 feet); minimum observed, 14 second-feet July 11 (gage height, 0.44 foot).
1937-48: Maximum discharge observed, 13,500 second-feet Mar. 29, 1944 (gage height, 18.0 feet, site and datum then in use); minimum observed, 5.3 second-feet Aug. 24, 1943 (gage height, 1.47 feet, site and datum then in use), but may have been less during period of doubtful gage-height record.

Remarks.- Records fair. Gage read twice daily.

Rating table, water year 1947-48 (gage height, in feet, (and discharge, in second-feet)

0.4	13	3.0	142	11.0	1,190
.7	22	5.0	308	12.0	1,490
1.5	54	8.0	611	13.0	2,000
2.0	78	9.0	747	14.0	2,760
2.5	107	10.0	940	15.0	3,860

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	77	83	222	687	406	556	83	34	20	107	20
2	17	198	78	366	647	822	516	78	30	19	89	19
3	17	150	73	426	611	2,000	356	73	30	18	63	18
4	17	101	73	386	589	2,510	254	68	28	18	46	38
5	d17	89	73	346	611	2,280	222	68	26	15	36	114
6	d17	68	83	290	611	3,250	272	89	26	17	30	182
7	d17	73	95	206	589	3,730	356	121	30	19	26	142
8	18	190	150	174	780	3,360	290	121	28	19	24	114
9	d18	174	290	150	1,560	2,510	446	95	28	16	24	83
10	d18	121	556	142	2,760	1,880	556	89	30	15	190	58
11	d17	308	701	142	3,860	1,520	486	73	30	14	546	50
12	16	496	647	135	3,480	1,270	486	63	26	19	623	42
13	16	446	536	158	3,040	940	556	58	28	16	326	38
14	16	326	456	214	3,480	816	1,300	60	30	26	166	44
15	16	366	506	246	3,860	611	2,430	58	28	22	166	60
16	16	486	855	238	3,040	416	2,430	52	24	16	150	58
17	16	456	1,080	198	2,590	446	1,820	50	24	20	128	48
16	16	406	986	182	2,000	556	1,490	48	38	80	114	42
19	16	406	763	158	1,460	446	1,190	46	50	68	83	36
20	16	346	673	142	1,300	336	918	40	54	63	60	32
21	16	238	611	158	1,360	336	716	38	46	78	50	28
22	16	174	556	230	1,390	290	436	36	38	44	42	26
23	16	150	456	299	1,160	281	246	34	34	36	36	24
24	16	142	272	299	986	336	190	32	34	28	34	22
25	16	158	214	272	716	299	158	32	30	26	30	20
26	16	150	182	246	647	281	135	34	26	42	28	19
27	19	135	166	246	600	406	128	34	24	85	24	26
28	40	121	150	446	546	647	128	32	22	290	24	66
29	50	101	135	600	476	747	114	42	22	299	22	222
30	46	89	128	647	-	660	95	44	20	272	22	230
31	40	-	128	687	-	600	-	38	-	238	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	624	50	16	20.1	0.064	0.07
November	6,741	496	68	225	.719	.80
December	11,755	1,080	73	379	1.21	1.40
Calendar year 1947	142,247	4,590	14	390	1.25	17.09
January	8,651	687	135	279	.891	1.03
February	45,436	3,860	476	1,567	5.01	5.40
March	34,988	3,730	281	1,129	3.61	4.16
April	19,276	2,430	95	643	2.05	2.29
May	1,829	121	32	59.0	.188	.22
June	918	54	20	30.6	.098	.11
July	1,958	299	14	63.2	.202	.23
August	3,329	623	20	107	.342	.40
September	1,921	230	18	64.0	.204	.23
Water year 1947-48	137,426	3,860	14	375	1.20	16.34

d Doubtful gage-height record; discharge computed on basis of records for other stations in vicinity.

Tuscolameta Creek at Walnut Grove, Miss.

Location.- Water-stage recorder, lat. 32°35', long. 89°28', in NE¼ sec. 34, T. 9 N., R. 8 E. Choctaw meridian, at bridge on State Highway 35 over north drainage canal, 0.4 mile southwest of Walnut Grove, 0.8 mile upstream from Gulf, Mobile & Ohio Railroad bridge, 7½ miles upstream from junction of north and south drainage canals, and 15½ miles upstream from mouth. Auxiliary water-stage recorder at bridge over south drainage canal on State Highway 35, 5,000 feet southwest of north canal gage. Datum of gage is 332.70 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 411 square miles (combined drainage area for all channels).

Records available.- January 1939 to September 1948.

Extremes.- Maximum discharge during year, 7,800 second-feet Mar. 4 (gage height, 17.03 feet, north canal gage); maximum gage height, south canal, 17.33 feet Mar. 4; minimum daily discharge (combined flow), 15 second-feet Sept. 25, but may have been less during period of faulty intake action; minimum gage height observed, north canal, 2.04 feet Sept. 25, but may have been less during period of faulty intake action; minimum gage height, south canal, 7.12 feet Sept. 26.

1939-48: Maximum discharge, 16,400 second-feet Feb. 11, 1946 (gage height, 18.52 feet, north canal); maximum gage height, south canal, 18.94 feet Feb. 11, 1946; minimum discharge (combined flow), 5.0 second-feet Aug. 28, 29, 1943; minimum gage height observed, north canal, that of Sept. 25, 1948; minimum gage height observed, south canal, 7.07 feet Aug. 29, 1943.

Maximum stage known, north canal, 19.3 feet Apr. 8, 1938, from floodmark; south canal, 20.2 feet Apr. 8, 1938, from floodmark. Prior to canalization, creek reached a stage of 24.5 feet, from floodmark, sometime between 1920 and 1925.

Remarks.- Records good except those for periods of no gage-height record or faulty intake action, which are fair. Discharge computed by combining the flow of individually rated low-water channels except when discharge in north canal exceeds about 1,100 second-feet or that in south canal exceeds about 595 second-feet, during which periods discharge determined from combined stage-discharge relation for all channels referred to gage on north canal.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	45	83	582	1,630	315	759	63	38	17	60	h17
2	22	59	79	703	1,240	2,910	673	62	30	17	h40	a16
3	21	49	77	541	747	4,280	426	60	h28	16	31	a16
4	21	38	78	404	502	6,860	279	60	h24	16	25	60
5	21	42	81	375	1,290	7,040	225	62	24	16	21	250
6	21	49	119	177	1,640	7,040	293	71	26	h24	18	200
7	21	98	129	150	1,670	5,900	293	86	28	28	16	150
8	21	143	136	134	2,240	5,900	300	84	30	24	16	80
9	23	92	278	128	3,450	4,700	876	69	30	a19	h17	80
10	23	78	1,030	124	3,590	2,490	774	a55	34	h18	40	h48
11	22	466	994	117	3,970	1,040	978	a50	h33	a17	77	40
12	22	403	758	110	3,270	685	651	a50	32	h16	91	35
13	21	294	699	139	1,760	476	734	a50	30	a16	60	32
14	21	205	517	236	2,390	374	2,670	a50	33	a16	68	h30
15	20	757	1,520	183	2,630	330	3,210	a48	35	72	57	60
16	19	538	2,170	145	3,210	306	3,270	a48	h28	102	137	50
17	19	384	1,850	137	2,430	336	1,540	a48	26	70	207	35
18	18	841	1,530	134	820	331	475	a66	29	60	109	26
19	18	1,120	811	128	490	304	266	a57	50	53	60	22
20	17	770	399	130	417	264	195	48	50	42	h54	h21
21	h16	593	266	246	471	233	158	46	45	h31	45	20
22	16	299	216	374	956	264	131	46	45	26	38	h18
23	16	217	189	334	990	1,240	113	46	h25	22	32	17
24	20	240	169	285	827	1,690	99	45	24	21	40	h18
25	25	219	150	258	817	1,760	91	49	23	20	45	h15
26	20	178	136	303	691	877	86	55	21	h31	35	g18
27	25	140	127	528	597	1,820	85	48	19	35	h22	g60
28	31	110	122	922	483	1,790	84	55	h18	45	20	g104
29	29	94	119	900	384	1,580	75	156	17	58	19	g100
30	25	87	115	1,410	-	920	68	84	17	67	a18	g54
31	25	-	120	1,660	-	695	-	54	-	117	h17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	660	31	16	21.3	0.052	0.06
November	8,848	1,120	38	288	.701	.78
December	15,063	2,170	76	486	1.18	1.36
Calendar year 1947	234,551	9,850	16	643	1.58	21.23
January	11,977	1,660	110	386	.939	1.08
February	45,602	3,970	384	1,572	3.82	4.13
March	64,450	7,040	233	2,079	5.06	5.83
April	19,877	3,270	68	663	1.61	1.80
May	1,871	156	45	60.4	.147	.17
June	890	50	17	29.7	.072	.08
July	1,132	117	16	36.5	.089	.10
August	1,535	207	16	49.5	.120	.14
September	1,670	250	15	55.7	.136	.15
Water year 1947-48	173,375	7,040	15	474	1.15	15.68

Peak discharge (base, 4,000 sec.-ft.).- Feb. 11 (5 p.m.) 4,090 sec.-ft.; Mar. 4 (8 p.m.) 7,800 sec.-ft.

a No gage-height record in south canal; discharge computed on basis of records for other stations in vicinity.

g Computed from graph based on gage readings.

h Computed from outside gage readings.

Note.- Water below intakes in north canal Oct. 15-20, 22-26, May 22-25, June 1, 2, 5-10, 12-15, 17-22, 24-27, June 29 to July 5, July 7-11, 13, 14, 17, 18, 20, 22-25, 27-29, Aug. 3-8, 10, 21-26, 28-31, Sept. 2-9, 11-13, 15-19, 21, 23; discharge computed on basis of south canal.

Yockanookany River near Kosciusko, Miss.
(Formerly published as Yokahockany River)

Location.- Water-stage recorder, lat. 33°02', long. 89°35', in T. 14 N., R. 7 E. Choctaw meridian, at bridge on State Highway 35, 2 miles south of Kosciusko. Datum of gage is 374.34 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 314 square miles.

Records available.- August 1938 to September 1948. (Prior to October 1947 published as Yokahockany River).

Average discharge.- 10 years, 354 second-feet.

Extremes.- Maximum discharge during year, 5,480 second-feet Feb. 11 (gage height, 14.24 feet); minimum, 10 second-feet Oct. 1, July 12, Sept. 3; minimum gage height, 2.00 feet Oct. 1.

1938-48: Maximum discharge, 11,600 second-feet Feb. 11, 1946 (gage height, 16.21 feet); minimum, 2.3 second-feet Aug. 20-24, 1943; minimum gage height, 0.10 foot Sept. 3-6, 1939.

Flood in December 1932 reached a stage of about 17 feet (authority, Corps of Engineers).

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-26, June 20 to July 16)

Oct. 1 to Apr. 14									Apr. 15 to Sept. 30			
2.1	10	3.5	86	7.5	603	12.5	2,600		2.2	11	4.0	101
2.3	17	4.3	157	9.0	930	13.1	3,350		2.5	20	4.5	150
2.5	26	5.5	294	10.5	1,410	13.7	4,370		3.0	40	6.0	356
2.9	47	6.5	433	11.5	1,890	14.1	5,160		3.5	65	6.5	433

Note.- Same as preceding table above 6.5 feet.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	84	55	666	739	263	307	50	20	14	26	11
2	11	110	54	986	481	1,670	251	50	16	16	18	11
3	12	54	53	706	346	2,750	210	50	15	13	16	10
4	12	34	53	339	353	2,700	182	48	14	12	14	58
5	12	28	57	221	659	2,930	281	52	13	12	14	341
6	12	26	78	182	640	3,270	549	115	14	12	12	132
7	12	182	82	157	714	2,990	374	139	19	18	11	64
8	13	205	194	142	2,150	2,600	358	87	20	16	12	37
9	13	80	333	132	3,670	2,420	1,550	60	51	13	18	26
10	13	113	320	142	4,750	1,680	2,420	47	77	11	339	24
11	14	339	313	147	5,160	648	2,420	40	40	10	307	23
12	14	227	215	168	4,280	360	2,510	38	24	10	119	21
13	14	116	162	532	3,920	287	2,870	38	19	11	60	22
14	14	134	124	481	4,190	257	3,510	40	17	13	108	59
15	13	698	781	300	4,460	245	2,750	36	16	13	97	56
16	12	481	1,370	221	4,190	285	2,340	32	15	28	66	39
17	12	215	1,450	193	2,860	804	1,720	28	65	167	54	28
18	12	142	1,290	167	1,440	1,130	566	27	114	231	40	21
19	13	188	678	147	515	1,330	296	24	139	217	29	18
20	13	137	294	152	465	913	224	21	67	108	24	17
21	13	100	215	374	515	360	179	20	44	47	20	16
22	13	80	182	498	678	414	150	20	37	27	18	15
23	13	121	162	353	567	876	124	20	26	18	17	14
24	13	215	142	251	433	930	104	22	24	23	16	14
25	13	167	127	227	465	465	92	23	20	218	15	14
26	13	122	115	221	449	357	88	23	18	70	14	12
27	32	92	109	513	388	1,100	85	20	18	111	14	19
28	36	74	106	1,100	346	1,530	75	20	20	208	13	465
29	25	65	104	1,100	267	1,370	62	31	17	67	12	315
30	20	59	100	876	-	858	54	31	16	43	12	139
31	28	-	108	958	-	388	-	24	-	41	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	470	36	10	15.2	0.048	0.06
November	4,688	698	26	156	.497	.56
December	9,426	1,450	53	304	.968	1.12
Calendar year 1947	156,217.2	4,650	4.2	428	1.36	18.52
January	12,652	1,100	132	408	1.30	1.50
February	50,110	5,160	287	1,728	5.50	5.93
March	38,180	3,270	245	1,232	3.92	4.52
April	26,701	3,510	54	890	2.83	3.16
May	1,276	139	20	41.2	.131	.15
June	1,017	139	13	33.9	.106	.12
July	1,818	231	10	58.6	.187	.22
August	1,547	339	11	49.9	.159	.18
September	2,041	465	10	68.0	.217	.24
Water year 1947-48	149,926	5,160	10	410	1.31	17.76

Peak discharge (base, 3,000 sec.-ft.).- Feb. 11 (1 a.m.) 5,480 sec.-ft.; Mar. 6 (1 p.m.) 3,350 sec.-ft.; Apr. 14 (1 p.m.) 3,670 sec.-ft.

Yockanookany River near Ofahoma, Miss.
(Formerly published as Yokahockany River)

Location.- Wire-weight gage, lat. 32°42', long. 89°40', in NE¼NW¼ sec. 22, T. 10 N., R. 6 E. Choctaw meridian, at bridge on State Highway 16, 1½ miles southeast of Ofahoma, 3 miles upstream from mouth, and 8½ miles southwest of Carthage. Datum of gage is 310.78 feet above mean sea level (levels by Corps of Engineers).

Drainage area.- 484 square miles (authority, Corps of Engineers).

Records available.- October 1943 to September 1948 (prior to October 1947 published as Yokahockany River).

Extremes.- Maximum discharge observed, during year, 7,100 second-feet Feb. 15 (gage height, 17.40 feet); minimum observed, 6 second-feet Oct. 5 (gage height, 3.08 feet).

1943-48: Maximum discharge observed, 10,700 second-feet Feb. 28, Mar. 29, 31, 1944; maximum gage height observed, 18.41 feet Feb. 13, 1946; minimum discharge observed, that of Oct. 5, 1947; minimum gage height observed, 3.00 feet Oct. 11, 12, 1943.

Remarks.- Records fair except those for periods of no gage height record, which are poor. Gage read once daily.

Cooperation.- Base data collected by Corps of Engineers; occasional discharge measurements made and records of discharge computed by Geological Survey.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 12-23, May 28 to June 21, July 15 to Sept. 30)

3.2	7	6.1	230	14.0	2,440
3.6	12	6.9	356	14.8	3,090
3.9	20	8.1	596	15.6	4,040
4.3	37	10.0	1,030	16.4	5,200
4.7	63	12.0	1,530	17.0	6,250
5.3	126	13.0	1,880		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	30	114	189	1,300	684	1,480	92	42	30	108	26
2	14	42	103	274	1,320	1,600	1,280	92	42	a29	72	28
3	15	48	97	244	1,250	2,730	1,130	87	39	a27	48	34
4	7	55	97	553	1,110	3,190	596	51	28	a26	45	37
5	6	87	77	845	962	3,910	392	48	28	a26	48	92
6	13	77	92	914	776	5,040	392	82	27	a25	26	67
7	13	63	92	730	707	5,880	574	77	24	25	34	202
8	14	67	132	532	1,200	5,700	618	82	30	23	32	176
9	15	87	202	244	2,440	4,740	868	108	34	25	22	163
10	14	144	374	230	4,040	3,650	730	108	30	23	97	97
11	15	216	411	163	5,040	2,900	730	97	30	23	163	103
12	16	274	450	189	5,700	2,370	845	87	26	25	176	51
13	16	290	470	202	6,640	1,720	1,970	51	42	34	290	37
14	16	306	511	216	6,860	1,110	5,040	51	39	26	290	45
15	16	274	532	230	6,860	707	5,360	67	39	14	163	42
16	16	244	707	290	5,530	684	4,890	55	32	24	132	42
17	16	618	891	450	5,360	684	4,040	48	25	92	132	42
18	16	553	868	450	5,200	553	2,900	55	21	103	126	45
19	16	374	1,060	356	4,450	553	2,370	51	21	48	108	45
20	16	374	1,250	244	3,300	596	1,720	45	45	97	82	45
21	16	374	1,280	274	2,580	1,030	1,250	45	103	138	67	37
22	16	339	1,110	339	1,980	1,280	753	37	138	144	51	37
23	16	189	454	374	1,450	1,280	450	34	82	108	39	34
24	16	176	274	374	1,180	1,080	290	30	55	67	42	28
25	11	144	306	450	1,130	1,010	216	45	55	39	39	27
26	11	138	230	490	1,030	868	176	48	45	42	37	28
27	16	202	189	574	914	1,060	163	51	45	51	32	30
28	24	138	189	776	799	1,060	144	42	37	374	30	39
29	24	126	163	753	662	1,060	132	42	26	306	26	67
30	34	144	163	730	-	1,300	97	39	a28	216	24	103
31	32	-	156	1,030	-	1,500	-	39	-	163	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	498	34	6	16.1	0.033	0.04
November	6,193	618	30	206	.426	.48
December	13,044	1,280	92	421	.870	1.00
Calendar year 1947	243,563	6,640	6	667	1.38	18.73
January	13,709	1,030	163	442	.913	1.05
February	81,770	6,860	662	2,820	5.83	6.28
March	61,529	5,880	553	1,985	4.10	4.73
April	41,596	5,360	97	1,387	2.87	3.20
May	1,886	108	30	60.8	.126	.14
June	1,258	138	21	41.9	.087	.10
July	2,393	374	14	77.2	.160	.18
August	2,603	290	22	84.0	.174	.20
September	1,849	202	26	61.6	.127	.14
Water year 1947-48	228,328	6,860	6	625	1.29	17.54

a No gage-height record; discharge computed on basis of records for station near Kosciusko.

Strong River at Dlo, Miss.

Location.- Water-stage recorder, lat. 31°58'45", long. 89°54'05", in SW¼ sec. 28, T. 2 N., R. 4 E. Choctaw meridian, at bridge on U. S. Highway 49, 460 feet upstream from Gulf & Ship Island Railroad bridge, a quarter of a mile south of Dlo, 1,500 feet downstream from Sellers Creek, 1.6 miles upstream from Dobbs Creek, and 2 miles northwest of Mendenhall. Datum of gage is 257.99 feet above mean sea level (Corps of Engineers benchmark).

Drainage area.- 429 square miles.

Records available.- August 1928 to September 1948.

Average discharge.- 19 years (1928-29, 1930-48), 551 second-feet.

Extremes.- Maximum discharge during year, 7,720 second-feet Mar. 7 (gage height, 23.85 feet); minimum, 25 second-feet July 8; minimum gage height, 2.47 feet July 28, Aug. 7.
1928-48: Maximum discharge, 22,900 second-feet Mar. 7, 1935 (gage height, 28.0 feet, from floodmarks, site and datum then in use), from rating curve extended above 13,400 second-feet; minimum, 16 second-feet Aug. 8, 9, 1933 (gage height, 2.25 feet, site and datum then in use).

Remarks.- Records good.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	46	50	308	1,900	459	354	98	69	66	61	29
2	37	44	47	534	1,440	1,780	310	93	59	71	74	30
3	36	44	49	390	768	4,040	293	87	54	68	48	33
4	37	42	46	345	469	4,990	259	98	51	49	44	129
5	38	44	50	243	568	4,690	235	110	49	40	41	480
6	37	41	83	175	795	6,240	227	133	48	36	33	439
7	36	65	211	144	963	7,600	227	140	48	35	30	284
8	35	56	204	124	1,740	6,390	211	130	46	30	42	145
9	36	53	235	115	3,280	4,330	186	122	46	38	108	86
10	35	60	429	107	3,960	3,430	169	101	48	44	288	65
11	34	150	490	98	3,500	1,940	206	89	45	40	523	60
12	34	122	372	93	2,790	934	178	84	44	35	409	49
13	34	77	363	466	2,530	664	1,020	78	44	35	243	60
14	33	94	354	454	2,830	534	3,350	75	43	38	137	119
15	33	259	1,260	243	2,360	480	3,540	72	44	40	100	130
16	33	181	2,160	196	1,590	439	2,660	70	44	61	102	105
17	32	101	1,410	181	963	439	2,130	70	41	43	106	89
18	32	97	963	175	591	400	1,110	68	46	91	114	69
19	34	81	512	168	469	372	390	63	48	104	118	54
20	35	69	284	163	400	336	293	62	44	70	81	48
21	37	63	211	188	602	318	235	60	49	53	61	42
22	38	64	174	235	2,130	575	200	59	54	40	50	40
23	37	81	151	293	1,970	2,130	174	55	50	32	43	38
24	36	93	133	363	1,410	1,710	152	54	42	29	39	37
25	35	87	122	363	1,170	1,110	144	59	38	43	37	34
26	39	73	111	381	963	615	168	75	37	58	35	34
27	38	65	101	930	741	694	178	122	38	37	34	35
28	37	59	100	2,100	591	1,290	150	136	36	30	33	51
29	34	54	91	1,530	469	1,050	124	97	37	305	32	83
30	34	52	89	2,060	-	689	107	84	55	98	31	66
31	36	-	95	2,630	-	419	-	77	-	74	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	1,096	39	32	35.4	0.083	0.10
November	2,417	259	41	80.6	.188	.21
December	10,950	2,160	46	353	.823	.95
Calendar year 1947	248,665	10,800	29	681	1.59	21.57
January	15,795	2,630	93	510	1.19	1.37
February	43,952	3,960	400	1,516	3.53	3.81
March	61,087	7,600	318	1,971	4.59	5.30
April	18,980	3,540	107	633	1.48	1.65
May	2,721	140	54	87.8	.205	.24
June	1,397	69	36	46.6	.109	.12
July	1,833	305	30	59.1	.138	.16
August	3,128	523	30	101	.235	.27
September	2,963	480	29	98.8	.230	.26
Water year 1947-48	166,319	7,600	29	454	1.06	14.44

Peak discharge (base, 5,000 sec.-ft.).- Mar. 7 (2 p.m.) 7,720 sec.-ft.

Bogue Chitto near Tylertown, Miss.

Location.- Water-stage recorder, lat. 31°11', long. 90°17', in SE¼ sec. 34, T. 3 N., R. 9 E. Washington meridian, a quarter of a mile downstream from Fernwood, Columbia & Gulf Railroad bridge, a quarter of a mile downstream from Bars Branch, 2¼ miles downstream from Topisaw Creek, and 9 miles northwest of Tylertown.

Drainage area.- 502 square miles.

Records available.- August 1944 to September 1948.

Extremes.- Maximum discharge during year, 21,400 second-feet Mar. 4 (gage height, 23.05 feet); minimum, 270 second-feet Sept. 3 (gage height, 8.02 feet).
1944-48: Maximum discharge, that of Mar. 4, 1948: minimum, 208 second-feet Nov. 6, 1944; minimum gage height, 7.38 feet Oct. 21, 1946.

Remarks.- Records good except those for periods of no gage-height record, which are fair.

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	416	357	427	576	3,600	1,330	677	413	337	501	334	279
2	406	370	420	840	2,690	9,240	635	403	331	433	328	276
3	396	370	413	917	1,850	14,300	595	399	325	389	328	270
4	396	360	410	677	1,000	18,800	576	393	325	347	319	452
5	393	360	410	557	865	10,200	557	393	322	334	315	635
6	389	376	406	519	767	12,300	538	427	319	328	312	519
7	386	519	406	483	699	9,440	538	483	315	325	309	403
8	380	483	519	483	677	5,900	519	458	319	328	a310	331
9	376	501	677	461	1,290	3,900	501	416	319	325	a400	319
10	370	465	2,740	458	2,090	3,140	483	396	347	a330	a800	360
11	366	465	3,600	444	2,090	2,420	483	386	461	a340	a450	363
12	363	501	2,870	440	2,170	1,930	465	380	403	a450	a400	341
13	360	538	2,870	576	2,490	1,240	557	380	350	a400	a350	344
14	357	519	2,600	677	5,600	972	1,210	a370	328	a380	a330	483
15	357	1,300	3,900	656	4,000	865	1,340	a360	328	370	a320	538
16	353	2,170	5,400	557	2,420	840	1,270	a350	322	370	309	461
17	347	1,850	3,700	519	1,690	917	815	a350	322	576	312	383
18	344	1,730	2,870	519	1,000	791	595	347	370	595	306	337
19	341	840	2,170	501	840	744	538	344	353	501	303	315
20	350	615	1,030	501	744	699	501	337	322	420	300	306
21	350	557	791	538	721	656	483	331	319	370	291	300
22	363	519	699	615	1,120	656	465	331	322	353	a290	291
23	363	557	635	721	1,240	865	454	325	334	a350	a285	297
24	363	615	595	840	1,150	1,340	437	325	347	a350	a285	306
25	357	699	557	1,000	1,000	944	430	325	331	a340	282	309
26	353	635	519	944	1,120	721	538	325	325	a340	303	297
27	353	538	501	1,600	1,060	1,340	557	373	322	341	300	282
28	347	501	483	6,180	840	1,450	501	437	319	337	297	282
29	341	458	465	5,300	721	1,490	454	410	319	347	294	282
30	337	437	465	4,500	-	917	427	368	347	341	288	282
31	344	-	465	5,400	-	744	-	347	-	347	285	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	11,317	416	337	365	0.727	0.84
November	20,205	2,170	357	674	1.34	1.50
December	44,013	5,400	406	1,420	2.83	3.26
Calendar year 1947	438,780	17,500	300	1,202	2.39	32.51
January	38,999	6,180	440	1,258	2.51	2.89
February	47,344	5,600	677	1,633	3.25	3.51
March	111,091	18,800	656	3,584	7.14	8.23
April	18,139	1,340	427	605	1.21	1.34
May	11,680	483	325	377	.751	.87
June	10,103	461	315	337	.671	.75
July	11,858	595	325	383	.763	.88
August	10,335	800	282	333	.663	.77
September	10,643	635	270	355	.707	.79
Water year 1947-48	345,727	18,800	285	945	1.88	25.63

Peak discharge (base, 6,000 sec.-ft.).- Jan. 28 (10 p.m.) 7,220 sec.-ft.; Feb. 14 (8 p.m.) 8,000 sec.-ft.; Mar. 4 (10 a.m.) 21,400 sec.-ft.; Mar. 6 (9:30 p.m.) 13,800 sec.-ft.

a No gage-height record; discharge computed on basis of weather records and records for other stations in vicinity.

Bogue Chitto at Franklinton, La.

Location.- Water-stage recorder, lat. 30°50'35", long. 90°09'45", in SE¼SE¼ sec. 26, T. 2 S., R. 10 E., at bridge on State Highway 35, three-quarters of a mile west of Franklinton and 3½ miles upstream from Lawrence Creek. Datum of gage is 124.81 feet above mean sea level, datum of 1929, supplementary adjustment of 1941.

Drainage area.- 985 square miles.

Records available.- October 1938 to September 1948. August 1928 to September 1931 at site a quarter of a mile downstream. Gage-height records collected at sites in this vicinity since 1922 are contained in reports of U. S. Weather Bureau.

Average discharge.- 13 years, 1,646 second-feet.

Extremes.- Maximum discharge during year, 23,100 second-feet Mar. 6 (gage height, 15.01 feet); minimum, 678 second-feet Sept. 28-30; minimum gage height, 0.54 foot Aug. 24, 25.

1928-31, 1938-48: Maximum discharge, 50,000 second-feet Mar. 21, 1943 (gage height, 18.46 feet); minimum, 350 second-feet Nov. 6-8, 1938; minimum gage height, 0.23 foot Oct. 30, 1940.

Maximum stage known, 27.6 feet, former site and datum, or 28.5 feet, former site and present datum, from floodmark, sometime in April 1900.

Remarks.- Records good.

Rating tables, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 10 to Sept. 4)

Oct. 1 to Dec. 16

0.7	795	4.0	3,150	8.0	7,490
1.3	1,100	5.0	4,120	9.0	8,890
2.0	1,500	6.0	5,200	10.0	10,600
3.0	2,290	7.0	6,300		

Note.- Same as following table above 10.0 feet.

Dec. 17 to Sept. 30

0.6	655	6.0	5,010	12.0	14,500
1.0	840	8.0	7,440	13.0	16,600
2.0	1,400	9.0	8,870	14.0	19,200
3.0	2,100	10.0	10,600	15.0	23,100
4.0	2,960	11.0	12,500		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	990	940	1,070	1,220	7,180	1,530	1,760	965	790	865	1,100	768
2	965	890	1,040	1,360	5,470	4,280	1,590	940	790	990	840	790
3	940	890	1,020	1,590	4,140	13,300	1,460	915	768	890	790	768
4	940	865	1,020	1,530	2,780	20,200	1,360	990	745	840	840	1,700
5	915	865	990	1,340	2,180	20,600	1,340	940	745	815	815	2,860
6	915	840	990	1,220	1,950	22,200	1,340	1,070	745	790	790	1,660
7	890	1,040	990	1,130	1,760	18,600	1,280	1,180	745	768	790	1,130
8	890	1,360	1,200	1,100	1,660	15,200	1,240	1,070	722	915	790	915
9	890	1,100	2,250	1,040	2,260	9,530	1,180	990	790	840	840	815
10	890	1,040	11,300	1,040	3,140	6,550	1,160	940	940	1,070	965	790
11	865	1,980	7,900	1,040	3,520	5,120	1,130	890	890	965	1,070	815
12	865	1,740	7,490	1,020	3,520	4,140	1,100	890	890	1,100	1,160	815
13	865	1,400	6,760	1,160	3,720	3,330	1,130	865	815	1,240	965	840
14	840	1,300	6,550	1,300	5,470	2,520	2,160	865	768	1,020	865	1,130
15	840	2,490	7,420	1,340	6,900	2,190	2,860	840	768	890	815	1,520
16	840	3,150	9,210	1,240	5,420	2,020	2,520	840	768	865	815	1,280
17	840	3,240	8,260	1,160	3,920	2,600	2,180	840	768	1,020	840	1,020
18	818	2,880	6,140	1,130	2,780	2,340	1,590	840	768	1,130	815	890
19	818	2,450	4,680	1,110	2,100	2,100	1,300	815	815	1,100	790	815
20	840	1,640	3,330	1,100	1,840	1,880	1,180	790	790	990	768	768
21	940	1,470	2,260	1,180	1,730	1,700	1,130	790	745	890	768	722
22	915	1,440	1,880	1,220	2,520	1,620	1,070	790	722	840	745	722
23	915	1,640	1,700	1,400	2,520	1,700	1,020	768	722	790	745	700
24	940	1,820	1,520	1,660	2,430	1,950	990	768	768	790	745	745
25	890	1,700	1,400	1,700	2,260	2,100	990	768	745	790	745	722
26	865	1,600	1,300	1,800	2,100	1,760	1,180	768	790	790	745	700
27	890	1,440	1,280	2,010	2,180	3,960	1,430	790	745	865	768	700
28	865	1,270	1,220	4,640	1,950	4,030	1,240	1,020	745	840	768	678
29	840	1,180	1,180	6,920	1,700	2,960	1,100	1,070	768	840	745	678
30	818	1,130	1,180	7,700	-	2,520	990	940	790	840	745	678
31	840	-	1,160	7,570	-	1,950	-	840	-	1,020	745	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	27,374	990	818	883	0.896	1.03
November	46,790	3,240	840	1,560	1.58	1.77
December	105,690	11,300	990	3,409	3.46	3.99
Calendar year 1947	907,990	21,000	750	2,488	2.53	34.38
January	61,960	7,700	1,020	1,999	2.03	2.34
February	91,000	7,180	1,660	3,138	3.19	3.44
March	186,470	22,200	1,530	6,015	6.11	7.04
April	42,000	2,860	990	1,400	1.42	1.59
May	27,787	1,180	768	896	.910	1.05
June	23,360	940	722	779	.791	.88
July	28,398	1,240	768	916	.930	1.07
August	25,727	1,160	745	830	.843	.97
September	29,134	2,860	678	971	.986	1.10
Water year 1947-48	695,690	22,200	678	1,901	1.93	26.27

Peak discharge (base, 7,000 sec.-ft.).- Dec. 10 (12 m.) 13,100 sec.-ft.; Dec. 16 (6 a.m.) 9,370 sec.-ft.; Jan. 30 (10 a.m.) 7,840 sec.-ft.; Mar. 6 (2 p.m.) 23,100 sec.-ft.

Bogue Chitto near Bush, La.

Location.- Wire-weight gage, lat. 30°37'45", long. 89°53'50", in T. 5 S., R. 13 E., at bridge on State Highway 7, 0.2 mile downstream from Gulf, Mobile & Ohio Railroad bridge and 1.4 miles north of Bush. Datum of gage is 44.25 feet above mean sea level, datum of 1929, supplementary adjustment of 1941 (levels by Corps of Engineers).

Drainage area.- 1,210 square miles (authority, Corps of Engineers).

Records available.- October 1937 to September 1948.

Average discharge.- 11 years, 1,963 second-feet.

Extremes.- Maximum discharge during year, 33,900 second-feet Mar. 6 (gage height, 14.19 feet); minimum, 768 second-feet Aug. 31, Sept. 1; minimum gage height, 2.30 feet Sept. 1.

1937-48: Maximum discharge, 51,200 second-feet Mar. 23, 1943 (gage height, 15.9 feet), from rating curve extended above 20,000 second-feet on basis of records for station at Franklinton; minimum, 460 second-feet Oct. 1, 1937; minimum gage height, 0.7 foot Oct. 1, 1937, Oct. 29-31, 1940, Oct. 22-27, 1941.

Remarks.- Records good. Gage read twice daily. Gage-height record Oct. 1 to June 30 and 3 discharge measurements furnished by Corps of Engineers.

Rating table, water year 1947-48 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 12-25, Mar. 30 to June 24)

2.3	768	8.0	3,510	11.0	11,400
2.5	820	8.5	4,100	11.5	14,100
3.0	955	9.0	4,840	12.0	17,300
4.5	1,380	9.5	5,750	13.0	24,700
6.0	1,990	10.0	7,000	14.0	32,300
7.0	2,550	10.5	8,810		

Discharge, in second-feet, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,170	928	1,380	1,600	8,810	2,250	2,550	1,170	1,010	982	1,060	768
2	1,120	1,040	1,320	1,640	8,000	2,420	2,250	1,120	955	1,060	1,170	794
3	1,090	1,010	1,290	1,770	7,000	4,670	1,990	1,090	901	1,090	982	982
4	1,060	955	1,260	1,900	5,550	12,500	1,770	1,060	901	1,010	1,010	1,850
5	1,040	1,010	1,230	1,810	4,100	22,500	1,680	1,170	874	955	1,010	3,290
6	1,010	1,060	1,200	1,640	2,990	32,300	1,680	1,170	874	901	901	3,620
7	1,010	1,170	1,200	1,560	2,550	29,200	1,720	1,410	874	901	955	2,420
8	982	1,350	1,230	1,480	2,250	22,500	1,640	1,440	874	955	1,090	1,640
9	955	1,770	1,480	1,410	2,360	17,300	1,520	1,290	901	1,150	1,260	1,230
10	955	1,480	2,890	1,380	3,190	12,500	1,440	1,150	1,090	1,200	1,230	1,040
11	955	2,030	9,770	1,380	3,290	8,810	1,410	1,060	1,200	1,560	1,260	1,060
12	928	3,510	13,600	1,350	4,100	6,440	1,350	1,040	1,120	1,480	1,260	1,150
13	928	3,060	10,200	1,410	4,680	5,360	1,350	1,010	1,060	1,440	1,200	1,290
14	901	2,090	7,640	1,520	4,680	4,230	1,810	982	982	1,380	1,010	1,480
15	901	2,300	8,390	1,600	5,010	3,190	2,550	982	928	1,170	928	2,190
16	901	3,970	9,740	1,600	6,190	2,620	2,890	982	928	1,010	901	2,420
17	874	4,370	10,200	1,560	6,440	2,360	2,550	982	1,010	982	847	1,900
18	874	4,100	10,200	1,520	5,180	2,700	2,250	982	982	1,060	847	1,440
19	874	3,970	8,000	1,480	3,730	2,550	1,860	982	928	1,150	847	1,200
20	901	3,290	6,190	1,440	2,790	2,250	1,600	955	955	1,150	847	1,090
21	955	2,480	4,840	1,560	2,620	2,140	1,440	928	928	1,060	820	1,040
22	1,040	2,360	3,400	1,640	2,890	2,040	1,380	928	901	955	794	982
23	1,010	2,360	2,620	1,720	3,190	2,040	1,290	928	874	901	794	955
24	1,010	2,550	2,360	1,810	3,620	2,140	1,230	928	874	847	794	901
25	982	2,890	2,140	2,090	3,510	2,360	1,230	928	874	847	794	928
26	982	2,550	1,950	2,140	2,700	2,480	1,260	901	874	874	794	928
27	982	2,140	1,810	2,140	2,550	2,790	1,410	928	874	901	794	901
28	955	1,860	1,720	2,700	2,550	4,230	1,520	982	847	955	794	874
29	928	1,640	1,680	4,100	2,360	5,010	1,380	1,120	874	982	794	874
30	901	1,520	1,640	6,190	-	3,190	1,260	1,200	982	955	794	847
31	874	-	1,640	8,390	-	3,100	-	1,090	-	955	768	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
October	30,048	1,170	874	969	0.801	0.92
November	66,813	4,370	928	2,227	1.84	2.05
December	134,210	13,600	1,200	4,329	3.58	4.13
Calendar year 1947	1,099,157	21,800	794	3,011	2.49	33.77
January	65,530	8,390	1,350	2,114	1.75	2.01
February	118,880	8,810	2,250	4,099	3.39	3.65
March	230,170	32,300	2,040	7,425	6.14	7.07
April	51,260	2,890	1,230	1,709	1.41	1.58
May	32,888	1,440	901	1,061	.877	1.01
June	28,249	1,200	847	942	.779	.87
July	32,818	1,560	847	1,059	.875	1.01
August	29,349	1,260	768	947	.783	.90
September	42,084	3,620	768	1,403	1.16	1.29
Water year 1947-48	862,299	32,300	768	2,356	1.95	26.49

Peak discharge (base, 8,000 sec.-ft.).- Dec. 12 (1 a.m.) 14,700 sec.-ft.; Dec. 17 (7 p.m.) 11,400 sec.-ft.; Jan. 31 (8 p.m.) 8,810 sec.-ft.; Mar. 6 (2:30 p.m.) 33,900 sec.-ft.

Measurements of stream flow in the south Atlantic slope and eastern Gulf of Mexico basins made at points other than gaging stations are given in the following table:

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948

James River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 7	Muddy Run Spring....	Muddy Run........	3.8 miles north of Warm Springs, Va. and 2.4 miles above mouth of Muddy Run.	3.16
Nov. 4	....do.............	....do..........	....do.............................	8.77
Dec. 9	....do.............	....do..........	....do.............................	4.48
Jan. 6	....do.............	....do..........	....do.............................	4.27
Feb. 3	....do.............	....do..........	....do.............................	3.32
Apr. 8	....do.............	....do..........	....do.............................	9.40
May 18	....do.............	....do..........	....do.............................	6.84
June 15	....do.............	....do..........	....do.............................	5.33
July 20	....do.............	....do..........	....do.............................	4.03
Aug. 18	....do.............	....do..........	....do.............................	4.55
Sept. 7	....do.............	....do..........	....do.............................	5.03
May 26	Gunns Run..........	Queens Creek.....	Highway 5, about 1 mile west of Charles City, Va. Drainage area, 7.9 square miles.	**1,240
26	Unnamed stream......	Glebe Creek......	Highway 155, about 5.5 miles south of Providence Forge, Va. Drainage area, 0.7 square mile.	††b555
26	Collins Run.........	Chickahominy River.	Highway 155, 3 miles south of Providence Forge, Va. Drainage area, 2.5 square miles.	**1,630
26	Unnamed stream......	....do..........	C. & O. Ry., 0.3 mile east of Providence Forge, Va. Drainage area, 1.1 square miles.	**335
26	....do.............	....do..........	C. & O. Ry., 0.5 mile east of Windsor Shades, Va. Drainage area, 0.14 square mile.	**46
26	....do.............	Lacey Creek......	C. & O. Ry., 0.9 mile east of Windsor Shades, Va. Drainage area, 1.3 square miles.	**413
26	....do.............	....do..........	C. & O. Ry., 1.2 miles east of Windsor Shades, Va. Drainage area, 0.9 square mile.	**330

** Computation of flow by contracted-opening method.
†† Computation of flow by contracted-opening method and flow over road.

Roanoke River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Nov. 6	Big Spring..........	South Fork Roanoke River.	At Elliston, Va......................	4.89
5	North Fork Roanoke River.	Roanoke River....	0.4 mile southwest of Bennetts Mill and 4.3 miles northeast of Blacksburg, Va.	101
5	....do.............	....do..........	100 feet east of State Highway 723 and 2.7 miles east of Blacksburg, Va.	125
6	W. K. Grubb Spring..	North Fork Roanoke River.	On State Highway 114, 7 miles northeast of Blacksburg, Va.	3.42
6	Frank Slusser Spring	....do..........	On State Highway 114, 0.6 mile east of Bennetts Mill and 6.2 miles northeast of Blacksburg, Va.	1.07
6	C. W. Wright Springs	....do..........	1.6 miles northwest of Bennetts Mill and 4.8 miles northeast of Blacksburg, Va.	11.8
6	J. W. Slusser Spring	....do..........	On State Highway 114, 3.6 miles northeast of Blacksburg, Va.	1.09

Neuse River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Nov. 7	Crabtree Creek......	Neuse River......	Lat. 35°46', long. 78°33', at bridge on U. S. Highway 64, near Raleigh, N. C.	98.6
Feb. 29	....do.............	....do..........	....do.............................	138
Mar. 20	....do.............	....do..........	....do.............................	118
Apr. 1	....do.............	....do..........	....do.............................	1,090
2	....do.............	....do..........	....do.............................	348
3	....do.............	....do..........	....do.............................	205
July 1	Mill Creek..........	....do..........	Lat. 35°15', long. 77°53', in Cliffs of Neuse State Park near Seven Springs, N. C.	1.20

Cape Fear River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Aug. 31	Lower Little River..	Cape Fear River..	Lat. 35°15', long. 79°18', above Mill Creek, at Vass, N. C.	8.92

Pee Dee River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Sept.13	Yadkin River........	Atlantic Ocean...	Lat. 36°14', long. 80°51', at U. S. Highway 21 at Elkin, N. C.	885
10	....do.............	....do..........	Lat. 36°13'30", long. 80°26'30", at bridge on Highway 67, near site of former gaging station, near Donnaha, N. C.	2,000
14	Roaring River.......	Yadkin River.....	Lat. 36°12'30", long. 81°01'00", at Southern Ry., bridge at Roaring River, N. C.	91.9
14	Arrarat River.......	....do..........	Lat. 36°18', long. 80°32', about 1.3 miles above Southern Ry., near Siloam, N. C.	199

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Pee Dee River Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Sept. 9	Muddy Creek.........	Yadkin River.....	Lat. 35°56'30", long. 80°21'30", at county road about 1.3 miles above mouth, near Arcadia, N. C.	112
9	Salem Creek.........	Muddy Creek......	Lat. 36°02', long. 80°19', at county road about 2.6 miles above mouth, near Winston-Salem, N. C.	40.8
Mar. 29	Fourth Creek........	Yadkin River.....	Lat. 35°47'30", long. 80°36'00", at county road half a mile above Third Creek near Woodleaf, N. C.	34.3
May 19	....do.............	....do..........	....do.............................	51.2
Mar. 29	Third Creek.........	Fourth Creek.....	Lat. 35°46'00", long. 80°37'30", at county road about 2.5 miles above mouth, near Woodleaf, N. C.	52.8
May 19	....do.............	....do..........	....do.............................	76.2
Mar. 29	Second Creek........	Yadkin River.....	Lat. 35°45'30", long. 80°30'30", at U. S. Highway 601, about 1.3 miles above mouth and about 2.5 miles north of Franklin, N. C.	80.6
July 20	....do.............	....do..........	....do.............................	62.0
Aug. 20	....do.............	....do..........	....do.............................	174
Sept. 1	....do.............	....do..........	....do.............................	64.7
Mar. 29	Grants Creek........	....do..........	Lat. 35°42'30", long. 80°26'00", about 1.3 miles above mouth at Spencer, N. C.	109
May 19	....do.............	....do..........	....do.............................	55.1
July 21	....do.............	....do..........	....do.............................	23.0
May 20	Swearing Creek......	....do..........	Lat. 35°45'30", long. 80°18'30", at county road at Linwood, N. C.	14.0
June 28	....do.............	....do..........	....do.............................	11.1
May 19	Town Creek..........	....do..........	Lat. 35°41', long. 80°24', about 0.9 mile above Crane Creek, near Spencer, N. C.	10.7
July 20	....do.............	....do..........	....do.............................	6.31
Aug. 3	....do.............	....do..........	....do.............................	13.4
5	....do.............	....do..........	....do.............................	65.6
May 20	Rich Creek..........	Abbotts Creek....	Lat. 35°51'30", long. 80°11'00", at U. S. Highway 70, about 4.5 miles northeast of Lexington, N. C.	9.26
June 28	....do.............	....do..........	....do.............................	3.37
May 20	Hambys Creek........	Rich Creek.......	Lat. 35°50'30", long. 80°08'30", at county road about 2.8 miles above mouth, near Thomasville, N. C.	3.23
June 28	....do.............	....do..........	....do.............................	2.01
Aug. 3	....do.............	....do..........	....do.............................	7.33
5	....do.............	....do..........	....do.............................	27.5
Apr. 13	Rocky River.........	Pee Dee River....	Lat. 35°26'30", long. 81°45'00", at Highway 73, about 7 miles west of Kannapolis, N. C.	39.4
27	....do.............	....do..........	....do.............................	25.2
13	....do.............	....do..........	Lat. 35°18'30", long. 81°28'30", at county road about 0.8 mile above Dutch Buffalo Creek and about 8 miles southeast of Concord, N. C.	498
26	....do.............	....do..........	....do.............................	198
13	Irish Buffalo Creek.	Rocky River......	Lat. 35°20'30", long. 81°33'00", at county road about a mile above Cold Water Creek and about 4 miles south-southeast of Concord, N. C.	53.0
27	....do.............	....do..........	....do.............................	31.7
13	Dutch Buffalo Creek.	....do..........	Lat. 35°20', long. 81°27', at county road about 2.4 miles above mouth, about 4 miles below old gaging station, and about 4 miles south of Mt. Pleasant, N. C.	80.0
26	....do.............	....do..........	....do.............................	33.4
14	Long Creek..........	....do..........	Lat. 35°16'00", long. 80°15'30", at county road about half a mile above Bear Creek and about 3.3 miles northwest of Aquadale, N. C.	75.5
27	....do.............	....do..........	....do.............................	23.1
14	Richardson Creek....	....do..........	Lat. 35°09'30", long. 80°14'00", at county road about half a mile above mouth and about 3.8 miles southwest of Cottonville, N. C.	148
27	....do.............	....do..........	....do.............................	35.3
Oct. 29	Thompson Creek......	Pee Dee River....	At county highway bridge, ¾ mile below Seaboard Air Line R. R. bridge, 3.5 miles southwest of Cheraw, S. C.	30.2

Santee River Basin

Dec. 2	Lyle Creek..........	Catawba River....	Lat. 35°43', long. 81°05', at Highway 10 at Catawba, N. C., 1 mile above mouth.	72.4
Feb. 5	....do.............	....do..........	....do.............................	153
Apr. 9	....do.............	....do..........	....do.............................	124
Aug. 18	....do.............	....do..........	....do.............................	51.2
Nov. 7	Bullock Creek.......	Broad River......	At bridge on State Highway 5, near Sharon, S. C.	75.9
Dec. 18	Little River........	Santee River.....	Just below Lake Marion Dam, near Pineville, S. C.	48.8

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
		Santee River Basin--Continued		
May 13	Little River.........	Santee River......	Just below Lake Marion Dam, near Pineville, S. C.	47.3
Aug. 25	....do...	....do...........	....do........................	37.4
		Cooper River Basin		
Apr. 21	Lake Moultrie tail-race.	West Branch Cooper River.	1,000 feet below Pinopolis power plant, near Moncks Corner, S. C.	28,500
		Savannah River Basin		
Oct. 7	Jerry Creek..........	Chauga River......	At bridge on State Highway 28, 6 miles northwest of Walhalla, S. C.	2.75
7	Town Creek...........	Twelvemile Creek..	600 feet above bridge on State Highway 183, at Pickens, S. C.	6.16
6	Eighteenmile Creek...	Seneca River......	At bridge on U. S. Highway 76, at Pendleton, S. C.	18.9
6	Twentysix Mile Creek.	....do...........	At bridge on U. S. Highway 178, 4.8 miles northwest of Anderson, S. C.	13.5
6	Rocky River..........	Savannah River....	150 feet above waterworks intake, and 2.7 miles northeast of Anderson, S. C.	12.9
6	Bailey Creek.........	Rocky River.......	At county highway bridge, 2 miles northeast of Anderson, S. C.	1.79
8	North Fork Broad River.	Broad River.......	Lat. 34°19', long. 83°11', 4½ miles southeast of Carnesville, Ga.	74.4
		Ogeechee River Basin		
Sept.15	Ogeechee River.......	Atlantic Ocean....	At crossing of State Highway 102, 1½ miles northwest of Agricola, Ga.	87.4
Aug. 6	....do...............	....do..	At crossing of State Highway 119, 5 miles west of Guyton, Ga.	1,380
Sept.24	....do...............	....do...........	....do........................	1,640
		Altamaha River Basin		
July 13	Ohoopee River........	Altamahe River....	At crossing of State Highway 178 between State Prison Farm and Glenville, Ga.	308
15	....do...............	....do...........	....do........................	408
Aug. 5	....do...............	....do.	....do........................	383
		St. Johns River Basin		
Jan. 6	Weir Lake outlet.....	Oklawaha River....	At Oklawaha, Fla.................	8.10
Feb. 4	....do....	....do...........	....do........................	11.9
Mar. 1	....do...............	....do...........	....do........................	7.08
Apr. 2	....do...............	....do...........	....do........................	9.94
July 30	....do...............	....do...........	....do........................	4.47
Aug. 31	....do...............	....do...........	....do........................	8.48
Sept.30	....do...............	....do...........	....do........................	4.14
Oct. 30	Prairie Creek........	Camps Canal.......	At crossing of State Highway 20, near Gainesville, Fla.	610
Dec. 16	....do...............	....do...........	....do........................	139
Jan. 27	....do...............	....do...........	....do........................	272
Mar. 10	....do...............	....do...........	....do........................	402
15	....do...............	....do...........	....do........................	812
Apr. 20	....do...............	....do...........	....do........................	202
Mar. 11	Hatchet Creek........	Newnans Lake......	At crossing of State Highway 26, near Orange Heights, Fla.	2,000
11	Little Hatchet Creek.	....do...........	....do........................	796
11	Unnamed stream.......	....do...........	First channel southwest of Little Hatchet Creek at crossing of State Highway 26, near Gainesville, Fla.	215
11	....do...............	....do...........	At crossing of State Highway 26, 4.3 miles east of Gainesville, Fla.	81.5
11	Lochloosa Creek......	Lochloosa Lake....	At crossing of U. S. Highway 301, near Orange Heights, Fla.	110
Oct. 29	Unnamed stream.......	....do...........	At crossing of road 0.5 mile northeast of Lochloosa Creek, near Hawthorne, Fla.	1.29
Jan. 26	....do...............	....do...........	....do........................	14.3
Oct. 7	Little Orange Creek..	Orange Creek......	2 miles northwest of Orange Springs, Fla.	236
Dec. 4	....do...............	....do...........	....do........................	106
Jan. 8	....do...............	....do...........	....do........................	46.2
Feb. 2	....do...............	....do...........	....do........................	146
Mar. 3	....do...............	....do...........	....do........................	65.9
31	....do...............	....do...........	....do........................	167
Apr. 27	....do...............	....do...........	....do........................	44.4
July 29	....do...............	....do...........	....do........................	44.0
Sept. 2	....do...............	....do...........	....do........................	91.9
29	....do...............	....do...........	....do........................	64.4

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Indian River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Mar. 24	North Relief Canal	Indian River	At crossing of U. S. Highway 1, 3.8 miles north of Vero Beach, Fla.	21.8
24	Main Canal	....do	At crossing of Victory Blvd., Vero Beach, Fla.	32.3
24	South Relief Canal	....do	At crossing of U. S. Highway 1, 2.5 miles south of Vero Beach, Fla.	19.7

St. Lucie River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 22	St. Lucie River	Atlantic Ocean	At crossing of U. S. Highway 1 at Stuart, Fla.	*6,980

* Average of 2 or more measurements for 1 tide cycle.

Lake Okeechobee and the Everglades

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 7	Indian Prairie Canal	Lake Okeechobee	At crossing of State Highway 70, near Brighton, Fla.	1,440
Nov. 4	....do	....do	....do	832
Dec. 18	....do	....do	....do	242
Aug. 11	....do	....do	....do	42.2
Sept. 28	....do	....do	....do	2,490
Nov. 13	Seepage ditch	....do	At west toe of Lake Okeechobee levee, Pahokee, Fla.	2.43
13	....do	....do	At west toe of Lake Okeechobee levee, 1.2 miles south of Pahokee, Fla.	3.01
13	....do	....do	At west toe of Lake Okeechobee levee, 2.7 miles south of Pahokee,	3.72
13	Richland Drainage District pump canal.	....do	Near Pahokee, Fla.	40.2
Jan. 22	....do	....do	....do	22.5
Feb. 25	....do	....do	....do	30.7
Oct. 28	Istokpoga Canal	Kissimmee River	At crossing of road at Wild Island, near Lorida, Fla.	737
Dec. 2	....do	....do	....do	512
Jan. 9	....do	....do	....do	499
Oct. 28	Istokpoga Creek	....do	....do	313
Dec. 2	....do	....do	....do	223
Jan. 9	....do	....do	....do	185
Oct. 9	Josephine Creek	Lake Istokpoga	At outlet from Josephine Lake, near De Soto City, Fla.	177
Jan. 29	....do	....do	....do	87.3
Mar. 10	....do	....do	....do	22.2
Apr. 13	....do	....do	....do	18.1
May 18	....do	....do	....do	10.5
Aug. 4	....do	....do	....do	475
Sept. 8	....do	....do	....do	196
Oct. 9	Sebring Lake south outlet.	Rex Beach Lake	3 miles northwest of Sebring, Fla.	7.87
Jan. 29	....do	....do	....do	7.71
Mar. 10	....do	....do	....do	3.82
Apr. 13	....do	....do	....do	.16
May 18	....do	....do	....do	2.48
Aug. 4	....do	....do	....do	7.08
Sept. 8	....do	....do	....do	6.81
Oct. 9	Jackson Creek	Josephine Lake	2 miles south of Sebring, Fla	78.5
Jan. 29	....do	....do	....do	26.6
Mar. 10	....do	....do	....do	10.6
Apr. 13	....do	....do	....do	9.15
May 18	....do	....do	....do	.53
Aug. 4	....do	....do	....do	86.5
Sept. 8	....do	....do	....do	75.8
Oct. 9	Placid-June Canal	Catfish Creek	At outlet at Placid Lake, 3.3 miles south of Lake Placid, Fla.	80.5
Jan. 29	....do	....do	....do	25.4
Mar. 11	....do	....do	....do	12.0
Apr. 13	....do	....do	....do	3.63
Aug. 5	....do	....do	....do	24.0
Sept. 9	....do	....do	....do	32.7
Oct. 9	Stearns Creek	Frances Lake	3.4 miles northwest of Lake Placid, Fla.	171
Jan. 29	....do	....do	....do	86.9
Mar. 10	....do	....do	....do	54.4
Apr. 13	....do	....do	....do	32.5
May 18	....do	....do	....do	21.6
Aug. 5	....do	....do	....do	52.2
Sept. 9	....do	....do	....do	92.6
Oct. 9	Annie Lake outlet	Placid Lake	0.3 mile northwest of Childs, Fla.	12.9
Jan. 30	....do	....do	....do	10.0
Mar. 10	....do	....do	....do	2.93
Apr. 14	....do	....do	....do	1.92
May 18	....do	....do	....do	2.30
Aug. 5	....do	....do	....do	7.83
Sept. 9	....do	....do	....do	8.19
Oct. 10	Placid Lake northeast outlet.	Huntley Lake	2.2 miles southeast of Lake Placid, Fla.	1.16
Jan. 30	Huntley Lake outlet.	Clay Lake	1.4 miles east of Lake Placid, Fla.	12.3
Mar. 10	....do	....do	....do	1.95
Apr. 14	....do	....do	....do	.54
Aug. 5	....do	....do	....do	11.5

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Lake Okeechobee and the Everglades--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Sept. 9	Huntley Lake outlet.	Clay Lake	1.4 miles east of Lake Placid, Fla.	18.1
9	Huntley-Clay Canal.	....do.	1.5 miles east of Lake Placid, Fla.	21.7
Oct. 10	Clay Lake outlet.	Apthorp Lake	2.1 miles northeast of Lake Placid, Fla.	24.3
Jan. 30	....do.	....do.	....do.	30.1
Mar. 10	....do.	....do.	....do.	6.13
Apr. 14	....do.	....do.	....do.	2.71
May 18	....do.	....do.	....do.	1.80
Aug. 5	....do.	....do.	....do.	17.2
Sept. 9	....do.	....do.	....do.	22.2
Oct. 10	Yellow Bluff Creek.	Josephine Creek.	1.1 miles southeast of De Soto City, Fla.	24.3
Jan. 30	....do.	....do.	....do.	18.2
Mar. 11	....do.	....do.	....do.	7.6
Apr. 14	....do.	....do.	....do.	6.4
May 18	....do.	....do.	....do.	5.1
Aug. 5	....do.	....do.	....do.	41.4
Sept. 9	....do.	....do.	....do.	31.7
Oct. 9	Letta Lake outlet.	Bonnett Lake	3.9 miles north of Sebring, Fla.	32.0
Jan. 29	....do.	....do.	....do.	11.5
Mar. 10	....do.	....do.	....do.	7.71
Apr. 13	....do.	....do.	....do.	5.40
May 18	....do.	....do.	....do.	.10
Aug. 4	....do.	....do.	....do.	16.6
Sept. 8	....do.	....do.	....do.	15.3
Oct. 9	Sebring Lake northeast outlet.	Little Red Water Lake.	3.4 miles northwest of Sebring, Fla.	11.7
Jan. 29	....do.	....do.	....do.	1.21
Mar. 10	....do.	....do.	....do.	.08
Aug. 4	....do.	....do.	....do.	44.0
Sept. 8	....do.	....do.	....do.	22.5
Oct. 9	Little Red Water Lake outlet.	Letta Lake Outlet.	3.6 miles north of Sebring, Fla.	28.0
Jan. 29	....do.	....do.	....do.	4.93
Mar. 10	....do.	....do.	....do.	1.65
Apr. 13	....do.	....do.	....do.	.55
May 18	....do.	....do.	....do.	1.04
Aug. 4	....do.	....do.	....do.	52.1
Sept. 8	....do.	....do.	....do.	26.3
Nov. 25	Caloosa-Clinch Canal	Clinch Lake	2.3 miles northwest of Frostproof, Fla.	20.6
Jan. 7	....do.	....do.	....do.	9.3
Feb. 20	....do.	....do.	....do.	17.3
Apr. 16	....do.	....do.	....do.	16.1
May 19	....do.	....do.	....do.	5.86
Aug. 19	....do.	....do.	....do.	12.5
Sept. 25	....do.	....do.	....do.	65.5
Nov. 25	Clinch Lake outlet.	Reedy Lake	At crossing of Lake Drive, Frostproof, Fla.	28.6
Jan. 7	....do.	....do.	....do.	15.4
Feb. 20	....do.	....do.	....do.	27.3
Mar. 19	....do.	....do.	....do.	7.18
Dec. 4	St. Lucie Canal	South Fork St. Lucie River.	At crossing of Arundel Road, near Stuart, Fla.	7,270
Oct. 20	Total flow east through bridge openings in State Highway A1A, including Earman River.	Intracoastal Waterway and Lake Worth.	From Jupiter to Lake Park, Fla.	666
Oct. 14	Earman River	Lake Worth	At crossing of Lake Park Road, near Lake Park, Fla.	659
21	....do.	....do.	....do.	384
20	....do.	....do.	At crossing of State Highway A1A, near Lake Park, Fla.	525
21	....do.	....do.	At crossing of U. S. Highway 1, near Lake Park, Fla.	*490
21	Total flow east through bridge openings in Military Trail, including Palm Beach Water Co. Canal.	Earman River and West Palm Beach Canal.	From Lake Park Road to Okeechobee Road, near West Palm Beach, Fla.	567
14	Palm Beach Water Co. canal.	Lake Magnonia	At crossing of Military Trail, near West Palm Beach, Fla.	619
21	....do.	....do.	....do.	322
3	West Palm Beach Canal.	Atlantic Ocean	At crossing of State Highway 7, near Loxahatchee, Fla.	1,890
10	....do.	....do.	....do.	1,970
13	....do.	....do.	....do.	1,700
18	....do.	....do.	....do.	2,030
24	....do.	....do.	....do.	2,120
Nov. 7	....do.	....do.	....do.	2,070
Dec. 9	....do.	....do.	....do.	1,610
Aug. 30	....do.	....do.	....do.	1,070
Sept. 23	....do.	....do.	....do.	1,850
28	....do.	....do.	....do.	1,930
Oct. 14	West Palm Beach Stub Canal.	West Palm Beach Canal.	At crossing of State Highway 80, West Palm Beach, Fla.	1,040
14	Equalizing Canal No. 4.	....do.	At control, near Lake Worth, Fla.	827

* Average of 2 or more measurements for 1 tide cycle.

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Lake Okeechobee and the Everglades--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 7	Clear Lake outlet....	West Palm Beach Canal.	At crossing of Okeechobee Road, West Palm Beach, Fla.	520
14	....do....	....do....	....do....	658
21	....do....	....do....	....do....	693
23	Boynton Canal....	Intracoastal Waterway.	At crossing of U. S. Highway 1, Boynton Beach, Fla.	636
29	Hillsboro Canal....	Atlantic Ocean...	2.7 miles northwest of Shawano, near Belle Glade, Fla.	505
Dec. 10	....do....	....do....	At Shawano, near Belle Glade, Fla....	429
Jan. 22	....do....	....do....	....do....	430
Feb. 9	....do....	....do....	....do....	179
Mar. 5	....do....	....do....	....do....	181
Apr. 2	....do....	....do....	....do....	148
May 4	....do....	....do....	....do....	147
June 10	....do....	....do....	....do....	198
July 24	....do....	....do....	....do....	269
Aug. 11	....do....	....do....	....do....	254
27	....do....	....do....	....do....	300
Sept.15	....do....	....do....	....do....	283
25	....do....	....do....	....do....	266
Oct. 29	....do....	....do....	Just upstream from Indian Run, near Deerfield Beach, Fla.	806
Dec. 12	....do....	....do....	....do....	918
Jan. 21	....do....	....do....	....do....	773
Mar. 4	....do....	....do....	....do....	227
Apr. 1	....do....	....do....	....do....	201
Sept.14	....do....	....do....	....do....	641
24	....do....	....do....	....do....	619
May 5	....do....	....do....	Just downstream from Indian Run, near Deerfield Beach, Fla.	173
June 11	....do....	....do....	....do....	195
July 23	....do....	....do....	....do....	316
Aug. 12	....do....	....do....	....do....	458
Oct. 14	....do....	....do....	At crossing of State Highway 7, near Deerfield Beach, Fla.	1,860
24	....do....	....do....	....do....	1,730
Nov. 5	....do....	....do....	....do....	1,510
Oct. 14	....do....	....do....	At crossing of State Highway 811, Deerfield Beach, Fla.	6,220
23	Cypress Creek....	Intracoastal Waterway.	At crossing of U. S. Highway 1, near Pompano, Fla.	†587
22	Cypress Creek Canal..	Cypress Creek....	At crossing of State Highway 7, near Pompano, Fla.	101
15	New River....	Atlantic Ocean...	At crossing of Andrews Ave., Fort Lauderdale, Fla.	*7,550
31	....do....	....do....	....do....	*7,260
Nov. 11	....do....	....do....	....do....	*4,880
19	....do....	....do....	....do....	*3,780
Dec. 19	....do....	....do....	....do....	*1,800
Oct. 16	South Fork New River (southward).	New River....	At crossing of State Highway 84, near Fort Lauderdale, Fla.	1,290
24	....do....	....do....	....do....	383
30	....do....	....do....	....do....	447
Nov. 10	....do....	....do....	....do....	196
18	....do....	....do....	....do....	405
Sept.29	North New River Canal	South Fork New River.	At Palm Beach-Broward county line, near Fort Lauderdale, Fla.	1,120
30	....do....	....do....	....do....	1,160
30	....do....	....do....	At 26-mile bend, near Fort Lauderdale, Fla.	984
Oct. 17	....do....	....do....	At crossing of State Highway 7, near Fort Lauderdale, Fla.	7,030
29	....do....	....do....	....do....	6,240
Nov. 10	....do....	....do....	....do....	4,470
18	....do....	....do....	....do....	3,670
Dec. 17	....do....	....do....	....do....	1,380
Oct. 21	Bolles Canal (west)..	North New River Canal.	At crossing of State Highway 25, Okeelanta, Fla.	262
Nov. 19	....do....	....do....	....do....	236
Oct. 21	Net flow to west through bridges and culverts in State Highway 25.	....do....	From Bolles Canal to 20-mile bend, near Fort Lauderdale, Fla.	1,020
Nov. 19	....do....	....do....	From Bolles Canal to 26-mile bend, near Fort Lauderdale, Fla.	448
Sept.27	....do....	....do....	From Palm Beach-Broward county line to 20-mile bend, near Fort Lauderdale, Fla.	185
28	....do....	....do....	....do....	188
29	....do....	....do....	....do....	214
30	....do....	....do....	....do....	148
Oct. 6	Lateral westward....	....do....	At crossing of State Highway 25 at 26-mile bend, near Fort Lauderdale, Fla.	279
16	....do....	....do....	....do....	644
31	....do....	....do....	....do....	243
21	....do....	....do....	....do....	431
Nov. 10	....do....	....do....	....do....	313
19	....do....	....do....	....do....	231
Aug. 9	....do....	....do....	....do....	27.8

* Average of 2 or more measurements for 1 tide cycle.
† Integrated mean discharge for 1 tide cycle.

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Lake Okeechobee and the Everglades--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Sept. 24	Lateral westward....	North New River Canal.	At crossing of State Highway 25 at 26-mile bend, near Fort Lauderdale, Fla.	200
27	....do..............	....do...........	....do..............................	440
28	....do..............	....do...........	....do..............................	444
29	....do..............	....do...........	....do..............................	453
30	....do..............	....do...........	....do..............................	262
Oct. 16	North Fork New River	New River........	At crossing of southwest 11th Ave., Fort Lauderdale, Fla.	1,820
31	....do..............	....do...........	....do..............................	1,330
Nov. 11	....do..............	....do...........	....do..............................	843
19	....do..............	....do...........	....do..............................	220
Oct. 14	Planation Canal.....	North Fork New River.	At crossing of State Highway 7, near Fort Lauderdale, Fla.	1,130
17	....do..............	....do...........	....do..............................	1,390
29	....do..............	....do...........	....do..............................	845
Nov. 10	....do..............	....do...........	....do..............................	403
18	....do..............	....do...........	....do..............................	315
Oct. 15	Tarpon Creek........	New River........	At crossing of U. S. Highway 1, Fort Lauderdale, Fla.	*21
16	Middle River North Fork.	....do...........	....do..............................	†1,400
16	North Fork Middle River.	Middle River.....	At crossing of State Highway 811, near Fort Lauderdale, Fla.	152
22	Total flow to east through culverts in State Highway 7.	North Fork Middle River.	Between Cypress Creek and Plantation Canals, near Fort Lauderdale, Fla.	742
Nov. 10	....do..............	....do...........	....do..............................	306
Oct. 16	South Fork Middle River.	Middle River.....	At crossing of State Highway 811, near Fort Lauderdale, Fla.	736
2	Dania Cut-off.......	Atlantic Ocean...	At footbridge at power plant, near Dania, Fla.	†1,180
15	....do..............	....do...........	At crossing of U. S. Highway 1, Dania, Fla.	†3,410
30	....do..............	....do...........	....do..............................	*3,460
Nov. 11	....do..............	....do...........	....do..............................	*2,490
19	....do..............	....do...........	....do..............................	*2,010
13	South New River Canal.	Dania Cut-off....	Just east of junction with Miami Canal, near Miami, Fla.	291
Oct. 16	....do..............	....do...........	Just west of junction with Snake Creek Canal, near Davie, Fla.	427
Nov. 4	....do..............	....do...........	....do..............................	459
15	....do..............	....do...........	....do..............................	355
Oct. 16	....do..............	....do...........	At Davie, Fla........................	1,000
Nov. 15	....do..............	....do...........	....do..............................	1,040
Oct. 2	....do..............	....do...........	At crossing of State Highway 7, near Davie, Fla.	*a964
15	....do..............	....do...........	....do..............................	2,400
24	....do..............	....do...........	....do..............................	a978
Nov. 4	....do..............	....do...........	....do..............................	2,250
10	....do..............	....do...........	....do..............................	2,000
18	....do..............	....do...........	....do..............................	1,310
4	Flamingo Canal (southward).	South New River Canal.	At junction with South New River Canal, near Davie, Fla.	118
11	....do..............	....do...........	....do..............................	127
15	....do..............	....do...........	....do..............................	126
Oct. 16	Snake Creek Canal (northward).	....do...........	....do..............................	125
Nov. 4	....do..............	....do...........	....do..............................	122
15	....do..............	....do...........	....do..............................	48
15	Lateral canals (northward).	....do...........	Between Snake Creek Canal and Davie, Fla.	229
15	Lateral canals (southward).	....do...........	Between Flamingo Canal and Davie, Fla.	490
Oct. 2	Lateral north (southward).	Dania Cut-off....	0.5 mile east of power plant, near Dania, Fla.	281
2	Power plant outlet canal.	Lateral north....	300 feet east of power plant, near Dania, Fla.	194
30	Hollywood Canal.....	Dania Cut-off....	At highway crossing north of Seaboard Air Line R. R. station, Hollywood, Fla.	156
16	....do..............	....do...........	At Tiger Tail Road crossing, near Dania, Fla.	379
30	....do..............	....do...........	....do..............................	315
Nov. 11	....do..............	....do...........	....do..............................	217
19	....do..............	....do...........	....do..............................	137
Oct. 30	Hollywood Canal lateral west.	Hollywood Canal..	At highway crossing north of Seaboard Air Line R. R. station, Hollywood, Fla.	59.9
16	Snake Creek Canal...	Oleta River......	At crossing of State Highway 7, near North Miami Beach, Fla.	a60.4
19	....do..............	....do...........	....do..............................	197
24	....do..............	....do...........	....do..............................	251
30, 31	....do..............	....do...........	....do..............................	*391
Nov. 8	....do..............	....do...........	....do..............................	292
18	....do..............	....do...........	....do..............................	261
Oct. 30	....do..............	....do...........	At crossing of Old Dixie Highway, North Miami Beach, Fla.	*448

* Average of 2 or more measurements for 1 tide cycle.
† Integrated mean discharge for 1 tide cycle.
a Flow of main channel only.

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Lake Okeechobee and the Everglades--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Nov. 18	Snake Creek Canal...	Oleta River.......	At crossing of Old Dixie Highway, North Miami Beach, Fla.	*304
Oct. 17	....do.............	....do...........	At crossing of U. S. Highway 1, North Miami Beach, Fla.	*431
Nov. 9	....do.............	....do...........	....do............................	*368
Oct. 8	Biscayne Canal......	Biscayne Bay......	At crossing of Red Road, near Hialeah, Fla.	474
16	....do.............	....do...........	....do............................	752
Nov. 8	....do.............	....do...........	....do............................	482
Oct. 16	....do.............	....do...........	At crossing of northwest 27th Ave., near Opa Locka, Fla.	679
Mar. 24	....do.............	....do...........	At Miami Shores Golf Course, Miami Shores, Fla.	*b39
Oct. 19	....do.............	....do...........	At crossing of U. S. Highway 1, Miami Shores, Fla.	†1,610
16	Opa Locka Canal.....	Biscayne Canal....	300 feet west of northwest 27th Ave., Opa Locka, Fla.	219
20	Little River........	Biscayne Bay......	At crossing of U. S. Highway 1, Miami, Fla.	†1,160
8	Little River Canal..	Little River......	At crossing of Red Road, Hialeah, Fla.	426
21	....do.............	....do...........	....do............................	885
Nov. 8	....do.............	....do...........	....do............................	490
Oct. 21	....do.............	....do...........	At crossing of northwest 27th Ave., Miami, Fla.	804
18	Miami River.........	Biscayne Bay......	At crossing of U. S. Highway 1, Miami, Fla.	†6,100
25	South Fork Miami River.	Miami River.......	At Tamiami Canal, Miami, Fla.........	69.8
25	....do.............	....do...........	At crossing of northwest 27th Ave., Miami, Fla.	171
Nov. 13	Miami Canal.........	....do...........	60 feet southeast of junction with South New River Canal, near Miami, Fla.	704
Oct. 7	....do.............	....do...........	4.3 miles above Pennsuco, Fla........	535
19	....do.............	....do...........	....do............................	1,200
28	....do.............	....do...........	....do............................	609
Nov. 13	....do.............	....do...........	....do............................	459
Dec. 18	....do.............	....do...........	....do............................	410
Oct. 7	....do.............	....do...........	At Pennsuco, Fla..................	1,130
8	....do.............	....do...........	At Russian Colony Canal, near Miami, Fla.	1,640
18	....do.............	....do...........	At crossing of northwest 27th Ave., Miami, Fla.	†5,580
Nov. 13	....do.............	....do...........	....do............................	*3,600
Oct. 7	Lateral canal.......	Miami Canal.......	1.5 miles northwest of Peter's Pike on State Highway 25, near Hialeah, Fla.	74.2
7	Peter's Pike Canal..	....do...........	At crossing of State Highway 25, near Hialeah, Fla.	87.5
8	F.E.C. Canal........	....do...........	Just north of junction with Tamiami Canal, near Coral Gables, Fla.	215
Nov. 14	....do.............	....do...........	....do............................	b177
Oct. 9	....do.............	....do...........	At crossing of northwest 25th St., near Miami Springs, Fla.	251
7	....do.............	....do...........	Just upstream from junction with Miami Canal, Hialeah, Fla.	431
21	....do.............	....do...........	....do............................	753
Nov. 11	....do.............	....do...........	....do............................	375
Oct. 9	Milam Dairy Canal...	F.E.C. Canal......	At Milam Dairy Road, Miami, Fla......	220
7	Country Club Canal..	Miami Canal.......	Just downstream from junction with Borrow Pit Canal, Miami Springs, Fla.	5.17
9	Tamiami Canal.......	....do...........	1,000 feet west of Snapper Creek Canal, Miami, Fla.	166
21	....do.............	....do...........	50 feet west of Florida East Coast Railway, Miami, Fla.	1,530
9	....do.............	....do...........	0.5 mile west of junction with Coral Gables Canal, near Coral Gables, Fla.	185
8	....do.............	....do...........	At crossing of Red Road, Miami, Fla..	1,090
13	....do.............	....do...........	....do............................	1,680
19	....do.............	....do...........	....do............................	1,660
31	....do.............	....do...........	....do............................	1,310
Nov. 17	....do.............	....do...........	....do............................	1,120
28	....do.............	....do...........	....do............................	872
Dec. 15	....do.............	....do...........	....do............................	703
Jan. 23	....do.............	....do...........	....do............................	*580
Feb. 6	....do.............	....do...........	....do............................	*524
26	....do.............	....do...........	....do............................	*378
Mar. 22	....do.............	....do...........	....do............................	*290
Apr. 9	....do.............	....do...........	....do............................	*234
28	....do.............	....do...........	....do............................	†350
May 19	....do.............	....do...........	....do............................	*226
June 3	....do.............	....do...........	....do............................	*306
16	....do.............	....do...........	....do............................	*292
30	....do.............	....do...........	....do............................	*172

* Average of 2 or more measurements for 1 tide cycle.
† Integrated mean discharge for 1 tide cycle.
b Reverse flow.

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Lake Okeechobee and the Everglades--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
July 15	Tamiami Canal	Miami Canal	At crossing of Red Road, Miami, Fla.	*144
Aug. 2	....do	....do	....do	*276
19	....do	....do	....do	†176
Sept. 3	....do	....do	....do	*216
25	....do	....do	....do	*597
Oct. 18	....do	....do	At northwest South River Drive, Miami, Fla.	†1,860
10	Krome Ave. Canal	Tamiami Canal	At Bird Road, near Miami, Fla.	82.7
9	Lateral south	....do	At bridge 63 on U. S. Highway 94, 1.6 miles west of Snapper Creek Canal near Miami, Fla.	85.8
Nov. 7	....do	....do	....do	209
Oct. 9	Snapper Creek Canal north.	....do	150 feet south of junction of North Line and Snapper Creek Canals near Miami, Fla.	20.5
9	....do	....do	75 feet north of junction with Tamiami Canal, near Miami, Fla.	24.2
10	Snapper Creek Canal south.	....do	Just north of Bird Road, near Coral Gables, Fla.	37.3
9	....do	....do	At U. S. Highway 94, near Miami, Fla.	58.2
21	....do	....do	....do	120
Nov. 7	....do	....do	....do	113
July 1	....do	....do	....do	33.4
Oct. 9	North Line Canal	....do	50 feet east of junction with Snapper Creek Canal, Miami, Fla.	91.3
8	....do	....do	At Milam Dairy Road, near Miami, Fla.	551
Nov. 12	....do	....do	....do	550
Oct. 9	Coral Gables Canal	Biscayne Bay	At Tamiami Canal, near Coral Gables, Fla.	56.6
21	....do	....do	....do	29.8
Nov. 7	....do	....do	....do	156
12	....do	....do	....do	191
Oct. 23	....do	....do	At Red Road, at Coral Gables, Fla.	283
Nov. 8	....do	....do	....do	300
Oct. 22	....do	....do	At crossing of Ingraham Highway, Coral Gables, Fla.	†335
23	Snapper Creek Canal	....do	At crossing of U. S. Highway 1, Coral Gables, Fla.	190
Sept. 23	....do	....do	....do	242
Oct. 22	....do	....do	At crossing of Ingraham Highway, Coral Gables, Fla.	†238
Sept. 23	....do	....do	....do	392
Oct. 10	Bird Road Canal	Snapper Creek Canal.	300 feet west of junction with Snapper Creek Canal, near Coral Gables, Fla.	11.9
10	Bird Road Canal lateral north.	Bird Road Canal	2 miles west of Snapper Creek Canal, near Coral Gables, Fla.	11.9
23	Black Creek	Biscayne Bay	At road 1 mile southeast of Ingraham Highway, near Goulds, Fla.	95.3
23	Flow to east through U. S. Highway 1 bridges.	....do	Between Kendal and Homestead, Fla.	85.8
23	Goulds Canal	....do	4.5 miles east of Princeton, Fla.	†47.3
23	Military Canal	....do	130 feet west of control, near Homestead, Fla.	†188
25	Mowry Canal	....do	0.8 mile west of Biscayne Bay, near Homestead, Fla.	†19.5
24	North Canal	....do	1.2 miles east of control, near Homestead, Fla.	†218
24	Florida City Canal	....do	0.8 mile west of Biscayne Bay, near Homestead, Fla.	†120
25	Old U. S. Highway 1 Canal.	Barnes Sound	9.1 miles south of Florida City, Fla.	†106
Nov. 4	Flow to south through U. S. Highway 94 bridges.	Gulf of Mexico	From Monroe to Carnestown, Fla.	1,730
3	Net flow to west through State Highway 29 bridges.	....do	From Carnestown to Immokalee, Fla.	309

* Average of 2 or more measurements for 1 tide cycle.
† Integrated mean discharge for 1 tide cycle.

Peace Creek Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Mar. 31	Peace Creek	Charlotte Harbor	At highway crossing at Fort Meade, Fla.	174
11	Mariana-Jessie Canal.	Lake Jessie	At crossing of U. S. Highway 92, near Auburndale, Fla.	11.5
Aug. 27	....do	....do	....do	4.2
27	Howard-May Canal	Lake May	At crossing of Lake Howard Drive, Winter Haven, Fla.	39.0
Mar. 11	Hartridge-Rochelle ditch.	Lake Rochelle	At crossing of State Highway 555, near Lake Alfred, Fla.	5.6
Aug. 27	Rochelle-Fannie Canal	Lake Fannie	At crossing of U. S. Highway 17, near Lake Alfred, Fla.	10.3
Jan. 7	Lulu Lake outlet	Peace Creek Marsh outlet.	At crossing of highway, 3 miles southeast of Eagle Lake, Fla.	17.0
Mar. 12	....do	....do	....do	6.71
Apr. 18	....do	....do	....do	26.0
May 20	....do	....do	....do	5.46

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Peace Creek Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Aug. 18	Lulu Lake outlet.....	Peace Creek Marsh outlet	At crossing of highway, 3 miles southeast of Eagle Lake, Fla.	75.7
Oct. 10	Lake Drane outlet....	Lake Hamilton....	At crossing of county road, 1.5 miles south of U. S. Highway 92, near Haines City, Fla.	31.9
Nov. 24	....do........	....do........	....do........	24.9
Jan. 6	....do........	....do........	....do........	9.8
Feb. 20	....do........	....do........	....do........	25.7
Aug. 19	....do........	....do........	....do........	42.6
Oct. 10	Canal........	....do........	0.6 mile southwest of Lake Hamilton outlet, near Lake Hamilton, Fla.	34.0
Jan. 6	....do........	....do........	....do........	14.7
Feb. 20	....do........	....do........	....do........	27.9
Mar. 12	....do........	....do........	....do........	4.00
Apr. 17	....do........	....do........	....do........	12.2
Aug. 18	....do........	....do........	....do........	54.4
Sept. 24	....do........	....do........	....do........	103

Hillsboro River Basin

Dec. 18	Ditch........	Cypress Creek....	At Sunset Lane, 0.5 mile east of Hanna Road, near Lutz, Fla.	4.35
Sept. 8	....do........	....do........	....do........	11.9
8	Thirteen Mile Run....	....do........	At crossing of Feinsinger Road, 0.2 mile east of U. S. Highway 41, near Lutz, Fla.	21.1
Dec. 12	....do........	....do........	Below Lake Stemper control, near Lutz, Fla.	4.89
Sept. 8	....do........	....do........	....do........	8.7
8	Keene-Hanna ditch....	Thirteen Mile Run	Below Keene Lake control, 0.9 mile east of U. S. Highway 41, near Lutz, Fla.	12.1
Nov. 11	Drainage ditch.......	Hillsboro River..	At crossing of Atlantic Blvd. and Florida Ave., near Sulphur Springs, Fla.	6.69
Dec. 18	....do........	....do........	....do........	21.3
Mar. 27	....do........	....do........	....do........	4.17

Health Spring Basin

Nov. 10	Health Spring (formerly Wall Springs).	Boggy Bayou......	At Wall Springs, Fla........	6.14

Withlacoochee River Basin

Apr. 30	Withlacoochee River..	Gulf of Mexico...	800 feet downstream from power plant, near Inglis, Fla.	1,780
30	....do........	....do........	....do........	324

Waccasassa River Basin

Mar. 15	Waccasassa River.....	Waccasassa Bay...	At crossing of U. S. Highway 41, near Gulf Hammock, Fla.	858

Suwannee River Basin

Nov. 19	Suwannee River.......	Gulf of Mexico...	At crossing of U. S. Highway 19, near Wilcox, Fla.	35,000
26	....do........	....do........	....do........	37,400
Mar. 25	....do........	....do........	....do........	46,000
Apr. 14	....do........	....do........	....do........	85,000
21	....do........	....do........	....do........	58,200
Mar. 16	Long Pond outlet.....	Suwannee River...	At crossing of State Highway 345, near Chiefland, Fla.	111

Apalachicola River Basin

Sept. 22	Wehadkee Creek.......	Chattahoochee River.	Sec. 4, T. 21 S., R. 13 E., 6 miles northeast of Roanoke, Ala.	6.95
Oct. 14	....do........	....do........	Sec. 34, T. 21 S., R. 13 E., 1 mile southeast of Rock Mills, Ala.	3.78
Sept. 22	....do........	....do........	....do........	15.1
Oct. 14	Osanippa Creek.......	....do........	Sec. 25, T. 21 N., R. 28 E., 1 mile southeast of Fairfax, Ala.	17.7
Sept. 22	....do........	....do........	....do........	37.3
Oct. 11	Halawakee Creek......	....do........	Sec. 29, T. 20 N., R. 28 E., 7 miles northeast of Opelika, Ala.	5.13
Sept. 22	....do........	....do........	....do........	12.5
Oct. 3	Bull Creek..........	....do........	At crossing of State Highway 85, 1.6 miles southwest of Midland, Ga.	1.21
3	....do........	....do........	At crossing of U. S. Highway 80, 8½ miles east of Columbus, Ga.	1.59
1	Upatoi Creek.........	....do........	At crossing of Box Springs Road on Fort Benning Military Reservation, Ga.	46.5
3	Baker Creek..........	Upatoi Creek.....	At crossing of U. S. Highway 80 at county line 4 miles east of Upatoi, Ga.	.671
3	Tar River............	....do........	At crossing of U. S. Highway 80, 2¼ miles east of Upatoi, Ga.	.317

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Apalachicola River Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 1	Kendall Creek	Upatoi Creek	At crossing of U. S. Highway 80, 1½ miles east of Upatoi, Ga.	1.73
3	Cox Creek	....do	At crossing of U. S. Highway 80, 0.6 mile east of Upatoi, Ga.	.288
1	Pine Knot Creek	....do	At crossing of State Highway 103 on Fort Benning Military Reservation, Ga.	78.2
3	Randall Creek	....do	At crossing of county road 2 miles east of Midland, Ga.	.721
3	....do	....do	At crossing of U. S. Highway 80, 2.3 miles west of Upatoi, Ga.	2.21
2	....do	....do	At crossing of State Highway 103 on Fort Benning Military Reservation, Ga.	1.45
2	....do	....do	At crossing of 2d Armored Division Road on Fort Benning Military Reservation, Ga.	1.87
3	Dozier Creek	Randall Creek	At crossing of U. S. Highway 80, 4.7 miles west of Upatoi, Ga.	.157
2	Long Branch	Upatoi Creek	At crossing of 2d Armored Division Road on Fort Benning Military Reservation, Ga.	.14
2	Wolf Creek	....do	At crossing of Steam Mill Road on Fort Benning Military Reservation, Ga.	.054
2	....do	....do	At crossing of 2d Armored Division Road on Fort Benning Military Reservation, Ga.	.46
2	Ochillee Creek	....do	At crossing of Central of Georgia R. R., 0.1 mile southeast of Ida Vesper, Ga.	1.34
2	....do	....do	At crossing of State Highway 26 on Fort Benning Military Reservation, Ga.	6.62
2	....do	....do	At crossing of Box Springs road 3 miles northeast of Cusseta, Ga.	17.8
2	....do	....do	At crossing of Lafayette Road, 2.3 miles north of Cusseta, Ga.	17.7
1	....do	....do	At crossing of Hourglass Road on Fort Benning Military Reservation, Ga.	22.5
2	Unnamed stream	Ochillee Creek	At crossing of State Highway 26, 5 miles east of Cusseta, Ga.	1.97
2	Steam Mill Creek	Upatoi Creek	At crossing of St. Marys Road on Fort Benning Military Reservation, Ga.	.078
2	....do	....do	At crossing of 2d Armored Division Road on Fort Benning Military Reservation, Ga.	.429
2	Tiger Creek	....do	At crossing of Wildcat Road on Fort Benning Military Reservation, Ga.	.327
3	Heriot Creek	....do	At crossing of Marne Road on Fort Benning Military Reservation, Ga.	1.89
3	Opossum Creek	....do	At crossing of U. S. Highway 27 on Fort Benning Military Reservation, Ga.	.03
3	Hamel Creek	....do	At crossing of Marne Road on Fort Benning Military Reservation, Ga.	.802
3	Unnamed stream	Armory Creek	....do	.174
14	Uchee Creek	Chattahoochee River.	Sec. 26, T. 16 N., R. 29 E., 6 miles northeast of Seale, Ala.	13.8
Sept. 21	....do	....do	....do	35.5
Oct. 14	Little Uchee Creek	Uchee Creek	Sec. 13, T. 16 N., R. 29 E., 8 miles northeast of Scale, Ala.	10.7
Sept. 21	....do	....do	....do	30.0
Oct. 1	Shell Creek	Chattahoochee River.	At crossing of Sunshine Road on Fort Benning Military Reservation, Ga.	1.22
1	Hitchitee Creek	....do	At crossing of U. S. Highway 27, 3 miles south of Cusseta, Ga.	7.71
1	Hewell Creek	Hitchitee Creek	At crossing of Liberty Road on Fort Benning Military Reservation, Ga.	.194
1	Cany Creek	....do	At crossing of Liberty Road, 5½ miles southwest of Cusseta, Ga.	.01
Dec. 8	Hatchechubbee Creek	Chattahoochee River.	Sec. 14, T. 14 N., R. 12 E., 2 miles west of Pittsview, Ala.	9.84
Apr. 26	....do	....do	....do	14.0
May 20	....do	....do	....do	3.68
Dec. 9	Cowikee Creek	....do	Sec. 34, T. 12 N., R. 29 E., 6 miles north of Eufavla, Ala.	176
Apr. 27	....do	....do	....do	150
May 20	....do	....do	....do	52.0
Dec. 8	North Fork Cowikee Creek.	Cowikee Creek	Sec. 14, T. 14 N., R. 27 E., at Rutherford, Ala.	7.94
Apr. 26	....do	....do	....do	8.66
May 20	....do	....do	....do	.81
Dec. 8	Hurtsboro Creek	....do	Sec. 22, T. 14 N., R. 27 E., 1 mile southeast of Rutherford, Ala.	1.78
Apr. 26	....do	....do	....do	1.75
May 20	....do	....do	....do	.19
Dec. 8	Middle Fork Cowikee Creek.	....do	Sec. 25, T. 14 N., R. 26 E., 6 miles south of Hurtsboro, Ala.	9.60
Apr. 26	....do	....do	....do	9.49

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Apalachicola River Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
May 20	Middle Fork Cowikee Creek.	Cowikee Creek.....	Sec. 25, T. 14 N., R. 26 E., 6 miles south of Hurtsboro, Ala.	2.22
Oct. 9	Barbour Creek........	Chattahoochee River.	Sec. 7, T. 10 N., R. 29 E., 2 miles south of Eufaula, Ala.	102
Apr. 27	....do..............	....do...........	....do............................	97.3
May 20	....do..............	....do...........	....do............................	39.7
Dec. 9	Abbie Creek..........	....do...........	Sec. 23, T. 7 N., R. 28 E., 2½ miles east of Abbeville, Ala.	68.6
Apr. 28	....do..............	....do...........	....do............................	45.0
May 21	....do..............	....do...........	....do............................	16.1
Oct. 1	Sandy Creek..........	Abbie Creek.......	Sec. 5, T. 5 N., R. 28 E., 5 miles east of Newville, Ala.	24.9
Dec. 9	....do..............	....do...........	....do............................	44.0
Apr. 28	....do..............	....do...........	....do............................	48.7
May 21	....do..............	....do...........	....do............................	35.5
Apr. 27	Omussee Creek........	....do...........	Sec. 22, T. 4 N., R. 29 E., at Columbia, Ala.	311
May 21	....do..............	....do...........	....do............................	214
Aug. 23	Unnamed branch.......	Omussee Creek.....	Sec. 17, T. 3 N., R. 27 E., 2 miles northeast of Dothan, Ala.	7.00
May 21	Buck Creek...........	Big Creek.........	Sec. 23, T. 1 N., R. 27 E., at Cottonwood, Ala.	1.44
Apr. 27	Spring Creek.........	Buck Creek........	Sec. 24, T. 1 N., R. 27 E., at Cottonwood, Ala.	6.65
Oct. 9	Blue Springs.........	Chipola River.....	Below headpool, 5 miles northeast of Marianna, Fla.	192

Choctawhatchee River Basin

Oct. 1	Blackwood Creek......	Choctawhatchee River.	Sec. 25, T. 5 N., R. 26 E., 3½ miles northwest of Headland, Ala.	9.47
Dec. 9	....do...	....do...........	....do............................	12.0
Apr. 27	....do..............	....do...........	....do............................	43.8
May 21	....do..............	....do...........	....do............................	29.2
Oct. 1	Lindsey Creek........	West Fork Choctawhatchee River.	Sec. 3-4, T. 9 N., R. 26 E., 6 miles south of Clayton, Ala.	10.1
Apr. 27	....do..............	....do...........	....do............................	33.0
May 23	....do..............	....do...........	....do............................	15.1
Nov. 12	Judy Creek...........	....do...........	Sec. 32, T. 6 N., R. 25 E., 4½ miles east of Ozark, Ala.	148
Apr. 26	....do..............	....do...........	....do............................	116
May 25	....do..............	....do...........	....do............................	36.1
Dec. 31	Hurricane Creek......	Choctawhatchee River.	Sec. 2, T. 4 N., R. 24 E., at Newton, Ala.	53.2
Jan. 12	....do..............	....do...........	....do............................	38.1
Apr. 27	....do..............	....do...........	....do............................	44.3
May 11	....do..............	....do...........	....do............................	41.1
22	....do..............	....do...........	....do............................	24.9
July 9	....do..............	....do...........	....do............................	24.9
10	....do..............	....do...........	....do............................	33.6
Jan. 12	Bear Creek...........	Claybank Creek....	Sec. 36, T. 6 N., R. 23 E., 4 miles west of Ozark, Ala.	29.2
Apr. 26	....do..............	....do...........	....do............................	31.5
May 21	....do..............	....do...........	....do............................	10.5
Oct. 1	Double Bridges Creek.	Choctawhatchee River.	Sec. 26-35, T. 4 N., R. 21 E., 4 miles southwest of Enterprise, Ala.	23.6
Apr. 26	....do..............	....do...........	....do............................	57.8
May 21	....do..............	....do...........	....do............................	38.6
Oct. 1	Pea River............	....do...........	Sec. 5, T. 5 N., R. 21 E., 6 miles east of Elba, Ala.	164
Dec. 5	....do..............	....do...........	....do............................	628
Apr. 27	....do..............	....do...........	....do............................	555
May 22	....do..............	....do...........	....do............................	197
Dec. 8	Johnston Creek.......	Pea River.........	Sec. 33, T. 13 N., R. 25 E., 1 mile south of Midway, Ala.	5.83
Apr. 26	....do..............	....do...........	....do............................	6.29
May 20	....do..............	....do...........	....do............................	2.46
Oct. 1	Pea Creek............	....do...........	Sec. 32, T. 11 N., R. 26 E., 2 miles northwest of Clayton, Ala.	3.47
Dec. 10	....do..............	....do...........	....do............................	39.1
Apr. 27	....do..............	....do...........	....do............................	10.9
May 23	....do..............	....do...........	....do............................	4.30
Dec. 9	Big Creek............	....do...........	Sec. 31, T. 9 N., R. 24 E., 4½ miles west of Clio, Ala.	39.1
Apr. 28	....do..............	....do...........	....do............................	34.5
May 22	....do..............	....do...........	....do............................	14.8
Oct. 9	Branch...............	Big Creek.........	Sec. 32, T. 9 N., R. 24 E., 3 miles west of Clio, Ala.	6.48
Apr. 28	....do..............	....do...........	....do............................	6.13
May 22	....do..............	....do...........	....do............................	2.31
Apr. 26	Walnut Creek.........	Pea River.........	Sec. 18, T. 8 N., R. 23 E., 4 miles southeast of Brundidge, Ala.	6.40
May 22	....do..............	....do...........	....do............................	2.18
Dec. 5	Whitewater Creek.....	....do...........	Sec. 29, T. 9 N., R. 22 E., 3 miles west of Brundidge, Ala.	24.0
Apr. 27	....do..............	....do...........	....do............................	34.7
May 23	....do..............	....do...........	....do............................	18.2
Oct. 1	Sandy Creek..........	....do...........	Sec. 20, T. 1 N., R. 21 E., 6 miles west of Geneva, Ala.	7.48
Apr. 27	....do..............	....do...........	....do............................	20.0
May 21	....do..............	....do...........	....do............................	8.84

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Yellow River Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Dec. 5	Lightwood Knot Creek.	Yellow River.....	Sec. 19, T. 4 N., R. 18 E., 2 miles northwest of Opp, Ala.	96.8
Apr. 29	....do..............	....do..........	....do..............................	99.1
May 21	....do..............	....do..........	....do..............................	56.4
Dec. 5	Indian Creek.........	....do..........	Sec. 6, T. 3 N., R. 18 E., 3 miles southwest of Opp, Ala.	6.25
Apr. 29	....do..............	....do..........	....do..............................	1.76
May 21	....do..............	....do..........	....do..............................	.06
Dec. 4	Five Runs Creek......	....do..........	Sec. 29, T. 3 N., R. 16 E., 7½ miles south of Andalusia, Ala.	108
Apr. 29	....do..............	....do..........	....do..............................	56.6
May 21	....do..............	....do..........	....do..............................	14.4
Dec. 4	Pond Creek..........	Shoal River......	Sec. 28, T. 6 N., R. 21 W., 1 mile south of Florala, Ala.	12.0
Apr. 27	....do..............	....do..........	....do..............................	8.19
May 21	....do..............	....do..........	....do..............................	3.15
Dec. 4	....do..............	....do..........	Sec. 32, T. 6 N., R. 21 W., 3½ miles southwest of Florala, Ala.	29.9
Apr. 27	....do..............	....do..........	....do..............................	23.8
May 21	....do..............	....do..........	....do..............................	8.98
Escambia River Basin				
Dec. 3	Little Patsaliga Creek.	Patsaliga Creek..	Sec. 26, T. 9 N., R. 17 E., at Rutledge, Ala.	92.3
Apr. 27	....do..............	....do..........	....do..............................	130
May 23	....do..............	....do..........	....do..............................	51.9
Apr. 29	Buck Creek..........	....do..........	Sec. 8, T. 5 N., R. 15 E., 2 miles northeast of Red Level, Ala.	27.6
May 21	....do..............	....do..........	....do..............................	21.6
Apr. 27	Persimmon Creek......	Sepulga River....	Sec. 13, T. 10 N., R. 14 E., 1 mile east of Greenville, Ala.	23.1
May 23	....do..............	....do..........	....do..............................	7.83
Apr. 30	....do..............	....do..........	Sec. 25, T. 7 N., R. 12 E., at Garland, Ala.	90.1
May 20	....do..............	....do..........	....do..............................	38.0
Apr. 27	Stallings Creek......	....do..........	Sec. 3, T. 9 N., R. 14 E., 4 miles south of Greenville, Ala.	30.5
May 23	....do..............	....do..........	....do..............................	5.13
Apr. 26	Rocky Creek..........	Persimmon Creek..	Sec. 12, T. 8 N., R. 13 E., at Chapman, Ala.	3.41
May 20	....do..............	....do..........	....do..............................	.26
Apr. 30	Oaklog Creek.........	....do..........	Sec. 28, T. 8 N., R. 13 E., 2 miles west of Georgiana, Ala.	2.64
May 20	....do..............	....do..........	....do..............................	.10
Oct. 1	Burnt Corn Creek.....	Murder Creek.....	Sec. 3, T. 5 N., R. 9 E., 3 miles west of Bellville, Ala.	2.40
Apr. 29	....do..............	....do..........	....do..............................	19.1
May 20	....do..............	....do..........	....do..............................	4.75
May 20	....do..............	....do..........	....do..............................	5.06
Perdido River Basin				
Oct. 1	Brushy Creek.........	Perdido River....	Sec. 35, T. 1 N., R. 5 E., 2 miles southwest of Atmore, Ala.	18.1
Apr. 30	....do..............	....do..........	....do..............................	17.1
May 21	....do..............	....do..........	....do..............................	17.9
Oct. 1	Tiger Creek..........	Brush Creek......	Sec. 36, T. 1 N., R. 5 E., 2 miles southwest of Atmore, Ala.	1.48
Apr. 30	....do..............	....do..........	....do..............................	5.37
May 21	....do..............	....do..........	....do..............................	4.64
Mobile River Basin				
Oct. 14	East Amicalola Creek.	Amicalola Creek..	Lat. 34°29', long. 84°12', ¼ mile north of Juno, Ga.	22.5
July 14	West Fork Little River.	Little River.....	Sec. 23, T. 5 S., R. 10 E., 1½ miles northwest of Mentone, Ala.	11.0
14	....do..............	....do..........	Sec. 20, T. 6 S., R. 10 E., ½ mile above dam in De Sota State Park.	15.9
Sept.22	....do..............	....do..........	....do..............................	1.66
July 21	Terrapin Creek.......	Coosa River......	Sec. 16, T. 12 S., R. 10 E., 4 miles north of Piedmont, Ala.	97.1
Aug. 26	....do..............	....do..........	....do..............................	52.2
July 21	....do..............	....do..........	Sec. 20, T. 11 S., R. 10 E., 7½ miles southeast of Cenre, Ala.	163
Aug. 25	....do..............	....do..........	....do..............................	112
July 21	Nances Creek.........	Terrapin Creek...	Sec. 4, T. 13 S., R. 10 E., 1½ miles northeast of Piedmont, Ala.	18.9
21	....do..............	....do..........	Sec. 23, T. 12 S., R. 10 E., 3 miles northeast of Piedmont, Ala.	25.4
Aug. 26	....do..............	....do..........	....do..............................	14.0
July 21	Dry Creek............	....do..........	Sec. 32, T. 12 S., R. 10 E. at Piedmont, Ala.	6.45
21	....do..............	....do..........	Sec. 29, T. 12 S., R. 10 E., 2 miles north of Piedmont, Ala.	8.46
Sept.21	Big Wills Creek......	Coosa River......	Sec. 29, T. 6 S., R. 9 E., 3 miles north of Ft. Payne, Ala.	6.67
July 14	....do..............	....do..........	Sec. 11, T. 7 S., R. 8 E., 2 miles west of Ft. Payne, Ala.	55.8
Aug. 26	....do..............	....do..........	....do..............................	19.0
July 14	....do..............	....do..........	Sec. 38, T. 7 S., R. 8 E., 5 miles southwest of Ft. Payne, Ala.	61.4

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Mobile River Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Aug. 25	Big Wills Creek.....	Coosa River.......	Sec. 38, T. 7 S., R. S E., 5 miles southwest of Ft. Payne, Ala.	30.2
Sept. 21	....do.............	....do...........	Sec. 34, T. 8 S., R. 7 E., 2 miles northwest of Collinsville, Ala.	30.1
July 15	....do.............	....do...........	Sec. 10, T. 12 S., R. 5 E., 1½ miles southwest of Attalla, Ala.	238
Aug. 23	....do.............	....do...........	....do.............................	112
24	....do.............	....do...........	Sec. 15, T. 12 S., R. 6 E., 1½ miles south of Gadsden, Ala.	227
July 15	Little Wills Creek..	Big Wills Creek...	Sec. 17, T. 11 S., R. 6 E., 2½ miles southwest of Crudup, Ala.	30.5
Aug. 24	....do.............	....do...........	....do.............................	9.13
Sept. 21	....do.............	....do...........	....do.............................	4.26
July 15	....do.............	....do...........	Sec. 1, T. 12 S., R. 5 E., at Attalla-Gadsden line.	41.8
Aug. 23	....do.............	....do...........	....do.............................	12.4
July 15	Black Creek.........	....do...........	Sec. 29, T. 11 S., R. 6 E., above Noccolula Falls.	151
Aug. 24	....do.............	....do...........	....do.............................	12.4
Sept. 21	....do.............	....do...........	....do.............................	.63
Aug. 24	....do.............	....do...........	Sec. 9, T. 12 S., R. 6 E., at Gadsden, Ala.	140
July 15	Big Canoe Creek.....	Coosa River.......	Sec. 5, T. 14 S., R. 4 E., at Ashville, Ala.	82.4
Aug. 24	....do.............	....do...........	....do.............................	23.1
Sept. 22	....do.............	....do...........	....do.............................	14.6
July 15	Canoe Creek.........	Big Canoe Creek...	Sec. 12, T. 14 S., R. 3 E., 1½ miles west of Ashville, Ala.	68.9
Aug. 24	....do.............	....do...........	....do.............................	18.0
Sept. 23	Ohatchee Creek......	Coosa River.......	Sec. 33, T. 13 S., R. 7 E., 1 mile west of Duke, Ala.	13.8
July 20	Tallahatchee Creek..	Chatchee Creek....	Sec. 16, T. 14 S., R. 7 E., 1 mile west of Wellington, Ala.	71.4
Sept. 22	....do.............	....do...........	....do.............................	50.0
July 12	Little Tallahatchee Creek.	Tallahatchee Creek	Sec. 15-16, T. 14 S., R. 8 E., 2 miles southwest of Jacksonville, Ala.	17.6
22	....do.............	....do...........	....do.............................	11.5
13	....do.............	....do...........	Sec. 17, T. 14 S., R. 8 E., 3½ miles southwest of Jacksonville, Ala.	87.9
Aug. 12	....do.............	....do...........	....do.............................	57.0
Sept. 21	....do.............	....do...........	....do.............................	11.4
July 12	Unnamed branch......	Little Tallahatchee Creek.	Sec. 14, T. 14 S., R. 8 E., at Jacksonville, Ala.	3.88
13	....do.............	....do...........	Sec. 10, T. 14 S., R. 8 E., 1 mile northwest of Jacksonville, Ala.	10.6
13	....do.............	....do...........	Sec. 9, T. 14 S., R. 8 E., 2½ miles northwest of Jacksonville, Ala.	68.6
Aug. 26	....do.............	....do...........	....do.............................	34.9
July 13	Cane Creek..........	Coosa River.......	Sec. 17, T. 15 S., R. 8 E., 5 miles north of Anniston, Ala.	20.1
22	....do.............	....do...........	....do.............................	3.59
Sept. 22	....do.............	....do...........	....do.............................	.94
July 19	....do.............	....do...........	Sec. 7, T. 15 S., R. 8 E., 5 miles north of Anniston, Ala.	8.31
19	....do.............	....do...........	Sec. 10, T. 15 S., R. 7 E., 6½ miles northwest of Anniston, Ala.	10.2
Sept. 22	....do.............	....do...........	....do.............................	3.64
20	Trout Creek.........	....do...........	Sec. 7, T. 15 S., R. 5 E., at Ragland, Ala.	.45
20	Broken Arrow Creek..	....do...........	Sec. 1, T. 16 S., R. 3 E., 1 mile south of Wattsville, Ala.	0
Aug. 11	Dye Creek...........	....do...........	Sec. 31, T. 16 S., R. 4 E., 1 mile east of Pell City, Ala.	.52
11	....do.............	....do...........	Sec. 5-6, T. 17 S., R. 4 E., 1½ miles east of Pell City, Ala.	1.33
24	....do.............	....do...........	....do.............................	1.23
11	....do.............	....do...........	Sec. 9, T. 17 S., R. 4 E., 3½ miles southeast of Pell City, Ala.	.82
24	....do.............	....do...........	....do.............................	.99
Sept. 22	Choccolocco Creek...	....do...........	Sec. 27, T. 15 S., R. 9 E., 2 miles north of Choccolocco, Ala.	57.1
July 20	....do.............	....do...........	Sec. 19, T. 16 S., R. 9 E., 6 miles east of Oxford, Ala.	122
Aug. 27	....do.............	....do...........	....do.............................	65.6
July 22	....do.............	....do...........	Sec. 27, T. 16 S., R. 8 E., 3 miles east of Oxford, Ala.	118
Aug. 26	....do.............	....do...........	....do.............................	84.5
July 19	....do.............	....do...........	Sec. 31, T. 16 S., R. 8 E., 2 miles south of Oxford, Ala.	211
Aug. 26	....do.............	....do...........	....do.............................	114
Sept. 23	....do.............	....do...........	....do.............................	72.3
July 20	Coldwater Creek.....	Choccolocco River.	Sec. 32, T. 16 S., R. 7 E., at Coldwater, Ala.	40.9
20	....do.............	....do...........	....do.............................	33.0
20	Dry Creek...........	Coldwater Creek...	Sec. 20, T. 16 S., R. 7 E., 6 miles southwest of Anniston, Ala.	1.72
Sept. 9	....do.............	....do...........	Sec. 29, T. 16 N., R. 7 E., at Coldwater, Ala.	1.34
20	Wolf Creek..........	Key Creek.........	Sec. 3, T. 17 S., R. 3 E., at Eden, Ala.	.18
2	Talladega Creek.....	Coosa River.......	Sec. 17, T. 19 S., R. 6 E., at Waldo, Ala.	19.8

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Mobile River Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Aug. 13	Talladega Creek.....	Coosa River.......	Sec. 5, T. 19 S., R. 5 E., 3 miles southwest of Talladega, Ala.	67.8
24	....do	....do	....do	49.4
Sept. 21	....do	....do	....do	34.5
July 23	Unnamed branch......	Talladega Creek...	Sec. 34, T. 18 S., R. 5 E., 1½ miles south of Talladega.	.64
23	....do	....do	Sec. 33, T. 18 S., R. 5 E., 2 miles southwest of Talladega, Ala.	6.15
16	Tallaseehatchee Creek.	Coosa River.......	Sec. 9, T. 21 S., R. 4 E., 4 miles northeast of Sylacaga, Ala.	45.5
Aug. 23	....do	....do	....do	11.1
Sept. 20	....do	....do	....do	6.15
July 16	....do	....do	Sec. 31, T. 20 S., R. 4 E., 3½ miles west of Sycamore, Ala.	72.7
Aug. 23	....do	....do	....do	29.0
23	....do	....do	Sec. 23, T. 20 S., R. 3 E., 3 miles east of Childersburg, Ala.	62.9
July 16	....do	....do	Sec. 16, T. 20 S., R. 3 E., at Childersburg, Ala.	140
Aug. 23	....do	....do	....do	66.0
July 16	Emauhee Creek.......	Tallaseehatchee Creek.	Sec. 36, T. 20 S., R. 4 E., 1 mile east of Sycamore, Ala.	7.74
16	....do	....do	Sec. 2, T. 21 S., R. 4 E., 1½ miles south of Sycamore, Ala.	8.01
Sept. 21	....do	....do	....do	.58
July 16	Shirtee Creek.......	....do	Sec. 30, T. 21 S., R. 4 E., 2 miles northwest of Sylacaga, Ala.	2.10
16	....do	....do	Sec. 18, T. 21 S., R. 4 E., 1 mile northwest of Sylacaga, Ala.	10.6
Sept. 23	Wolf Creek.........	Waxahatchee Creek.	Sec. 33, T. 21 S., R. 1 W., 3 miles southwest of Columbiana, Ala.	0
23	Yellowleaf Creek....	Coosa River.......	Sec. 16, T. 22 N., R. 14 E., 2½ miles southeast of Thorsby, Ala.	3.25
Sept. 20	Weogufka Creek......	....do	Sec. 18, T. 23 N., R. 18 E., 2 miles south of Weogufka, Ala.	14.0
20	Hatchet Creek.......	....do	Sec. 8, T. 24 N., R. 20 E., 2 miles northwest of Goodwater, Ala.	28.4
23	Chestnut Creek......	....do	Sec. 36, T. 21 N., R. 15 E., at Verbena, Ala.	6.09
Aug. 12	Tallapoosa River....	Alabama River.....	Sec. 23, T. 16 S., R. 10 E., 3 miles southeast of Heflin, Ala.	409
25	....do	....do	....do	275
Sept. 23	....do	....do	....do	136
Oct. 8	Wedowee Creek.......	Little Tallapoosa River.	Sec. 34, T. 19 S., R. 11 E., 1½ miles north of Wedowee, Ala.	11.5
Sept. 21	....do	....do	....do	20.1
Oct. 7	High Pine Creek.....	Tallapoosa River..	Sec. 27, T. 21 S., R. 12 E., 1 mile north of Roanoke, Ala.	1.51
14	....do	....do	....do	1.90
Sept. 16	....do	....do	....do	7.94
22	....do	....do	....do	5.73
29	....do	....do	....do	12.0
Oct. 7	....do	....do	Sec. 28, T. 21 S., R. 12 E., 1½ miles west of Roanoke, Ala.	1.02
14	....do	....do	....do	1.59
Sept. 16	....do	....do	....do	7.87
22	....do	....do	....do	5.88
29	....do	....do	....do	12.4
Oct. 14	Jones Creek.........	High Pine Creek...	Sec. 22, T. 21 S., R. 12 E., 1½ miles north of Roanoke, Ala.	.70
14	Chatahaspee Creek...	Tallapoosa River..	Sec. 27, T. 23 N., R. 25 E., 9 miles northwest of Lafayette, Ala.	20.0
Sept. 23	....do	....do	....do	31.5
Oct. 14	Finley Creek........	Mill Creek........	Sec 17, T. 22 N., R. 26 E., 3½ miles west of Lafayette, Ala.	1.96
Sept. 23	....do	....do	....do	5.98
Oct. 7	Hillabee Creek......	Tallapoosa River..	Sec. 16, T. 23 N., R. 22 E., 6 miles northeast of Alexander City, Ala.	22.9
Sept. 23	....do	....do	....do	30.9
Aug. 25	Enitachobe Creek....	Hillabee Creek....	Sec. 25, T. 20 S., R. 7 E., 2 miles southwest of Ashland, Ala.	11.9
13	....do	....do	Sec. 31, T. 20 S., R. 8 E., 3 miles southwest of Ashland, Ala.	24.9
Sept. 21	....do	....do	....do	13.0
Oct. 9	....do	....do	Sec. 17-18, T. 21 S., R. 8 E., 8 miles south of Ashland, Ala.	9.84
Aug. 13	Unnamed branch......	Enitachobe Creek..	Sec. 30, T. 20 S., R. 8 E., 1 mile southwest of Ashland, Ala.	2.42
Oct. 7	North Fork Sandy Creek.	Sandy Creek.......	Sec. 3, T. 21 N., R. 23 E., 2 miles east of Dadeville, Ala.	5.86
Sept. 23	....do	....do	....do	14.4
Oct. 15	South Fork Sandy Creek.	....do	Sec. 18, T. 21 N., R. 24 E., 2 miles southwest of Camp Hill, Ala.	1.75
Sept. 23	....do	....do	....do	3.77
Oct. 15	Little Sandy Creek..	South Fork Sandy Creek.	Sec. 8, T. 21 N., R. 24 E., 1½ miles south of Camp Hill, Ala.	14.3
Sept. 23	....do	....do	....do	23.5
23	Channahatchee Creek.	Tallapoosa River..	Sec. 5, T. 19 N., R. 21 E., 3 miles of Eclectic, Ala.	.46
Oct. 14	Sougahatchee Creek..	....do	Secs. 12-13, T. 19 N., R. 25 E., 3 miles north of Auburn, Ala.	8.93

Miscellaneous discharge measurements in the south Atlantic slope and eastern Gulf of Mexico basins during water year October 1947 to September 1948--Continued

Mobile River Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Sept. 22	Sougahatchee Creek..	Tallapoosa River..	Secs. 12-13, T. 19 N., R. 25 E., 3 miles north of Auburn, Ala.	17.9
Oct. 7	....do.............	....do...........	Sec. 26, T. 19 N., R. 23 E., 3 miles northwest of Notasulga, Ala.	22.4
Sept. 21	....do.............	....do...........	....do..............................	60.4
Oct. 7	Uphapee Creek.......	....do...........	Sec. 21, T. 17 N., R. 24 E., 3 miles east of Tuskegee, Ala.	14.4
Sept. 21	....do.............	....do...........	....do..............................	29.3
Oct. 14	Chewacla Creek......	Sawacklahatchee Creek.	Sec. 18, T. 18 N., R. 26 E., at Chewacla State Park.	2.80
Sept. 22	....do.............	....do...........	....do..............................	6.05
Oct. 7	Calebee Creek.......	Tallapoosa River..	Sec. 11, T. 16 N., R. 22 E., 8 miles west of Tuskegee, Ala.	1.55
Sept. 20	....do.............	....do...........	....do..............................	2.48
20	Cabahatchee Creek...	....do...........	Sec. 5, T. 16 N., R. 21 E., 1½ miles west of Shorter, Ala.	4.40
Oct. 7	Tumkehatchee Creek..	....do...........	Sec. 9, T. 17 N., R. 21 E., 7 miles South Tallassee, Ala.	.43
Sept. 23	....do.............	....do...........	....do..............................	1.85
Oct. 7	Line Creek..........	....do...........	Sec. 13, T. 16 N., R. 20 E., 6 miles east of Mt. Meigs, Ala.	1.43
Sept. 20	....do.............	....do...........	....do..............................	5.13
23	Mortar Creek........	Alabama River.....	Sec. 13, T. 18 N., R. 17 E., at Elmore, Ala.	27.0
25	Swift Creek.........	....do...........	Sec. 22, T. 17 N., R. 14 E., at Autaugaville, Ala.	68.8
25	Valley Creek........	....do...........	Sec. 23, T. 17 N., R. 10 E., 1 mile northwest of Selma, Ala.	13.2
24	Cahaba River........	....do...........	Sec. 14, T. 17 S., R. 1 W., at Lovick, Ala.	6.73
24	Little Cahaba River.	Cahaba River......	Sec. 30, T. 17 S., R. 1 E., 2½ miles southwest of Leeds, Ala.	6.20
23	Buck Creek..........	....do...........	Sec. 11, T. 21 S., R. 3 W., 1 mile south of Siluria, Ala.	.92
24	....do.............	....do...........	Sec. 15, T. 20 S., R. 3 W., at Helena, Ala.	18.1
24	Coffee Creek........	....do...........	Sec. 29, T. 22 S., R. 5 W., at Blocton, Ala.	1.46
24	Little Cahaba River.	....do...........	Sec. 19, T. 24 N., R. 11 E., 3 miles north of Six Mile, Ala.	52.3
23	Shoal Creek.........	Little Cahaba River.	Sec. 5, T. 24 N., R. 12 E., 1 mile north of Wilton, Ala.	27.1
24	Six Mile Creek......	....do...........	Sec. 5, T. 23 N., R. 11 E., 1 mile southeast of Six Mile, Ala.	14.8
25	Oakmulgee Creek.....	Cahaba River......	Sec. 1, T. 17 N., R. 9 E., 8 miles northwest of Selma, Ala.	34.4
Aug. 25	Slab Creek..........	Locust Fork.......	Sec. 36, T. 9 S., R. 4 E., 1 mile northwest of Boaz, Ala.	.17
25	....do.............	....do...........	Sec. 33, T. 9 S., R. 4 E., 4 miles west of Boaz, Ala.	.74
25	....do.............	....do...........	Sec. 27, T. 9 S., R. 3 E., 3 miles north of Douglas, Ala.	1.00
Mar. 2	Dobbs Creek.........	Strong River......	SW¼ sec. 18, T. 2 N., R. 4 E. Choctaw meridian; at bridge on U. S. Highway 49, 2.5 miles northwest of D'lo, Miss. Drainage area, 55.1 square miles.	301
3	....do.............	....do...........	....do..............................	773
2	Riles Creek.........	....do...........	NE¼ sec. 17, T. 1 N., R. 4 E., Choctaw meridian; at bridge on State Highway 20 at Merit, Miss. Drainage area, 20.8 square miles.	252
2	Mill Creek..........	....do...........	SE¼ sec. 10, T. 2 N., R. 3 E , Choctaw meridian; at bridge on dirt road west of Braxton, Miss. Drainage area, 11.3 square miles.	167
3	....do.............	....do...........	....do..............................	288
2	Big Creek...........	....do...........	SW¼ sec. 36, T. 1 N., R. 2 E., Choctaw meridian; at bridge on State Highway 20, 5.5 miles west of Pinola, Miss. Drainage area, 44.0 square miles.	395
3	....do.............	....do...........	....do..............................	689

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