UNITED STATES DEPARTMENT OF THE INTERIOR

SURFACE WATER SUPPLY *of the* UNITED STATES 1937

PART 7

LOWER MISSISSIPPI RIVER BASIN

Prepared in cooperation with the States of
ARKANSAS, COLORADO, KANSAS, LOUISIANA, MISSOURI
NEW MEXICO, OKLAHOMA, TENNESSEE, AND TEXAS

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 827

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

Water-Supply Paper 827

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PART 7
LOWER MISSISSIPPI RIVER BASIN

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ILLUSTRATION

SURFACE WATER SUPPLY OF LOWER MISSISSIPPI RIVER BASIN, 1937

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the water year ending September 30, 1937. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1937, 3,380 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 9.

DEFINITION OF TERMS

The units in which stream-flow data are presented in this report and other terms used herein are defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is the rate of discharge of water flowing in a channel when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

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

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

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

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours.

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

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

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either

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

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

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

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge unless otherwise qualified.

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

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

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

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

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

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

TYPICAL RIVER-MEASUREMENT STATIONS.

5 percent; "good", within 10 percent; "fair", within 15 percent; and "poor", within 20 percent or more.

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

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

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

PUBLICATIONS

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

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

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

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

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

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

Augusta, Maine, Statehouse.
Boston, Mass., 945 Post Office Building.
Hartford, Conn., 203 Federal Building.
Albany, N. Y., 528 Federal Building.
Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
Charlottesville, Va., University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 119 United States Courthouse.
Atlanta, Ga., Georgia School of Technology.
Ocala, Fla., Post Office Building.
Montgomery, Ala., Post Office Building.
Chattanooga, Tenn., 442 Post Office Building.
Louisville, Ky., Federal Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Urbana, Ill., 14 Post Office Annex.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 808 New Post Office Building.
Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
St. Louis, Mo., 906 Customhouse, 1114 Market Street.
Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
Topeka, Kans., 305 Federal Building.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Highway Building.
Santa Fe, N. Mex., 3 United States Courthouse.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 230 Customhouse.
Salt Lake City, Utah, 303 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, 429 Federal Building.
Helena, Mont., 412 Federal Building.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 208 Federal Office Building.
Los Angeles, Calif., 512 Eighth and Figueroa Building.
Honolulu, Hawaii, 225 Federal Building.

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

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

Stream-flow data in reports of the Geological Survey

(A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.....	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to Sept. 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93)....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)...	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.- The reports which contain records after 1901 are given in the table on page 5.

Numbers of water-supply papers containing results of stream measurements, 1899-1937

(For basins included see p. 3)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b 35, 36	36	36	36	c 36, 37	37	37	d 37, 38	38, e 39	38, f 39	38	38	38
1900 g...	47, h 48	48	48, i 49	49	49	49, j 50	50	50	50	51	51	51	51	51
1901.....	65, 75	65, 75	65, 75	65, 75	k 65, 66, 75	66, 75	k 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82	b 82, 83	83	m 82, 83	k 83, 85	84	k 83, 84	84	85	85	85	85	85	85
1903.....	97	b 97, 98	98	97	k 98, 99, n 100	99	k 98, 99	99	100	100	100	100	100	100
1904.....	o 124, p 125, q 126	q 126, 127	128	129	k 128, 130	130, r 131	k 128, 131	132	133	133, s 134	134	135	135	135
1905.....	o 165, p 166, q 167	q 167, 168	169	170	171	172	k 169, 173	174	175, t 177	176, s 177	177	178	178	u 177, 178
1906.....	o 201, p 202, q 203	q 203, 204	205	206	207	208	k 205, 209	210	211, t 213	212, s 213	213	214	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s 251	251	252	252	252
1909.....	261	262	263	264	265	266	267	268	269	270, s 271	271	272	272	272
1910.....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911.....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912.....	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913.....	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914.....	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915.....	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916.....	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917.....	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918.....	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20..	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928.....	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1931.....	711	712	713	714	715	716	717	718	719	720	721	722	723	724
1932.....	726	727	728	729	730	731	732	733	734	735	736	737	738	739
1933.....	741	742	743	744	745	746	747	748	749	750	751	752	753	754
1934.....	756	757	758	759	760	761	762	763	764	765	766	767	768	769
1935.....	781	782	783	784	785	786	787	788	789	790	791	792	793	794
1936.....	801	802	803	804	805	806	807	808	809	810	811	812	813	814
1937.....	821	822	823	824	825	826	827	828	829	830	831	832	833	834

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

The foregoing table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1937. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

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

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

Reports containing compilation of discharge by States and drainage basins

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

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

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama....	1915	Bull. 17, Water powers of Alabama.....	Geological Survey of Alabama.
Arkansas...	1928	Stream gaging report 1.....	Arkansas Geological Survey.
Georgia....	1920	Bull. 38, Water powers of Georgia.....	Geological Survey of Georgia.
Illinois...	1937	Stream flow data of Illinois	Division of Waterways
Do.....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Indiana....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	[a]1930	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	[b]1932	Stream-flow records of Iowa.....	Iowa State Planning Board.
Kansas.....	[c]1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	1924	.....do.....	Do.
Do.....	[d]1928	.....do.....	Do.
Kentucky...	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Minnesota..	1912	Water resources investigation of Minnesota.	State Drainage Commission.
Missouri...	1926	Reports of Bureau of Geology and Mines, Vol. 20, 2d series, Water Resources of Missouri.	Missouri Bureau of Geology and Mines.
Nebraska...	1914	1st hydrographic report.....	Bureau of Water Power, Irrigation and Drainage.
Do.....	[e]1928	2d hydrographic report.....	Do.
New Jersey.	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	[f]1934	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico.	1925	Surface water supply of New Mexico....	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	[g]1924	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	[h]1930	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	[i]1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	[j]1932	Stream-flow records of Pennsylvania...	Department of Forests and Waters.
Tennessee..	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.....	[k]1930	Bull. 40, Surface waters of Tennessee.	Do.
Utah.....	1905	5th Biennial Report, State Engineer...	Office of the State Engineer.
Virginia...	1927	Bull. 31, Water resources of Virginia.	Conservation and Development Commission.
Washington.	1933	Bull. 5, Monthly and yearly summaries of hydrometric data	Department of Conservation and Development.
Wisconsin..	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	[l]1923	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

a Includes records for the years 1927-30.
b Includes records for the years 1895-1919.
c Includes records for the years 1919-24.
d Includes records for the years 1924-28.
e Includes records for the years 1914-28.
f Includes records for the years 1928-34.
g Includes records for the years 1914-24.
h Includes records for the years 1924-30.
i Includes records for the years 1930-36.
j Includes records for the years 1928-32.
k Includes average weekly discharge for the years 1920-30.
l Includes records for the years 1914-23.

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

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1936 to September 1937 by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of daily discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Remarks
Atchafalaya River	Simmesport, La.	*1851-1937	Published by Mississippi River Commission.
Do.	Morgan City, La.	1927-37	Do.
Do.	North of junction with Little Bayou des Ourses, La.	1933-37	Unpublished.
Bayou Courtableau	North of Port Barre, La.	1932-37	Do.
Do.	East of Port Barre, La.	1930-37	Do.
Bayou Dorcheat	Minden, La.	1928-31 1936-37	Do.
Bayou Macon	Delhi, La.	1936-37	Do.
Bayou Teche	Port Barre, La.	1932-37	Do.
Do.	Charenton, La.	1933-37	Do.
Do.	North of Loreauville Canal, La.	1933-37	Do.
Big Black River	Bovina, Miss.	1936-37	Do.
Black River	Mengo Switch, Mo. (near Poplar Bluff, Mo.)	1936-37	Do.
Do.	Pocahontas, Ark.	1936-37	Do.
Do.	Black Rock, Ark.	1936-37	Do.
Canadian River	Conchas Dam, N. Mex.	1936-37	Do.
Do.	Garmes, N. Mex.	1936-37	Do.
Do.	Roy, N. Mex., 11 miles west of,	1936-37	Do.
Coldwater River	Coldwater, Miss.	1928-37	Do.
Do.	Savage, Miss.	1936-37	Do.
Conchas River	Variadero, N. Mex.	1936-37	Do.
Current River	Biggers, Ark.	1936-37	Do.
Eleven Point River	Eleven Point, Ark.	1936-37	Do.
Fourche La Fave River	Nimrod, Ark.	1936-37	Do.
Little River	Habell, Okla.	1936-37	Do.
Little Red River	Heber Springs, Ark.	1936-37	Do.
Loreauville Canal	East of Bayou Teche, La.	1933-37	Do.
Mississippi River	Helena, Ark.	*1879-1937	Published by Mississippi River Commission.
Do.	Arkansas City, Ark.	*1884-1937	Do.
Do.	Mayersville, Miss.	1683-95; 1935-37	Do.
Do.	Lower Delta Point, La.	*1856-1937	Do.
Do.	Natchez, Miss. (Ferry range)	1890-92; 1934-37	Do.
Do.	Tarberts Landing, Miss.	1928-37	Do.
Do.	Red River Landing, La.	*1851-1937	Do.
Do.	Carrollton, La.	*1851-1937	Do.
Ocate Creek	Near Colmor, N. M.	1936-37	Unpublished.
Old River	Texas & Pacific Ry. bridge near Torras, La.	*1851-1937	Published by Mississippi River Commission.
Ouachita River	Cold Springs Bar, Ark.	1928-37	Unpublished.
Do.	Camden, Ark.	1929-37	Do.
Do.	Monroe, La.	*1892-1937	Published by Mississippi River Commission.
Do.	Arkadelphia, Ark.	1929-37	Unpublished.
Petit Jean Creek	Danville, Ark.	1936-37	Do.
Red River	Index, Ark.	1936-37	Do.
Do.	Alexandria, La.	*1858-1937	Published by Mississippi River Commission.
Do.	Shreveport, La.	1928-37	Unpublished.
St. Francis River	Chaonia, Mo.	*1925-37	Do.
Do.	Wappapello, Mo.	1936-37	Do.
Do.	Parkin, Ark.	1928-37	Published by Mississippi River Commission.
St. Francis Bay River	Riverfront, Ark.	1928-37	Do.
Strawberry River	Poughkeepsie, Ark.	1936-37	Unpublished.
Sunflower River	Sunflower, Miss.	1936-37	Do.
Tallahatchie River	Sardis, Miss.	1926-37	Do.
Do.	Lambert, Miss.	1936-37	Do.
Do.	Swan Lake, Miss.	1928-37	Do.
Tensas River	Tendel, La.	1936-37	Do.
West Beaver Creek	Victor, Colo.	1905-37	Do.
White River	Clarendon, Ark.	*1879-1937	Published by Mississippi River Commission.

*Intermittently.

Records of discharge collected by agencies other than the Geological Survey--Continued

Stream	Location	Period	Remarks
Yalobusha River	Grenada, Miss.	1928-37	Unpublished.
Yazoo River	Greenwood, Miss.	*1909-37	Published by Mississippi River Commission.
Yocona River	Enid, Miss.	1923-37	Unpublished.

*Intermittently.

Note.- All gaging stations listed above were operated by the Corps of Engineers, U. S. Army, except that on West Beaver Creek near Victor, Colo., which was operated by the Southern Colorado Power Co.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Arkansas (except for the station on White River at Beaver), with the State Highway Commission, Jas. R. Rhyne, director, and the Arkansas Geological Survey, George C. Branner, State geologist; in Colorado, with the office of the State engineer, M. C. Hinderlider, State engineer; in Kansas, with the water-resources division of the Kansas State Board of Agriculture, George S. Knapp, chief engineer; in Louisiana, with the Louisiana State University and Agricultural and Mechanical College, L. J. Lassalle, dean, College of Engineering; in Missouri and for the station on White River at Beaver, Ark., with the Missouri Geological Survey and Water Resources, H. A. Buehler, State geologist, the Missouri Game and Fish Department, W. C. Buford, commissioner, the Missouri Highway Department, T. H. Cutler, chief highway engineer, succeeded by C. W. Brown, the city of Joplin, J. J. Saunders, commissioner, Department of Streets and Public Improvements, and the city of Springfield, Will C. Lohmeyer, commissioner, Department of Public Property and Public Utilities; in New Mexico, with the office of the State engineer, Thomas M. McClure, State engineer; in Oklahoma, with the Oklahoma Conservation Commission, F. L. Vaughan, commissioner, succeeded by the Oklahoma Planning and Resources Board, Division of Water Resources, F. L. Vaughn, director; in Tennessee, with the Tennessee Division of Geology, Walter F. Pond, State geologist; in Texas, with the State through the Board of Water Engineers, C. S. Clark, chairman, A. H. Dunlap, and J. W. Pritchett.

Acknowledgments are also due to the Corps of Engineers, United States Army, the Mississippi River Commission, United States Soil Conservation Service, and United States Weather Bureau, for financial assistance in collecting records published herein.

Assistance in collecting records was also rendered by the following organizations and corporations: In Arkansas, by the Arkansas Power & Light Co., White River Power Co., Federal Land Bank of St. Louis, and Van Buren Waterworks Improvement District No. 1; in Colorado, by the Arkansas Valley Ditch Association; in Kansas, by the Kansas Gas & Electric Co.; in Mississippi, by the Vicksburg Bridge & Terminal Co.; in Missouri, by the Little River Drainage District, Empire District Electric Co., and Current River Power Co.

Acknowledgment of records collected and furnished by individuals or corporations is made in connection with the description of each station affected.

DIVISION OF WORK

The data for stations in the several States were collected and prepared for publication under supervision of district engineers as follows: In Arkansas (except for White River at Beaver), in Oklahoma and for Mississippi River at Memphis, Tenn.--J. H. Gardiner; in Colorado--Robert Follansbee, the work being done in collaboration with M. C. Hinderlider, State engineer, and L. T. Burgess, State chief hydrographer; in Kansas--J. B.

Spiegel; in Louisiana and Mississippi--D. H. Barber; in Missouri, and for White River at Beaver, Ark.--H. C. Beckman; in New Mexico--Berkeley Johnson; in Tennessee except for Mississippi River at Memphis--C. E. McCashin; in Texas--C. E. Ellsworth.

MISSISSIPPI RIVER MAIN STEM

Mississippi River at St. Louis, Mo.

Location.- Water-stage recorder, lat. 38°37'44", long. 90°10'54", at foot of Washington Avenue, just downstream from west pier of Eads Bridge, St. Louis, and 15 miles below mouth of Missouri River. Zero of gage is 379.94 feet above mean sea level (general adjustment of 1929) and 379.80 feet above mean Gulf level.

Drainage area.- 701,000 square miles (authority, Mississippi River Commission).

Records available.- March 1933 to September 1937. Daily gage heights have been published in reports of Mississippi River Commission since January 1861, in reports of U. S. Weather Bureau since January 1890. Results of discharge measurements made intermittently since 1866 by Corps of Engineers, U. S. Army, and Mississippi River Commission are contained in reports of those organizations.

Extremes.- Maximum discharge during year, 374,000 second-feet May 5 (gage height, 23.76 feet); minimum, 42,300 second-feet Dec. 17 (gage height, -3.16 feet).

1933-37: Maximum discharge, 649,000 second-feet June 7, 1935; maximum gage height, 33.52 feet June 9, 1935; minimum discharge observed, 34,000 second-feet Dec. 29, 30, 1933 (gage height, -4.6 feet), revised.

Maximum stage known, 41.39 feet June 28, 1844.

Remarks.- Records excellent. Forty four discharge measurements were made during the year.

Gage height at 8 a.m., in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14.23	0.62	-0.63	0.96	7.16	16.06	13.90	15.90	14.06	15.48	7.61	1.82
2	11.85	.55	-.75	2.80	8.96	15.19	13.35	16.52	13.80	15.32	7.03	1.12
3	9.60	3.55	-.87	4.67	9.44	14.10	12.36	16.34	13.30	14.95	6.22	.82
4	7.48	11.70	-.80	5.52	11.24	13.43	11.75	21.76	13.38	14.52	5.72	.76
5	5.81	13.14	-.43	5.55	12.27	12.92	11.51	23.70	13.78	13.98	5.79	.48
6	4.57	10.25	.13	5.18	12.08	12.74	11.20	23.64	14.34	13.14	6.37	.26
7	3.52	9.25	.43	4.67	10.51	14.18	10.69	23.04	14.19	12.38	7.17	-.12
8	2.52	8.54	-.08	5.29	9.02	16.97	10.86	21.65	13.61	11.38	7.12	-.73
9	2.48	6.79	-.82	7.40	9.38	19.10	11.56	20.19	12.50	10.37	6.42	-1.16
10	2.62	5.37	-1.11	8.64	10.22	19.95	11.99	18.89	16.18	9.72	5.32	-1.25
11	3.01	4.52	-.75	8.66	9.88	20.75	12.10	17.64	20.79	9.19	4.17	-1.35
12	3.44	3.92	-.65	7.96	9.69	20.72	11.93	16.93	20.86	8.83	3.33	-1.13
13	4.93	3.65	-.87	6.45	10.01	20.42	11.58	16.41	19.03	8.36	3.10	-.95
14	6.70	3.28	-1.05	5.90	9.96	20.32	11.27	16.00	18.02	8.24	3.10	-.91
15	7.20	2.88	-1.53	7.82	9.45	20.12	11.42	15.79	17.67	8.97	2.98	-1.37
16	6.57	2.62	-2.32	11.93	9.70	19.91	11.93	15.52	17.13	9.77	2.63	-1.69
17	5.71	2.43	-3.12	12.73	11.12	19.37	12.17	15.02	16.60	9.63	2.13	-1.57
18	4.99	1.85	-2.62	11.17	13.46	19.05	12.22	14.59	16.93	11.18	1.66	-1.38
19	4.40	1.32	-2.22	10.00	14.35	18.60	12.19	14.21	17.97	11.39	1.22	-1.51
20	3.67	1.30	-2.06	9.45	14.76	18.43	12.02	13.81	19.17	11.14	1.28	-1.80
21	2.74	1.28	-1.94	8.50	14.48	18.36	12.98	13.42	19.01	9.58	1.41	-2.09
22	2.00	1.23	-1.93	7.63	15.10	17.65	14.65	12.97	17.52	9.00	1.17	-2.28
23	1.54	1.02	-2.37	7.97	16.84	16.45	15.95	12.65	16.30	7.87	1.02	-2.25
24	1.16	.78	-2.97	8.77	18.43	14.96	17.65	12.61	15.65	7.78	.96	-2.10
25	1.15	.50	-2.88	9.18	18.80	14.01	17.91	13.42	15.36	8.93	1.73	-1.98
26	1.34	.16	-2.43	8.52	18.67	13.71	16.89	15.00	15.45	9.48	2.46	-1.81
27	1.40	.37	-2.20	7.47	17.87	14.51	15.50	15.55	15.92	10.20	2.90	-1.85
28	1.07	.53	-2.09	6.74	16.89	15.76	14.62	15.24	16.45	10.20	3.53	-2.02
29	.82	.23	-1.23	6.17	-	15.81	14.67	14.62	16.37	8.44	3.74	-2.26
30	1.08	-.30	-.43	5.88	-	15.19	15.04	13.93	15.71	7.61	3.50	-2.46
31	.98	-	-.03	6.27	-	14.29	-	14.12	-	7.76	2.69	-

Note.- Gage heights for this station, published in previous water-supply papers, are mean daily gage heights.

Discharge, in second-feet, of Mississippi River at St. Louis, Mo., water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	204,000	66,200	58,500	72,100	126,000	229,000	201,000	219,000	199,000	217,000	125,000	74,300
2	164,000	68,800	57,200	87,700	140,000	211,000	186,000	233,000	194,000	213,000	120,000	69,300
3	139,000	104,000	56,800	102,000	146,000	199,000	180,000	270,000	189,000	213,000	112,000	68,300
4	118,000	184,000	57,600	107,000	168,000	190,000	172,000	360,000	193,000	205,000	108,000	67,000
5	106,000	175,000	60,400	107,000	174,000	185,000	169,000	372,000	199,000	196,000	111,000	65,100
6	96,100	143,000	63,900	102,000	165,000	186,000	166,000	363,000	201,000	186,000	117,000	63,600
7	84,900	141,000	64,900	99,500	151,000	215,000	159,000	348,000	201,000	173,000	123,000	60,600
8	81,200	129,000	60,800	108,000	139,000	263,000	164,000	318,000	190,000	163,000	119,000	56,500
9	80,400	112,000	56,700	127,000	147,000	294,000	172,000	280,000	195,000	154,000	113,000	54,000
10	82,300	103,000	55,400	136,000	152,000	312,000	176,000	265,000	246,000	148,000	102,000	53,200
11	85,500	94,500	58,000	136,000	146,000	330,000	178,000	249,000	314,000	141,000	92,500	53,700
12	90,600	91,900	57,800	123,000	148,000	323,000	174,000	236,000	295,000	138,000	87,600	54,900
13	105,000	89,500	56,500	112,000	150,000	319,000	169,000	230,000	265,000	132,000	86,200	56,300
14	112,000	85,800	54,900	113,000	149,000	318,000	165,000	225,000	255,000	136,000	85,900	55,600
15	121,000	83,000	50,400	138,000	144,000	313,000	170,000	223,000	247,000	144,000	84,100	52,700
16	113,000	81,700	46,400	174,000	150,000	310,000	176,000	217,000	240,000	148,000	81,200	51,300
17	106,000	79,600	42,800	171,000	172,000	298,000	179,000	207,000	236,000	151,000	77,300	52,300
18	100,000	74,600	45,700	152,000	193,000	291,000	179,000	204,000	243,000	166,000	73,600	53,400
19	94,900	71,500	48,100	145,000	206,000	285,000	177,000	199,000	261,000	159,000	71,200	52,000
20	88,600	72,100	49,500	141,000	206,000	283,000	178,000	195,000	277,000	151,000	72,100	50,300
21	80,400	71,800	50,200	131,000	206,000	279,000	189,000	191,000	266,000	145,000	72,200	48,500
22	75,800	70,900	49,600	125,000	220,000	260,000	211,000	186,000	240,000	136,000	70,400	47,500
23	73,000	69,200	46,500	130,000	256,000	236,000	232,000	181,000	231,000	128,000	69,300	48,100
24	71,300	68,000	43,500	140,000	280,000	214,000	252,000	184,000	219,000	131,000	70,200	49,100
25	71,100	65,300	44,900	138,000	281,000	200,000	261,000	197,000	216,000	141,000	76,400	49,600
26	72,200	61,600	47,000	131,000	273,000	200,000	233,000	217,000	220,000	147,000	81,400	50,900
27	71,900	62,600	48 500	119,000	255,000	218,000	216,000	219,000	226,000	155,000	85,500	50,200
28	69,200	66,200	50,200	115,000	238,000	235,000	208,000	215,000	230,000	149,000	89,500	49,100
29	68,200	63,300	55,700	111,000	-	230,000	208,000	205,000	229,000	131,000	91,300	47,500
30	70,000	60,000	60,500	110,000	-	219,000	216,000	188,000	220,000	126,000	88,100	46,600
31	68,900	-	63,500	115,000	-	206,000	-	201,000	-	129,000	80,700	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,964,500	204,000	68,200	95,630	5,880,000
November	2,709,100	184,000	60,000	90,300	5,373,000
December	1,662,400	64,900	42,800	53,630	3,297,000
Calendar year 1936	40,994,300	332,000	39,700	112,000	81,310,000
January	3,818,300	174,000	72,100	123,200	7,573,000
February	5,181,000	281,000	126,000	185,000	10,280,000
March	7,861,000	330,000	185,000	253,300	15,570,000
April	5,706,000	252,000	159,000	190,200	11,320,000
May	7,397,000	372,000	181,000	238,600	14,670,000
June	6,937,000	314,000	189,000	231,200	13,760,000
July	4,852,000	217,000	126,000	156,500	9,624,000
August	2,836,700	125,000	69,300	91,510	5,627,000
September	1,651,500	74,300	46,600	55,050	3,276,000
Water year 1936-37	53,566,500	372,000	42,800	146,800	106,200,000

Note.- Daily discharge computed from mean daily gage heights, not from the 8 a.m. gage heights published on the preceding page.

Mississippi River at Cape Girardeau, Mo.

Location.- Water-stage recorder, lat. 37°18'08", long. 89°31'05", at downstream end of concrete sea wall 400 feet below St. Louis-San Francisco Railway station at Cape Girardeau and 52 miles above mouth of Ohio River. Zero of gage is 304.65 feet above mean sea level (general adjustment of 1929) and 304.43 feet above mean Gulf level.

Drainage area.- 716,000 square miles (authority, Mississippi River Commission).

Records available.- March 1933 to September 1937. Daily gage heights have been published in reports of Mississippi River Commission since May 1896, in reports of U. S. Weather Bureau from February 1891 to February 1894 and since December 1904.
Results of discharge measurements made intermittenly since 1903 by Corps of Engineers, U. S. Army, and Mississippi River Commission at Thebes, 6 miles downstream, and referred to Cape Girardeau gage are contained in reports of those organizations.

Extremes.- Maximum discharge during year, 420,000 second-feet May 7 (gage height, 30.36 feet); minimum, 43,900 second-feet Dec. 26 (gage height, 6.25 feet).
1933-37: Maximum discharge, 623,000 second-feet June 10, 1935; maximum gage height, 36.26 feet June 11, 1935; minimum discharge, 38,700 second-feet Aug. 29, 1936 (gage height, 5.62 feet).
Maximum stage known, 42.53 feet July 4, 1844.

Remarks.- Records excellent. Discharge computed by slope method using the slope as determined by auxiliary staff gages at Moccasin Springs and Grays Point, Mo. Gage-height records for auxiliary gages furnished by the Corps of Engineers, U. S. Army. Stage-discharge relation occasionally affected by backwater from the Ohio River. Thirteen discharge measurements were made during year.

Gage height at 8 a.m., in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.19	9.10	8.50	10.29	26.50	22.70	19.51	22.41	19.05	20.64	14.69	11.33
2	16.40	9.01	8.20	10.15	26.50	21.67	19.05	22.89	19.18	20.30	14.74	10.78
3	17.48	9.92	8.03	11.00	26.98	20.78	18.63	24.31	19.18	20.18	14.45	10.23
4	15.92	11.78	7.93	12.15	27.25	19.83	18.07	25.69	18.90	19.98	13.97	9.84
5	15.52	15.38	7.84	13.12	27.29	19.06	17.78	27.85	18.74	19.73	13.53	9.77
6	13.23	18.52	8.04	13.48	27.62	18.49	17.88	29.80	19.01	19.36	13.32	9.62
7	12.28	17.93	8.28	13.60	27.48	18.15	17.67	30.30	19.45	18.82	13.52	9.43
8	11.53	16.53	8.52	14.73	27.00	18.76	17.30	30.10	19.42	18.32	13.96	9.24
9	10.78	15.77	8.58	15.60	26.44	20.68	17.07	29.08	19.09	17.69	14.22	8.97
10	10.35	14.78	8.21	16.56	25.76	22.67	17.28	27.92	19.29	16.96	14.03	8.66
11	10.22	13.63	7.83	17.63	25.23	23.82	17.57	26.68	21.82	16.40	13.42	8.48
12	10.34	12.77	7.73	18.03	24.63	24.60	17.69	25.55	24.47	15.95	12.70	8.35
13	10.63	12.12	7.89	17.81	23.88	24.82	17.65	24.51	25.31	15.57	12.01	8.35
14	11.07	11.67	7.87	18.67	23.28	24.65	17.41	23.53	24.43	15.30	11.57	8.44
15	12.10	11.35	7.74	21.11	22.69	24.52	17.22	22.72	23.37	15.11	11.41	8.54
16	13.08	11.00	7.55	21.76	21.79	24.37	17.14	22.13	22.87	15.23	11.37	8.44
17	13.28	10.68	7.22	22.39	21.25	24.13	17.32	21.70	22.47	16.04	11.21	8.17
18	12.80	10.52	6.71	23.63	21.10	23.85	17.68	21.12	22.00	16.45	11.03	8.04
19	12.22	10.23	6.44	23.48	21.71	23.56	17.79	20.73	22.00	16.80	10.69	8.09
20	11.73	9.82	6.62	22.70	22.30	23.24	17.74	20.00	22.43	18.03	10.33	8.14
21	11.28	9.55	6.83	23.22	22.42	23.15	17.89	19.45	23.19	17.33	10.17	8.03
22	10.99	9.47	6.93	23.92	22.13	23.08	19.52	19.00	23.38	16.73	10.36	7.83
23	10.36	9.43	6.99	24.22	22.04	22.66	20.60	18.64	22.54	16.31	10.33	7.66
24	9.84	9.31	6.90	24.95	22.89	21.77	21.50	18.25	21.47	15.49	10.07	7.55
25	9.49	9.16	6.56	26.14	24.19	20.75	22.65	18.08	20.75	14.87	9.93	7.89
26	9.36	9.00	6.28	26.70	24.74	19.72	23.08	18.38	20.36	15.21	10.05	7.84
27	9.33	8.78	6.48	26.27	24.57	19.12	22.73	19.32	20.29	15.76	10.55	7.81
28	9.36	8.65	6.68	25.78	23.86	19.26	21.92	20.03	20.48	16.21	10.96	7.93
29	9.29	8.75	6.79	25.59	-	20.04	21.23	20.09	20.87	16.47	11.23	7.84
30	9.09	8.73	7.10	25.72	-	20.41	21.56	19.75	20.98	15.72	11.49	7.69
31	8.98	-	9.40	26.22	-	20.15	-	19.23	-	14.78	11.61	-

Note.- Gage heights for this station, published in previous water-supply papers, are mean daily gage heights.

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Discharge, in second-feet, of Mississippi River at Cape Girardeau, Mo., water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188,000	71,000	64,400	80,800	174,000	259,000	209,000	262,000	205,000	232,000	133,000	86,000
2	197,000	69,700	61,800	82,800	175,000	244,000	200,000	275,000	207,000	227,000	133,000	79,600
3	177,000	84,900	60,500	94,000	188,000	227,000	191,000	302,000	206,000	225,000	127,000	74,200
4	153,000	105,000	59,400	108,000	199,000	211,000	183,000	332,000	200,000	221,000	120,000	71,200
5	134,000	166,000	59,100	119,000	206,000	198,000	180,000	381,000	201,000	216,000	115,000	70,700
6	117,000	199,000	61,400	123,000	222,000	189,000	181,000	414,000	205,000	208,000	114,000	69,200
7	106,000	182,000	63,400	124,000	220,000	188,000	175,000	419,000	212,000	200,000	117,000	67,300
8	96,300	163,000	65,800	140,000	207,000	206,000	169,000	406,000	210,000	189,000	123,000	65,200
9	87,600	151,000	65,200	146,000	198,000	246,000	168,000	375,000	204,000	177,000	126,000	61,900
10	83,800	136,000	61,100	160,000	196,000	282,000	172,000	344,000	216,000	167,000	121,000	59,800
11	83,500	121,000	58,100	172,000	196,000	304,000	179,000	316,000	274,000	157,000	111,000	58,100
12	85,500	111,000	58,000	172,000	191,000	319,000	179,000	296,000	319,000	150,000	102,000	57,200
13	89,200	103,000	59,100	161,000	190,000	322,000	176,000	280,000	329,000	144,000	93,600	57,300
14	95,300	99,200	58,700	181,000	188,000	317,000	174,000	262,000	307,000	141,000	89,500	58,200
15	109,000	94,300	57,500	214,000	186,000	315,000	172,000	256,000	284,000	139,000	88,400	59,000
16	120,000	90,400	55,400	214,000	179,000	308,000	172,000	250,000	275,000	143,000	87,200	57,600
17	120,000	88,100	51,500	236,000	176,000	302,000	175,000	242,000	267,000	157,000	85,500	55,300
18	112,000	85,500	47,300	255,000	186,000	295,000	180,000	232,000	259,000	159,000	83,100	54,600
19	105,000	82,100	45,800	244,000	210,000	288,000	182,000	223,000	262,000	173,000	79,200	55,300
20	98,800	78,000	47,800	224,000	226,000	283,000	181,000	214,000	273,000	186,000	76,100	55,400
21	93,900	75,800	49,400	225,000	233,000	281,000	189,000	207,000	289,000	171,000	75,000	54,100
22	89,600	75,000	50,200	219,000	232,000	278,000	218,000	193,000	287,000	163,000	77,000	52,500
23	82,600	74,600	50,500	198,000	239,000	267,000	235,000	195,000	267,000	154,000	76,000	51,000
24	77,500	73,200	49,200	196,000	266,000	248,000	255,000	188,000	247,000	141,000	73,100	50,500
25	74,400	71,600	46,100	203,000	294,000	236,000	273,000	188,000	234,000	136,000	72,300	52,600
26	73,700	69,700	44,100	205,000	302,000	210,000	277,000	196,000	230,000	143,000	74,800	52,500
27	73,600	67,500	46,400	199,000	297,000	203,000	268,000	213,000	228,000	151,000	80,000	53,100
28	72,000	66,600	48,200	186,000	283,000	209,000	252,000	223,000	233,000	157,000	84,000	53,400
29	72,400	67,900	49,300	173,000	-	222,000	240,000	223,000	239,000	159,000	86,900	52,800
30	70,200	66,800	55,600	167,000	-	227,000	249,000	216,000	240,000	144,000	89,700	51,200
31	70,000	-	76,600	172,000	-	218,000	-	206,000	-	134,000	89,900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,207,900	197,000	70,000	103,500	6,363,000
November	2,988,900	199,000	66,600	99,630	5,928,000
December	1,726,900	76,600	44,100	55,710	3,425,000
Calendar year 1936	42,090,900	317,000	39,100	115,000	83,500,000
January	5,393,600	255,000	80,800	174,000	10,700,000
February	6,059,000	302,000	174,000	216,400	12,020,000
March	7,902,000	322,000	188,000	254,900	15,670,000
April	6,054,000	277,000	168,000	201,800	12,010,000
May	8,329,000	419,000	188,000	268,700	16,520,000
June	7,409,000	329,000	200,000	247,000	14,700,000
July	5,264,000	232,000	134,000	169,800	10,440,000
August	3,003,300	133,000	72,300	96,880	5,957,000
September	1,796,800	86,000	50,500	59,890	3,564,000
Water year 1936-37	59,134,400	419,000	44,100	162,000	117,300,000

Note.- Daily discharge computed from mean daily gage heights, not from the 8 a.m. gage heights published on the preceding page.

Mississippi River at Memphis, Tenn.

Location.- Water-stage recorder, lat. 35°07'37", long. 90°04'25", at Memphis, 50 feet below Harahan Bridge, 1.3 miles below Beale Street gage, 1¼ miles below mouth of Wolf River, 70 miles above mouth of St. Francis River, 164 miles above mouth of White River, and 171 miles above mouth of Arkansas River. Zero of gage is 183.91 feet above mean sea level (general adjustment of 1929), 184.21 feet above mean Gulf level (1912 Mississippi River Commission), and 190.86 feet on Memphis datum (1881 Mississippi River Commission).

Drainage area.- 932,800 square miles (authority, Mississippi River Commission).

Records available.- April 1934 to September 1937. Daily gage heights from Beale Street gage have been published in reports of Mississippi River Commission since November 1871 and in reports of U. S. Weather Bureau December 1890 to August 1932; from staff gage 1,000 feet downstream in reports of U. S. Weather Bureau September 1932 to December 1934; since December 1934 in reports of U. S. Weather Bureau at present site. To relate gage heights obtained at present site to Beale Street gage add 0.3 foot for each 10 feet of stage.

Results of 43 discharge measurements referred to Beale Street gage, made during 1882-1904, and of 61 discharge measurements made during 1933 by Corps of Engineers, U. S. Army, and Mississippi River Commission are contained in reports of the last-named organization.

Extremes.- Maximum discharge during year, 1,980,000 second-feet Feb. 8; maximum gage height, 48.69 feet Feb. 10; minimum discharge, 110,000 second-feet Sept. 27, 29, 30; minimum gage height, 2.39 feet Sept. 27.

1934-37: Maximum discharge, that of Feb. 8, 1937; maximum gage height, that of Feb. 10, 1937; minimum discharge, 79,200 second-feet Aug. 25, 1936 (gage height, -0.01 foot).

Maximum stage known previous to 1937, 46.55 feet Apr. 9, 1913 (Beale Street gage); about 45.2 feet, present site.

Remarks.- Records excellent. Gage-height record collected in cooperation with U. S. Weather Bureau. Ninety six discharge measurements were made during the year.

Gage height at 8 a.m., in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.21	4.60	3.96	9.75	46.24	34.65	20.04	22.63	17.29	16.31	9.15	8.36
2	4.14	4.92	4.00	11.13	46.72	33.45	20.14	23.10	16.76	16.96	9.04	8.59
3	4.76	5.31	4.04	12.64	47.10	32.10	20.00	24.05	16.22	17.73	8.76	8.74
4	6.56	5.87	3.76	14.19	47.53	30.56	19.77	25.43	15.83	18.09	8.26	8.74
5	8.31	6.19	3.25	15.85	47.77	29.00	19.38	27.08	15.64	18.52	7.88	8.64
6	8.62	7.63	3.16	18.22	48.04	27.30	18.68	28.49	15.57	18.33	7.52	7.56
7	8.27	9.69	3.53	20.78	48.22	25.70	17.97	29.62	15.60	17.90	7.38	5.84
8	7.84	12.30	3.59	22.71	48.41	24.14	17.50	30.60	15.89	17.32	7.19	5.75
9	7.23	14.67	3.98	24.43	48.63	22.67	17.08	31.43	16.38	16.07	7.12	6.57
10	6.62	16.00	4.65	26.07	48.69	21.38	16.57	32.21	16.88	14.32	7.09	6.92
11	6.47	16.60	6.04	27.29	48.56	20.70	16.09	32.89	17.16	13.22	7.19	7.20
12	6.52	16.87	8.20	28.32	48.37	20.57	15.66	33.53	16.67	12.81	7.81	7.16
13	6.53	16.92	9.62	29.06	48.05	20.90	15.50	34.21	16.21	12.51	8.51	7.34
14	6.89	16.83	10.58	29.70	47.75	21.41	15.57	34.72	16.70	11.87	8.31	7.35
15	7.07	16.72	11.38	30.37	47.25	21.85	15.75	34.86	17.75	11.23	8.17	7.30
16	7.11	16.54	11.87	30.82	46.71	22.12	16.02	34.86	18.50	10.83	8.11	7.31
17	7.22	16.27	12.08	31.36	45.97	22.17	16.22	34.25	18.68	10.87	7.98	7.20
18	7.11	15.84	12.10	32.32	45.21	22.15	16.43	33.35	18.47	10.96	8.00	6.02
19	6.86	15.19	11.87	33.09	44.35	21.97	16.60	32.25	18.20	11.30	8.07	5.00
20	7.02	14.26	11.34	33.70	43.52	21.72	16.72	31.07	18.03	11.61	8.14	4.40
21	7.36	12.80	10.67	34.83	42.70	21.43	16.80	29.77	17.91	12.63	8.14	4.10
22	7.81	10.44	9.65	36.39	41.69	21.11	16.80	28.23	17.86	13.26	7.40	3.97
23	8.07	8.04	8.82	37.98	40.79	20.93	16.78	26.48	17.90	13.66	6.53	4.04
24	8.02	6.77	8.40	39.56	39.86	21.00	17.34	24.56	18.02	13.67	6.41	4.03
25	7.76	6.21	7.43	41.42	38.92	21.15	18.21	22.72	18.00	13.45	6.32	3.47
26	7.43	5.76	6.53	42.76	37.92	21.17	19.16	21.16	17.66	13.15	6.37	2.98
27	6.80	5.37	6.41	43.75	36.90	20.94	20.20	19.95	17.19	12.81	6.29	2.44
28	6.09	5.04	7.49	44.31	35.83	20.55	21.17	19.08	16.76	12.47	6.28	2.58
29	5.58	4.68	8.24	44.63	-	20.16	21.87	18.48	16.32	11.76	6.95	2.47
30	4.97	4.28	8.47	45.00	-	19.91	22.33	18.11	16.09	10.36	7.77	2.50
31	4.41	-	9.24	45.65	-	19.88	-	17.77	-	9.40	8.08	-

Note.- Gage heights for this station, published in previous water supply papers, are mean daily gage heights.

Discharge, in thousands of second-feet, of Mississippi River at Memphis, Tenn., water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	151	138	261	1,790	980	515	595	422	406	232	219
2	142	156	139	298	1,820	932	518	615	408	422	229	223
3	155	165	139	337	1,880	874	512	653	395	442	221	225
4	188	173	136	379	1,910	815	500	704	384	456	210	223
5	217	182	129	428	1,920	751	485	766	382	464	204	217
6	219	212	132	500	1,940	722	462	819	379	459	196	190
7	212	261	134	579	1,950	639	442	866	382	442	194	162
8	200	327	138	639	1,970	588	428	906	390	419	190	165
9	188	392	145	698	1,950	546	414	944	403	379	190	178
10	178	419	158	755	1,970	512	398	980	417	337	190	186
11	180	430	188	800	1,940	503	384	1,000	419	317	192	190
12	182	439	234	835	1,900	509	373	1,030	406	307	206	190
13	186	439	263	854	1,870	521	371	1,040	398	298	219	194
14	192	436	286	870	1,840	537	373	1,060	414	282	214	194
15	196	430	303	882	1,810	553	382	1,080	442	268	214	192
16	196	422	312	902	1,760	562	390	1,050	462	261	212	192
17	198	414	317	927	1,690	566	398	1,010	464	261	212	186
18	192	398	317	966	1,640	566	403	958	459	265	212	163
19	190	373	307	1,020	1,560	559	411	906	453	275	217	148
20	194	345	293	1,040	1,500	553	414	858	447	288	217	140
21	200	300	275	1,100	1,460	543	417	811	444	310	214	136
22	208	245	252	1,200	1,420	537	417	751	444	324	196	133
23	212	198	236	1,300	1,380	531	419	684	447	334	182	134
24	210	176	223	1,420	1,300	537	442	615	450	334	180	132
25	204	169	202	1,540	1,240	540	467	559	450	330	178	123
26	196	162	186	1,600	1,160	540	497	518	439	324	178	116
27	186	156	188	1,630	1,100	531	524	485	425	315	176	110
28	174	151	208	1,670	1,040	518	553	464	414	305	178	111
29	165	146	223	1,700	-	509	569	450	400	284	192	110
30	156	140	232	1,720	-	503	582	442	395	252	206	110
31	148	-	247	1,760	-	506	-	433	-	236	212	-

Month	Thousands of second-foot-days	Discharge in thousands of second-feet			Run-off in Thousands of acre-feet
		Maximum	Minimum	Mean	
October	5,808	219	142	187.4	11,520
November	8,407	439	140	280.2	16,680
December	6,680	317	129	215.5	13,250
Calendar year 1936	129,796	1,340	80	354.6	257,400
January	30,610	1,760	261	987.4	60,710
February	46,710	1,970	1,040	1,668	92,650
March	18,583	980	503	599.4	36,860
April	13,460	582	371	448.7	26,700
May	24,052	1,080	433	775.9	47,710
June	12,634	464	379	421.1	25,060
July	10,396	464	236	335.4	20,620
August	6,263	232	176	202.0	12,420
September	4,992	225	110	166.4	9,901
Water year 1936-37	188,595	1,970	110	516.7	374,070

Note.- Daily discharge computed from mean daily gage heights, not from 8 a.m. readings published on the preceding page.

Mississippi River near Vicksburg, Miss.

Location.- Water-stage recorder, lat. 32°18'45," long. 90°54'25", in T. 16 N., R. 3 E., at combined highway and railway bridge of Vicksburg Bridge & Terminal Co., 1½ miles below mouth of Yazoo River and 3 miles southwest of Vicksburg. Zero of gage is 46.16 feet above mean sea level.

Drainage area.- 1,144,500 square miles (authority, Mississippi River Commission).

Records available.- April 1930 to September 1937 (prior to June 1931, gage heights only). Daily gage heights from Yazoo Canal gage, 1½ miles upstream, have been published in reports of Mississippi River Commission since November 1871 and in reports of U. S. Weather Bureau from May 1873 to September 1934; from present gage, in reports of U. S. Weather Bureau since September 1934. Gages are at the same datum, but Yazoo Canal gage reads 0.2 foot when present gage reads 0.0 foot, the difference increasing to 2.0 feet at gage height 60.0 feet. Discharge for 1858 and intermittent periods since 1903 contained in reports of Mississippi River Commission.

Extremes.- Maximum discharge during year, 2,080,000 second-feet Feb. 17; maximum gage height, 53.2 feet Feb. 21; minimum discharge, 154,000 second-feet Sept. 30 (gage height, -0.26 foot).

1930-37: Maximum discharge, that of Feb. 17, 1937; maximum gage height, that of Feb. 21, 1937; minimum discharge, 101,000 second-feet Aug. 29, 31, Sept. 1, 2, 1936; minimum gage height, -3.52 feet Aug. 31, 1936.

Maximum recorded gage height (Corps of Engineers, U. S. Army), 56.6 feet, present gage, May 4, 1927. Minimum observed discharge (Corps of Engineers, U. S. Army), 97,000 second-feet Oct. 26, 1895.

Remarks.- Records excellent. One hundred seventy discharge measurements were made during year.

Gage height at 8 a.m., in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.84	5.92	4.35	5.89	45.26	51.85	27.09	22.76	27.57	19.60	12.67	3.53
2	1.48	5.90	3.63	6.77	46.10	51.47	26.61	23.58	25.94	18.90	11.63	4.09
3	2.25	5.66	3.12	7.97	46.51	51.09	26.24	24.21	24.52	18.27	10.37	4.71
4	4.00	5.39	2.58	9.49	47.60	50.65	25.91	24.70	23.20	17.90	9.21	5.12
5	5.75	5.14	2.13	11.34	48.26	50.26	25.74	25.23	21.97	17.83	8.41	5.45
6	6.79	5.03	1.90	13.17	48.73	49.77	25.35	26.00	20.86	18.06	7.86	5.71
7	7.22	5.04	1.92	14.95	49.51	49.24	24.90	26.99	20.25	18.38	7.35	5.89
8	7.66	5.30	1.76	16.75	50.10	48.59	24.40	28.03	20.00	18.63	6.80	5.90
9	8.12	5.95	1.66	18.83	50.60	47.87	23.72	29.04	19.66	18.76	6.26	5.56
10	8.22	7.52	1.84	20.99	50.86	47.00	22.92	29.93	19.17	18.59	5.83	4.71
11	7.94	10.52	2.37	22.99	51.34	46.06	22.09	30.70	18.78	18.16	5.61	3.83
12	7.39	13.26	3.21	24.90	51.66	44.98	21.27	31.45	18.88	17.38	5.43	3.53
13	6.72	15.11	4.05	26.63	51.97	43.72	20.49	32.15	19.18	16.20	5.34	3.78
14	6.33	16.18	4.90	28.06	52.20	42.50	19.78	32.88	19.45	14.88	5.23	4.15
15	7.14	16.75	6.06	29.37	52.48	41.14	19.15	33.53	19.38	13.74	5.27	4.42
16	8.25	16.99	7.55	30.31	52.69	39.80	18.68	34.22	19.16	12.79	5.58	4.56
17	8.63	17.08	8.85	31.19	52.60	38.57	18.32	34.92	19.47	11.98	5.75	4.61
18	8.65	17.09	9.89	32.08	52.70	37.53	18.10	35.54	20.49	11.28	5.71	5.13
19	8.66	17.01	10.66	32.98	52.80	36.53	17.98	36.10	21.53	10.68	5.66	6.00
20	8.70	16.82	11.00	34.08	52.88	35.71	17.96	36.53	22.04	10.24	5.48	6.38
21	8.58	16.51	11.35	35.11	53.22	34.76	17.97	36.88	22.18	10.23	5.32	6.05
22	8.30	16.06	11.33	36.01	53.00	33.87	18.00	37.11	22.16	10.14	5.22	5.16
23	7.91	15.30	11.11	36.97	52.93	32.99	17.98	37.15	22.23	10.30	5.30	4.13
24	7.48	14.44	10.62	37.75	52.82	32.26	18.20	37.02	22.36	10.74	5.39	3.20
25	7.16	12.97	9.96	38.75	52.70	31.43	18.30	36.77	22.38	11.35	5.22	2.43
26	7.02	11.17	9.17	39.67	52.51	30.62	18.34	36.27	22.17	11.90	4.65	1.91
27	6.87	9.23	8.38	40.67	52.40	29.89	18.70	35.50	21.86	12.38	4.05	1.65
28	6.67	7.41	7.62	41.55	52.25	29.22	19.63	34.36	21.45	12.89	3.64	1.34
29	6.35	5.98	6.76	42.51	-	28.67	20.72	32.94	20.96	13.34	3.47	.79
30	6.02	5.13	5.96	43.46	-	28.15	21.75	31.24	20.28	13.51	3.40	.13
31	5.89	-	5.65	44.41	-	27.65	-	29.37	-	13.30	3.55	-

Note.- Gage heights for this station, published in previous water supply papers, are mean daily gage heights.

Discharge, in thousands of second-feet, of Mississippi River near Vicksburg, Miss., water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	170	252	224	264	1,630	1,870	692	642	710	543	377	208
2	180	249	213	283	1,680	1,830	684	660	663	529	352	222
3	194	243	205	308	1,730	1,760	673	676	628	515	328	233
4	224	240	198	338	1,760	1,720	668	686	598	511	306	240
5	254	238	193	377	1,800	1,670	663	699	576	515	286	245
6	266	236	189	417	1,830	1,600	655	721	557	520	273	249
7	271	238	189	461	1,870	1,560	645	751	547	529	266	252
8	279	243	188	511	1,920	1,510	632	781	543	527	258	252
9	284	258	189	566	1,970	1,450	618	818	538	527	251	245
10	283	296	196	628	1,980	1,380	600	853	531	522	242	229
11	277	360	205	686	2,000	1,310	581	879	524	508	238	215
12	266	421	218	740	1,980	1,240	564	903	529	483	234	215
13	254	461	233	790	2,020	1,160	543	927	538	450	231	220
14	260	479	249	841	2,020	1,110	524	948	545	421	233	227
15	275	485	269	885	2,030	1,050	508	969	540	398	238	231
16	290	490	296	921	2,040	1,010	499	993	534	379	242	233
17	296	488	322	945	2,080	981	492	1,010	552	362	245	234
18	296	488	344	969	2,070	951	492	1,040	583	350	245	245
19	296	483	356	996	2,060	924	492	1,060	612	338	245	260
20	296	476	364	1,020	2,060	900	494	1,070	618	332	243	258
21	292	468	367	1,060	2,060	873	497	1,080	620	332	242	249
22	284	454	364	1,090	2,020	850	499	1,080	615	334	240	227
23	279	435	352	1,130	2,020	824	499	1,080	615	340	238	208
24	273	411	342	1,160	2,020	804	504	1,070	615	354	238	201
25	267	379	326	1,200	2,000	787	508	1,040	615	364	234	196
26	266	342	310	1,240	1,960	770	511	1,000	610	375	229	189
27	264	302	296	1,280	1,920	751	524	963	602	386	213	184
28	260	271	283	1,350	1,910	737	552	921	590	396	206	178
29	256	249	271	1,420	-	724	583	867	576	406	203	168
30	252	238	260	1,500	-	713	612	815	559	402	203	156
31	252	-	258	1,560	-	702	-	762	-	394	203	-

Month	Thousands of second-foot-days	Discharge in thousands of second-feet			Run-off in Thousands of acre-feet
		Maximum	Minimum	Mean	
October	8,156	296	170	263.1	16,180
November	10,673	490	236	355.8	21,170
December	8,269	367	188	266.7	16,400
Calendar year 1936	149,207	1,270	101	407.7	296,000
January	26,936	1,560	264	868.9	53,430
February	54,440	2,080	1,630	1,944	108,000
March	35,521	1,870	702	1,146	70,450
April	17,008	692	492	566.9	33,730
May	27,764	1,080	642	895.6	55,070
June	17,483	710	524	582.8	34,680
July	13,342	543	332	430.4	26,460
August	7,782	377	203	251.0	15,440
September	6,669	260	156	222.3	13,230
Water year 1936-37	234,043	2,080	156	641.2	464,200

Note.- Daily discharge computed from mean daily gage heights, not from the 8 a.m. gage heights published on the preceding page.

Mississippi River near New Orleans, La.

Location.- Water-stage recorder, lat. 29°57', long. 90°10', in T. 13 S., R. 10 E. St. Helena meridian, at Huey P. Long Bridge, 5 miles west of New Orleans and 126 miles (revised) above mouth of Mississippi River. Zero of gage is at mean Gulf level, referred to U. S. Coast and Geodetic Survey general adjustment of 1934, and 0.15 foot below mean Gulf level, referred to datum of Corps of Engineers, U. S. Army.

Drainage area.- 1,243,600 square miles (from reports of Mississippi River Commission). Includes all of drainage area above New Orleans, La.

Records available.- November 1934 to September 1937 (gage heights only). Daily gage heights from gage of Corps of Engineers, U. S. Army, 2⅛ miles (revised) downstream, published in reports of Mississippi River Commission since 1871. Daily gage heights from U. S. Weather Bureau gage at foot of Canal Street, 11 miles downstream, May 1873 to December 1922, and those from gage of Corps of Engineers, U. S. Army, 2⅛ miles (revised) downstream, since January 1923 published in reports of U. S. Weather Bureau. Discharge for 1851, 1852, and intermittent periods since 1879 contained in reports of Mississippi River Commission.

Extremes.- Maximum gage height during year, 19.28 feet Mar. 1; minimum, 0.55 foot Dec. 12. 1934-37: Maximum gage height, that of Mar. 1, 1937; minimum, that of Dec. 12, 1936. Maximum gage height observed, 21.3 feet Apr. 25, 1922; minimum, -1.6 feet Dec. 27, 1872. Both maximum and minimum observations were made 2⅛ miles (revised) downstream on gage of Corps of Engineers, U. S. Army, with zero 0.13 foot below mean Gulf level (datum of Corps of Engineers, U. S. Army). This gage reads practically the same as that of the Geological Survey below 19.0 feet and a maximum of 0.10 foot lower above 9 feet.

Remarks.- Records excellent. Gage heights Jan. 29 to Mar. 17, affected by diversions through Bonnet Carre floodway, 22 miles above. Gage heights below about 15.0 feet affected by tide, which caused diurnal fluctuations of stage.

Gage height at 8 a.m., in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.31	1.69	1.96	2.22	15.14	19.24	12.67	8.13	12.28	6.44	3.50	2.40
2	1.42	2.19	2.12	2.23	15.44	19.16	12.23	8.64	11.84	6.36	3.44	2.40
3	1.44	2.49	2.30	1.88	15.74	19.14	12.03	8.78	11.22	6.29	3.30	2.20
4	2.06	2.29	1.77	1.82	16.02	19.10	12.19	9.00	10.75	6.05	2.98	2.06
5	2.51	2.56	1.47	2.42	16.30	19.04	12.00	9.12	10.20	5.80	2.82	1.93
6	2.76	1.82	1.74	2.29	16.61	18.95	11.81	9.31	9.47	5.48	2.55	1.98
7	2.85	1.92	1.11	2.68	16.85	18.82	11.70	9.46	8.81	5.37	1.98	1.98
8	2.96	1.80	1.04	3.21	17.24	18.75	11.61	9.72	8.25	5.30	1.79	2.02
9	2.92	1.68	1.11	3.44	17.55	18.75	11.26	9.97	7.56	5.40	1.88	2.14
10	2.77	1.71	1.06	4.04	17.68	18.66	10.96	10.32	7.00	5.53	1.85	2.30
11	2.58	1.83	1.32	4.53	17.91	18.54	10.56	10.64	6.66	5.65	1.97	2.44
12	2.30	1.84	.83	5.21	18.23	18.43	10.19	10.96	6.42	5.71	2.08	2.38
13	2.00	2.12	1.13	6.18	18.24	18.42	9.80	11.30	6.34	5.65	2.12	2.60
14	1.81	2.29	1.17	7.14	18.42	18.37	9.45	11.63	6.31	5.44	2.40	2.35
15	1.99	2.64	1.28	7.83	18.40	18.37	9.27	11.92	6.35	5.01	2.30	2.28
16	2.11	3.10	1.75	8.36	18.43	18.24	8.92	12.17	6.45	4.56	2.18	2.22
17	1.99	3.12	1.71	9.05	18.60	18.14	8.55	12.38	6.46	4.00	2.13	2.00
18	2.17	3.35	2.13	9.58	18.78	17.76	8.29	12.53	6.44	3.57	2.27	2.30
19	2.24	3.39	1.95	9.97	18.75	17.41	8.00	12.69	6.46	3.33	2.35	2.36
20	2.33	3.45	1.84	10.88	18.99	17.11	7.79	12.80	6.56	2.90	2.19	2.28
21	2.50	3.44	1.83	11.02	18.95	16.67	7.70	12.95	6.71	2.83	1.99	1.98
22	2.60	3.25	1.63	11.41	18.90	16.27	7.66	13.15	6.89	2.75	1.94	1.97
23	2.62	3.16	1.69	11.94	19.00	15.89	7.55	13.23	6.99	2.70	1.98	2.27
24	2.51	2.99	1.60	12.40	19.05	15.71	7.50	13.28	7.07	2.74	1.98	2.46
25	2.30	2.63	1.71	12.90	19.17	15.21	7.47	13.31	7.08	2.66	1.98	2.60
26	2.11	2.19	1.86	13.32	19.21	14.79	7.48	13.34	7.09	2.78	2.13	2.47
27	1.64	1.83	2.09	13.78	19.24	14.55	7.31	13.30	7.03	2.87	2.18	2.51
28	1.42	1.54	2.20	14.15	19.19	13.97	7.25	13.22	6.77	3.03	2.54	2.36
29	1.32	1.42	2.20	14.40	-	13.57	7.47	13.12	6.48	3.14	2.86	2.04
30	1.26	1.95	2.44	14.61	-	13.34	7.56	12.93	6.48	3.26	2.78	2.20
31	1.47	-	2.40	14.85	-	12.90	-	12.63	-	3.46	2.67	-

Note.- Gage heights for this station, published in previous water-supply papers, are mean daily gage heights.

Meramec River near Steelville, Mo.

Location.- Water-stage recorder, lat. 37°59'55", long. 91°21'35", in NE¼ sec. 21, T. 38 N., R. 4 W., at county highway bridge, 400 feet below St. Louis-San Francisco Railway bridge and 2½ miles north of Steelville. Zero of gage is 680.27 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 830 square miles.

Records available.- December 1922 to September 1937.

Average discharge.- 14 years (1923-37), 580 second-feet.

Extremes.- Maximum discharge during year, 14,900 second-feet May 3 (gage height, 14.15 feet); minimum, 107 second-feet Aug. 20 (gage height, 0.65 foot).
1922-37: Maximum discharge, 47,800 second-feet June 26, 1935 (gage height, 23.39 feet); minimum, 74 second-feet July 22, 1934 (gage height, 0.35 foot).
Maximum stage known, 26.5 feet Aug. 20, 1915 (discharge, about 60,000 second-feet).

Remarks.- Records excellent except those for periods of missing gage heights, Oct. 24-29, Nov. 23-26, Dec. 1-7, which were computed on basis of rainfall records and recorded range of stage and are fair.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-10)

0.6	95	3.0	1,100	10.0	8,170
1.0	197	4.0	1,790	12.0	11,000
1.5	340	5.0	2,630	14.0	14,500
2.0	545	6.0	3,600	14.2	14,900
2.5	805	8.0	5,750		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	258	171	145	306	2,280	321	266	5,310	269	200	163	117
2	216	325	150	378	1,160	306	258	4,660	411	194	161	114
3	194	4,410	155	458	833	294	258	13,200	328	192	155	119
4	179	2,120	158	347	724	286	260	4,590	292	188	161	114
5	168	890	161	300	614	283	289	2,280	300	182	155	114
6	163	594	163	272	522	277	350	1,680	294	178	148	112
7	163	445	171	331	489	272	367	1,260	294	176	150	112
8	155	371	181	3,130	531	260	347	1,010	255	176	158	109
9	179	321	171	3,800	1,390	252	324	861	334	176	161	109
10	272	286	163	1,910	1,010	241	309	778	1,490	176	158	112
11	331	260	155	1,040	750	232	289	655	1,100	176	153	114
12	246	238	150	750	620	227	276	750	750	178	145	117
13	205	224	148	635	540	246	274	979	503	174	142	114
14	181	210	145	1,700	476	283	276	805	415	168	137	114
15	163	197	145	8,470	424	309	324	687	381	164	135	114
16	150	192	145	3,720	389	315	315	570	724	157	129	114
17	145	176	145	1,570	357	389	289	484	949	153	129	114
18	142	171	145	1,160	334	750	276	440	687	153	124	112
19	137	163	145	890	315	805	266	407	516	2,410	114	112
20	135	174	145	750	318	750	266	381	567	1,190	109	112
21	137	158	142	650	445	620	340	367	458	517	124	109
22	140	150	140	565	650	498	979	392	353	354	129	112
23	135	148	140	476	604	445	805	498	304	289	132	114
24	137	145	140	428	517	411	697	423	280	258	132	117
25	145	142	140	400	445	392	778	364	260	230	129	117
26	263	140	140	378	396	343	645	337	247	210	129	117
27	252	140	148	343	364	318	546	315	231	197	127	117
28	224	142	205	337	340	306	503	300	224	184	124	119
29	197	142	205	340	-	289	833	292	214	171	119	119
30	192	140	213	594	-	283	4,000	276	204	168	119	117
31	184	-	309	3,010	-	274	-	266	-	166	119	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	5,788	331	135	187	0.225	0.26	11,480
November	13,385	4,410	140	446	.537	.60	26,550
December	5,008	309	140	162	.195	.22	9,930
Calendar year 1936	81,584	4,410	95	223	.269	3.65	161,800
January	39,438	8,470	272	1,272	1.53	1.76	78,220
February	17,837	2,280	315	637	.767	.80	35,360
March	11,277	805	227	364	.439	.51	22,370
April	16,004	4,000	258	533	.642	.72	31,740
May	45,617	13,200	266	1,472	1.77	2.04	90,480
June	13,634	1,490	204	454	.547	.61	27,040
July	9,505	2,410	153	307	.370	.43	18,850
August	4,270	163	109	138	.166	.19	8,470
September	3,427	119	109	114	.137	.15	6,800
Water year 1936-37	185,190	13,200	109	507	.611	8.29	367,300

Meramec River near Eureka, Mo.

Location.- Wire-weight gage, lat. 38°30'20", long. 90°35'30", in SE¼ sec. 32, T. 44 N., R. 4 E., at bridge on U. S. Highway 66, 2 miles east of Eureka. Zero of gage is 406.18 feet above mean sea level (general adjustment of 1929).
Drainage area.- 3,800 square miles.
Records available.- August 1903 to July 1906, October 1921 to September 1937.
Average discharge.- 16 years (1921-37), 2,953 second-feet.
Extremes.- Maximum discharge observed during year, 35,700 second-feet May 6 (gage height, 21.56 feet); minimum, 370 second-feet Sept. 22, 24-26; minimum gage height, 0.40 foot Sept. 25.
1921-37: Maximum discharge observed, 64,000 second-feet Apr. 3, 1927; maximum gage height, 30.89 feet Mar. 14, 1935; minimum discharge, 196 second-feet Aug. 27, 31, Sept. 1, 1936; minimum gage height, 0.33 foot Oct. 2, 3, 1932, former site and datum.
Maximum stage known, 40.2 feet, present site and datum, Aug. 22, 1915 (discharge, about 175,000 second-feet).
Remarks.- Records good. Gage read twice daily.

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

Oct. 1 to Jan. 17				Jan. 18 to Sept. 30			
1.0	542	6.0	6,000	0.4	370	5.0	4,610
1.2	673	7.0	7,500	0.6	483	7.0	7,500
1.5	889	9.0	10,700	0.8	607	9.0	10,700
1.8	1,120	11.0	14,100	1.2	878	12.0	15,900
2.2	1,460	13.0	17,700	1.6	1,180	15.0	21,500
3.0	2,220	15.0	21,500	2.0	1,480	18.0	27,600
4.0	3,290	18.0	27,600	3.0	2,380	21.0	34,300
5.0	4,540			4.0	3,440	22.0	36,800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,290	852	574	3,890	11,600	1,900	1,560	13,100	1,400	1,100	878	483
2	1,380	1,120	574	3,180	12,700	1,810	1,480	21,500	1,640	1,020	843	483
3	1,040	7,350	574	2,850	6,750	1,720	1,480	27,600	1,640	950	843	454
4	815	12,400	574	2,850	4,740	1,640	1,560	32,500	2,380	950	914	454
5	708	14,500	542	3,070	3,660	1,640	2,580	34,500	3,440	914	878	454
6	673	5,700	574	2,220	3,210	1,560	3,780	33,800	2,380	1,990	774	640
7	708	3,530	606	2,740	2,990	1,560	3,780	13,800	2,990	1,330	706	544
8	640	2,850	606	7,660	2,780	1,480	2,990	8,140	2,480	1,020	706	544
9	1,460	2,120	640	17,700	5,410	1,480	2,680	6,300	10,200	950	672	514
10	2,740	1,820	673	18,500	7,820	1,400	2,380	5,000	20,700	878	640	544
11	6,600	1,640	640	15,900	7,200	1,330	2,080	4,250	19,000	843	640	514
12	1,820	1,290	606	6,600	4,490	1,330	1,900	3,780	18,800	950	607	483
13	1,550	1,200	606	4,540	3,550	1,330	1,810	3,780	13,800	950	576	483
14	1,290	1,120	606	7,500	3,210	1,330	2,680	3,780	4,370	878	544	544
15	1,040	1,040	606	18,500	2,780	1,330	2,080	3,660	3,320	806	544	514
16	815	965	606	26,300	2,480	1,400	1,900	3,320	2,880	1,100	514	483
17	815	889	574	27,400	2,280	1,560	2,080	2,990	3,320	950	514	454
18	640	852	574	18,100	2,080	2,480	1,900	2,680	4,740	1,720	640	425
19	640	815	574	6,450	1,900	4,010	1,720	2,480	3,900	1,400	514	425
20	640	779	574	5,130	1,810	5,850	2,280	2,180	3,210	4,870	514	398
21	640	743	574	4,250	2,680	5,550	7,240	1,990	2,680	7,820	483	398
22	640	708	574	3,780	3,210	4,870	13,800	1,990	2,180	3,100	454	370
23	606	708	574	3,440	3,780	3,780	14,100	1,330	1,990	1,990	672	425
24	574	673	574	3,100	3,440	3,100	7,820	1,480	1,720	1,560	1,020	370
25	606	673	542	2,780	2,880	2,680	5,550	1,900	1,640	1,720	774	398
26	708	640	542	2,680	2,480	2,380	5,550	2,180	1,480	1,330	672	398
27	708	606	574	2,480	2,180	2,180	4,610	1,810	1,900	1,180	640	514
28	1,000	606	606	2,380	2,080	1,990	3,660	1,720	1,480	1,020	576	514
29	965	606	1,120	2,280	-	1,810	4,250	1,640	1,250	950	514	454
30	927	574	2,530	2,780	-	1,720	6,750	1,640	1,100	914	514	454
31	927	-	1,920	6,150	-	1,640	-	1,480	-	878	483	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	35,605	6,600	574	1,149	0.302	0.35	70,620
November	69,369	14,500	574	2,312	.608	.68	137,600
December	22,033	2,530	542	711	.187	.22	43,700
Calendar year 1936	422,241	14,500	196	1,154	.304	4.15	837,500
January	237,180	27,400	2,220	7,651	2.01	2.32	470,400
February	116,170	12,700	1,810	4,149	1.09	1.14	230,400
March	69,840	5,850	1,330	2,253	.593	.68	138,500
April	118,030	14,100	1,480	3,934	1.04	1.16	234,100
May	248,300	34,500	1,330	8,010	2.11	2.43	492,600
June	144,010	20,700	1,100	4,800	1.26	1.41	285,600
July	48,033	7,820	808	1,549	.408	.47	95,270
August	20,263	1,020	454	654	.172	.20	40,190
September	14,132	640	370	471	.124	.14	28,030
Water year 1936-37	1,142,965	34,500	370	3,131	.824	11.20	2,267,000

Bourbeuse River at Union, Mo.

Location.- Wire-weight gage, lat. 38°26'45", long. 90°59'30", in SW¼ sec. 26, T. 43 N., R. 1 W., at bridge on U. S. Highway 50, 800 feet above Flat Creek and half a mile east of Union. Zero of gage is 491.58 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 767 square miles.

Records available.- June 1921 to September 1937.

Average discharge.- 16 years, 648 second-feet.

Extremes.- Maximum discharge during year, 14,500 second-feet June 12 (gage height, 15.42 feet); minimum discharge, 26 second-feet Sept. 28, 30; minimum gage height, 0.28 foot Sept. 28.

1921-37: Maximum discharge, 22,500 second-feet Apr. 3, 1927 (gage height, 19.10 feet); minimum discharge, 14 second-feet Aug. 31, Sept. 1, 1936 (gage height, 0.22 foot).

Maximum stage known, 25.5 feet Aug. 22, 1915, from floodmark (discharge, about 50,000 second-feet).

Remarks.- Records good except those for days of rapidly changing stage, which are poor. Gage read once daily below and twice daily above gage height 8.0 feet. Gage height records collected in cooperation with U. S. Weather Bureau.

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

0.2	22	1.0	112	3.0	930	9.0	6,400
0.4	34	1.5	238	4.0	1,520	13.0	11,200
0.6	54	2.0	432	5.0	2,290	15.0	13,900
0.8	79	2.5	670	7.0	4,250	16.0	15,400

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	128	61	1,150	5,740	254	194	2,290	141	108	105	37
2	345	194	60	1,150	2,960	238	180	4,870	144	101	88	37
3	254	1,210	61	773	1,150	208	175	7,340	170	94	307	34
4	168	6,070	59	1,590	721	208	165	12,000	548	91	180	38
5	132	5,550	58	930	572	208	271	11,400	645	86	112	39
6	108	877	64	548	478	194	326	3,050	645	85	85	36
7	98	525	66	572	388	208	271	1,660	721	86	78	33
8	79	367	64	3,650	367	208	254	1,100	1,040	76	107	33
9	144	289	62	7,340	1,520	194	238	773	3,450	71	85	31
10	96	238	65	9,380	5,200	180	223	620	8,300	69	71	38
11	85	208	65	3,750	1,590	165	194	525	12,900	66	64	44
12	175	180	72	1,150	930	158	180	455	11,100	69	59	40
13	128	158	101	721	645	155	165	388	1,730	64	56	35
14	105	141	91	773	525	155	208	388	984	61	54	33
15	90	128	88	5,630	478	155	223	670	721	59	52	31
16	88	120	79	9,260	388	165	432	478	525	55	50	32
17	92	116	74	6,400	346	194	432	346	455	91	52	30
18	82	108	69	1,460	307	289	207	289	825	66	52	30
19	71	98	69	1,040	271	877	254	254	670	238	51	29
20	65	92	69	877	254	1,940	238	223	596	3,350	51	29
21	59	88	66	721	525	1,870	1,940	194	388	596	50	28
22	59	82	66	670	1,520	1,460	5,090	238	307	289	50	28
23	55	79	64	620	1,150	825	3,550	238	346	208	47	28
24	52	76	62	525	773	620	1,460	254	271	180	44	28
25	50	69	64	478	525	478	1,390	367	208	208	43	29
26	54	70	64	388	432	432	1,520	307	180	155	43	28
27	54	66	76	326	346	367	930	207	238	208	43	27
28	52	66	88	326	289	307	645	307	153	148	45	26
29	48	65	2,960	307	-	271	548	254	132	105	42	27
30	56	64	1,270	346	-	238	645	194	120	85	45	26
31	61	-	877	1,100	-	208	-	162	-	76	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off: Inches	Run-off: Acre-feet
October	3,676	670	48	119	0.155	0.18	7,290
November	15,522	6,070	64	517	.674	.75	30,790
December	7,054	2,960	58	228	.297	.34	13,990
Calendar year 1936	69,798	6,180	14	191	.249	3.38	138,400
January	63,951	9,380	307	2,063	2.69	3.10	126,800
February	30,390	5,740	254	1,085	1.41	1.47	60,280
March	13,429	1,940	155	433	.565	.65	26,640
April	22,648	5,090	165	755	.984	1.10	44,920
May	51,741	12,000	162	1,669	2.18	2.51	102,600
June	48,653	12,900	120	1,622	2.11	2.35	96,500
July	7,244	3,350	55	234	.305	.35	14,370
August	2,259	307	42	72.9	.095	.11	4,480
September	964	44	26	32.1	.042	.05	1,910
Water year 1936-37	267,531	12,900	26	733	.956	12.96	530,600

Big River at Byrnesville, Mo.

Location.- Wire-weight gage, lat. 38°21'45", long. 90°39'05", in SE¼ sec. 12, T. 42 N., R. 3 E., at county highway bridge 200 feet below dam and mill at Byrnesville. Zero of gage is 433.77 feet above mean sea level (general adjustment of 1929).

Drainage area.- 892 square miles.

Records available.- May 1922 to September 1937.

Average discharge.- 15 years, 789 second-feet.

Extremes.- Maximum discharge during year, 17,300 second-feet Jan. 16 (gage height, 20.06 feet, from graph based on gage readings); minimum discharge observed, 63 second-feet Sept. 24 (gage height, 1.96 feet).

1922-37: Maximum discharge, 31,700 second-feet (revised) Mar. 12, 1935 (gage height, 24.65 feet), from rating curve extended above 25,000 second-feet; minimum discharge, 25 second-feet Aug. 30, 1936; minimum gage height, 1.50 feet Aug. 14, 1934.

Maximum stage known, 30.2 feet in August 1915, from floodmarks (discharge, about 80,000 second-feet).

Remarks.- Records good except those for periods of ice effect, Jan. 21-28, which are computed on basis of gage heights and weather records and are poor. Gage read twice daily.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 22 to Sept. 23)

1.9	56	5.0	715	15.0	7,570
2.0	67	7.0	1,700	16.0	8,800
2.5	130	9.0	2,790	17.0	10,300
3.0	206	11.0	4,020	18.0	12,200
4.0	418	13.0	5,580	19.0	14,400
				21.0	19,900

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	166	234	158	1,200	4,620	418	369	7,680	303	234	215	104
2	130	1,040	158	1,200	2,230	418	346	5,750	282	224	198	104
3	124	3,670	151	1,150	1,400	393	346	10,500	324	215	215	104
4	110	6,460	144	1,050	1,150	393	527	12,200	850	215	189	104
5	104	2,500	144	715	950	369	1,500	4,400	1,850	262	181	98
6	91	1,170	158	527	800	369	2,550	3,890	1,550	1,000	181	124
7	104	755	166	1,550	715	369	2,110	3,150	1,650	586	166	166
8	117	586	173	6,650	1,500	346	1,300	1,950	900	369	166	144
9	546	527	173	9,350	2,330	346	1,000	1,450	6,620	324	158	144
10	2,590	418	173	4,020	1,900	324	800	1,300	8,270	234	151	130
11	1,940	346	158	1,950	1,300	303	649	1,050	7,020	215	144	117
12	755	324	158	1,350	950	303	586	950	2,450	418	144	130
13	527	303	158	1,050	850	303	556	1,350	1,200	324	137	144
14	369	282	151	4,440	715	346	682	900	950	243	130	151
15	303	262	151	10,300	616	369	586	715	755	198	110	124
16	243	243	151	14,600	586	393	527	649	1,000	198	117	110
17	234	224	144	3,620	499	499	471	616	2,160	262	262	110
18	189	224	151	1,950	499	1,050	418	527	1,900	1,650	130	98
19	173	215	151	1,550	471	2,000	418	499	1,050	900	104	79
20	166	198	144	1,150	527	1,700	783	444	682	5,430	104	79
21	158	181	151	1,000	1,000	1,600	4,730	418	616	2,090	104	79
22	158	181	158	900	950	1,200	7,930	393	527	900	110	85
23	158	173	158	800	755	900	3,700	418	418	616	556	79
24	166	181	151	715	616	755	1,900	418	369	616	369	65
25	173	173	151	682	556	682	1,500	393	346	586	262	85
26	189	166	151	649	499	586	1,400	499	346	369	215	144
27	324	158	158	616	471	527	1,050	346	715	324	173	144
28	471	158	151	586	444	471	950	393	324	282	151	124
29	346	151	166	682	-	444	2,000	369	282	262	130	124
30	303	144	198	1,050	-	418	3,330	303	262	243	117	117
31	262	-	616	3,740	-	393	-	303	-	234	110	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	11,689	2,590	91	377	0.423	0.49	23,180
November	21,647	6,460	144	722	.809	.90	42,940
December	5,324	616	144	172	.193	.22	10,560
Calendar year 1936	107,079	6,460	25	293	.328	4.45	212,400
January	80,792	14,600	527	2,606	2.92	3.37	160,200
February	29,899	4,620	444	1,068	1.20	1.25	59,300
March	18,987	2,000	303	612	.686	.79	37,660
April	45,014	7,930	346	1,500	1.68	1.87	89,280
May	64,223	12,200	303	2,072	2.32	2.68	127,400
June	45,971	8,270	262	1,532	1.72	1.92	91,180
July	20,023	5,430	198	646	.724	.83	39,720
August	5,499	556	104	177	.198	.23	10,910
September	3,410	166	65	114	.128	.14	6,760
Water year 1936-37	352,478	14,600	65	966	1.08	14.69	699,100

Castor River at Zalma, Mo.

Location.- Wire-weight gage, lat. 37°08'45", long. 90°04'30", in SE¼ sec. 29, T. 29 N., R. 9 E., at bridge on State Highway 51, in Zalma. Zero of gage is 350.38 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 395 square miles.

Records available.- September 1921 to September 1937.

Average discharge.- 16 years, 511 second-feet.

Extremes.- Maximum discharge during year, 40,400 second-feet Jan. 14 (gage height, 27.67 feet), from rating curve extended above 25,000 second-feet; minimum, 21 second-feet Aug. 17 (gage height, 1.27 feet).

1921-37: Maximum discharge, that of Jan. 14, 1937; maximum gage height, 28.20 feet Mar. 11, 1935; minimum discharge, 16 second-feet Aug. 31, 1936 (gage height, 0.81 foot).

Remarks.- Records fair. Discharge for period of missing gage heights, Apr. 12-15, computed on basis of records of nearby stations. Gage read once daily below and twice daily above 10.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	189	94	3,600	3,950	272	195	1,070	95	82	50	26
2	71	203	94	1,540	1,990	256	160	2,340	90	66	45	26
3	71	1,340	94	1,290	1,290	256	181	4,760	95	50	43	39
4	64	2,490	86	884	1,030	240	637	4,360	90	68	43	37
5	60	986	86	621	815	240	2,500	2,280	110	77	45	77
6	60	625	217	500	815	225	3,020	1,520	134	100	46	95
7	68	495	309	991	642	210	1,640	956	122	105	46	82
8	86	407	262	4,560	621	195	1,090	861	128	82	32	77
9	154	341	247	4,630	1,140	195	1,090	684	160	72	31	72
10	189	309	232	3,950	1,220	181	884	580	272	60	29	56
11	161	277	232	1,970	793	174	705	481	425	46	24	90
12	130	247	217	1,240	621	167	540	443	322	53	23	86
13	113	232	203	1,760	580	160	425	425	225	43	31	82
14	103	232	189	20,800	600	167	356	373	210	45	24	72
15	98	203	189	24,800	540	153	322	288	560	42	22	46
16	94	175	175	9,280	481	153	305	288	339	42	22	56
17	82	161	161	4,040	425	153	339	272	305	68	21	50
18	82	161	154	1,580	407	134	305	225	272	105	26	40
19	74	148	154	1,110	390	128	540	225	240	210	27	45
20	78	136	154	1,010	407	153	339	225	210	122	22	38
21	71	130	142	3,100	407	128	580	195	210	100	22	40
22	82	118	142	4,430	390	167	793	195	167	100	22	39
23	175	118	130	3,010	373	160	982	160	146	95	105	35
24	189	118	118	1,810	356	181	749	174	122	95	50	36
25	203	108	124	2,300	322	195	1,190	160	105	100	46	167
26	232	103	118	1,880	305	225	1,090	146	105	64	42	95
27	373	98	118	1,420	288	225	749	110	100	64	31	122
28	325	103	148	1,220	288	225	621	100	95	60	27	105
29	262	98	142	1,350	-	210	540	100	95	60	27	82
30	232	98	807	1,720	-	210	560	122	90	60	22	72
31	203	-	5,440	3,400	-	195	-	100	-	50	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	4,259	373	60	137	0.347	0.40	8,450
November	10,449	2,490	98	348	.881	.98	20,730
December	10,978	5,440	86	354	.896	1.03	21,770
Calendar year 1936	66,700	5,440	16	182	.461	6.26	132,300
January	115,796	24,800	500	3,735	9.46	10.91	229,700
February	21,486	3,950	288	767	1.94	2.02	42,620
March	5,933	272	128	191	.484	.56	11,770
April	23,427	3,020	160	781	1.98	2.21	46,470
May	24,218	4,760	100	781	1.98	2.28	48,040
June	5,639	560	90	188	.476	.53	11,180
July	2,588	210	42	77.0	.195	.22	4,740
August	1,072	105	21	34.6	.088	.10	2,130
September	1,985	167	26	66.2	.168	.19	3,940
Water year 1936-37	227,630	24,800	21	624	1.58	21.43	451,500

South Fork of Obion River near Greenfield, Tenn.

Location.- Staff gage, lat. 36°07', long. 88°49', at bridge on State Highway 43, 2½ miles south of Greenfield, Weakley County, and 10 miles above confluence with Middle Fork.

Drainage area.- 431 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge during year, 25,600 second-feet on night of Jan. 21-22 (gage height, 17.82 feet, from floodmarks); minimum, 94 second-feet Oct. 22; minimum gage height, 2.08 feet Aug. 15-20.
1929-37: Maximum discharge, that of Jan. 21-22, 1937; minimum discharge, 94 second-feet Aug. 28 to Sept. 1, Oct. 22, 1936; minimum gage height, 1.5 feet several days in August and September 1930.

Remarks.- Records fair. Discharge Jan. 17-27 computed from stage graph constructed on basis of seven gage readings. Discharge July 11, 12, 14, 15, estimated. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	101	114	1,270	783	239	197	1,790	110	124	105	105
2	105	101	114	2,100	543	225	183	2,340	284	119	105	114
3	97	1,410	114	1,590	404	225	163	1,910	960	114	105	329
4	97	847	114	895	359	211	225	2,550	359	140	105	151
5	97	495	114	559	314	211	687	2,550	284	239	101	847
6	101	374	960	284	299	225	404	1,240	344	134	254	1,200
7	197	170	1,110	269	314	225	254	495	197	124	114	1,080
8	197	145	591	197	389	284	239	299	129	124	105	404
9	404	134	284	434	783	225	225	225	124	119	105	197
10	284	134	299	2,030	404	211	197	197	2,940	114	101	419
11	140	134	284	1,440	314	211	183	183	2,550	110	97	1,060
12	101	129	197	1,910	254	197	170	164	2,250	105	97	314
13	101	124	170	1,910	344	284	170	284	943	129	124	197
14	101	124	157	1,790	879	1,410	269	359	687	110	97	140
15	101	124	151	3,240	434	1,030	197	225	434	105	97	124
16	101	124	145	2,800	314	404	164	170	239	105	97	170
17	183	124	145	4,860	254	329	157	157	254	299	97	164
18	105	122	170	9,740	254	299	151	145	284	511	97	124
19	97	119	211	12,400	254	284	183	145	419	314	97	114
20	97	114	314	12,400	254	575	170	134	284	183	97	110
21	97	110	211	18,400	404	299	183	134	170	119	97	110
22	97	110	183	25,000	314	254	211	124	157	114	197	105
23	101	110	170	18,400	284	225	170	314	145	105	449	105
24	101	110	170	14,800	269	751	1,250	170	134	105	359	105
25	101	110	157	12,900	254	879	1,200	119	129	105	124	329
26	110	110	157	11,500	225	479	1,160	114	124	211	114	269
27	110	110	225	9,300	225	284	495	114	124	114	114	129
28	105	110	751	4,860	239	225	464	114	140	105	105	119
29	105	110	329	1,590	-	211	389	114	124	105	105	114
30	101	110	511	799	-	211	2,030	114	124	105	105	114
31	101	-	2,170	1,790	-	211	-	114	-	105	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,940	404	97	127	0.295	0.34
November	6,249	1,410	101	208	.483	.54
December	10,792	2,170	114	348	.807	.93
Calendar year 1936	106,179	6,800	94	290	.673	9.17
January	181,457	25,000	197	5,853	13.6	15.68
February	10,361	879	225	370	.858	.89
March	11,333	1,410	197	366	.849	.98
April	12,160	2,030	151	405	.940	1.05
May	17,107	2,550	114	552	1.28	1.48
June	15,446	2,940	110	515	1.19	1.33
July	4,615	511	105	149	.346	.40
August	4,071	449	97	131	.304	.35
September	8,862	1,200	105	295	.684	.76
Water year 1936-37	286,393	25,000	97	785	1.82	24.73

Obion River at Obion, Tenn.

Location.- Chain gage, lat. 36°15', long. 89°12', at toll bridge on State Highway 3, a quarter of a mile south of Obion, Obion County, and 7 miles below mouth of North Fork. Zero of gage is 261.23 feet above mean Gulf level.

Drainage area.- 1,880 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge during year, 99,500 second-feet Jan. 24 (gage height, 25.4 feet, from floodmarks); minimum, 283 second-feet Oct. 6 (gage height, 0.28 foot). The low daily discharge Feb. 4, 15 second-feet, due to backwater from Mississippi River; reversed flow of 57 second-feet was measured by current meter on that date.
1929-37: Maximum discharge, that of Jan. 24, 1937; minimum, 232 second-feet Sept. 1, 1936 (gage height, -0.04 foot).

Remarks.- Gage read twice daily except Oct. 14, 28, Dec. 8-10, Jan. 21-24, 26, 27, Sept. 19. Gage heights Jan. 21-27 computed from graph based on seven readings and floodmarks. Stage-discharge relation affected by backwater from Mississippi River Jan. 27 to Mar. 11, May 7-22; discharge determined from graph based on 26 discharge measurements and comparative hydrographs. Discharges Oct. 14, 28, Dec. 8-10, Sept. 19, determined from hydrographic comparison with sum of Obion River tributaries. Records fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	328	347	368	2,430	6,660	770	741	3,380	513	490	389	368
2	337	347	368	2,650	4,340	760	713	9,750	524	444	378	411
3	318	1,450	368	3,130	1,100	760	698	14,000	613	411	368	575
4	300	2,310	378	4,100	*15	760	967	15,300	792	478	357	650
5	292	2,370	389	4,600	750	750	1,770	14,900	1,010	727	378	713
6	283	2,430	1,140	4,600	615	750	2,060	12,300	1,570	767	411	727
7	433	2,470	2,300	4,100	555	740	2,150	8,150	1,930	805	490	860
8	805	2,470	2,700	3,640	345	740	2,150	3,910	1,850	767	524	1,010
9	767	2,370	2,850	3,540	1,180	770	2,060	2,720	1,570	667	535	1,060
10	805	2,160	2,900	3,640	2,160	780	1,820	2,000	2,620	613	444	1,080
11	741	1,330	2,930	4,330	1,810	760	1,330	1,610	3,190	535	400	1,260
12	667	754	2,840	7,010	2,280	754	947	1,190	8,150	513	433	1,770
13	535	535	2,760	8,150	3,400	754	905	1,030	12,300	513	594	1,890
14	446	444	2,560	8,150	2,760	860	780	927	10,600	478	613	1,680
15	357	422	2,310	7,750	3,560	1,160	767	891	8,150	478	613	1,160
16	347	389	1,890	7,750	3,880	1,870	767	831	6,640	456	594	780
17	337	378	927	10,200	3,550	2,020	754	767	4,600	594	467	575
18	378	368	698	20,100	2,950	1,980	713	698	3,640	683	411	513
19	411	357	767	32,200	2,480	1,930	713	632	3,030	967	378	484
20	389	357	989	39,300	1,900	2,160	713	613	2,590	1,290	368	456
21	357	357	1,080	49,400	2,100	2,210	713	594	2,330	1,360	357	422
22	328	357	1,330	73,500	2,200	2,160	713	613	2,070	987	357	400
23	318	357	1,010	95,100	1,460	1,850	727	594	1,450	727	502	389
24	318	368	831	99,500	1,150	1,570	860	555	831	535	767	378
25	318	357	727	90,700	1,000	1,570	1,450	632	594	467	860	411
26	411	357	667	77,100	900	1,740	2,020	613	524	433	875	478
27	444	368	667	60,200	830	1,850	2,110	575	490	444	683	613
28	422	368	792	42,200	770	1,740	2,110	555	490	502	513	698
29	400	368	967	28,000	-	1,400	2,090	524	513	467	433	613
30	368	368	1,290	17,600	-	947	2,800	513	513	422	389	513
31	357	-	2,310	11,100	-	805	-	502	-	400	378	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	13,317	805	283	430	0.229	0.26
November	27,683	2,470	347	923	.491	.55
December	44,023	2,930	368	1,420	.755	.87
Calendar year 1936	324,903	6,250	232	888	.472	6.42
January	825,770	99,500	2,430	26,640	14.2	16.37
February	56,700	6,660	15	2,025	1.08	1.12
March	39,670	2,210	740	1,280	.681	.79
April	39,011	2,800	698	1,300	.691	.77
May	101,869	15,300	502	3,286	1.75	2.02
June	85,687	12,300	490	2,856	1.52	1.70
July	19,420	1,360	400	626	.333	.38
August	15,259	875	357	492	.262	.30
September	22,937	1,890	368	765	.407	.45
Water year 1936-37	1,291,346	99,500	15	3,538	1.88	25.58

*Due to backwater from Mississippi River.

Rutherford Fork of Obion River near Bradford, Tenn.

Location.- Chain gage, lat. 36°04', long. 88°54', at bridge on county road 2 miles below relocated State Highway 54, 5½ miles southwest of Bradford, Gibson County, and 17 miles above confluence with South Fork.

Drainage area.- 190 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 9,730 second-feet Jan. 22 (gage height, 20.06 feet); minimum, 19 second-feet Oct. 5; minimum gage height, 0.68 foot July 16.
1929-37: Maximum discharge observed, that of Jan. 22, 1937; minimum discharge, 13 second-feet several days during October 1931 and August 1934; minimum gage height, that of July 16, 1937.

Remarks.- Records poor. Gage read twice daily except during July 23-25, discharge for which period was determined by hydrographic comparison.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	21	26	325	305	58	63	1,380	29	28	25	35
2	20	21	26	1,790	216	54	58	2,620	197	25	23	34
3	20	2,730	26	572	171	52	56	933	305	23	23	405
4	20	509	26	285	163	49	72	467	163	572	23	113
5	20	140	26	163	148	49	148	305	101	325	33	824
6	20	89	1,500	78	133	47	113	225	101	163	26	148
7	67	55	265	78	133	49	84	163	60	126	23	56
8	95	40	155	67	140	78	72	140	47	235	22	36
9	84	36	78	107	325	63	63	89	40	40	25	28
10	63	33	107	782	163	47	56	78	6,140	36	23	325
11	32	30	78	425	113	45	52	72	1,520	34	22	1,080
12	25	28	64	1,410	101	55	48	65	345	33	60	446
13	23	28	52	656	148	101	49	63	126	33	95	95
14	21	28	41	614	305	551	67	206	84	26	25	52
15	21	28	38	2,290	206	305	62	133	845	23	24	38
16	28	26	35	978	133	188	49	78	101	21	25	67
17	26	26	33	2,580	113	140	47	63	140	95	25	50
18	26	26	72	7,460	107	120	45	55	89	345	24	43
19	23	25	155	6,260	120	120	41	52	107	572	23	35
20	22	25	95	4,440	113	133	41	46	89	126	23	28
21	21	25	65	6,860	171	107	44	43	63	101	22	25
22	22	25	47	9,210	107	95	43	40	47	78	55	23
23	21	24	42	7,460	84	84	47	84	60	35	305	22
24	21	25	40	8,060	72	385	1,180	46	40	29	89	21
25	21	25	38	7,460	67	245	488	38	35	70	37	140
26	22	25	36	5,540	65	171	365	35	32	140	36	113
27	25	25	40	889	63	113	89	32	30	40	29	50
28	23	26	140	467	60	84	64	30	113	32	27	33
29	22	26	101	345	-	72	54	29	45	29	25	30
30	21	26	155	265	-	67	2,850	28	30	27	22	27
31	21	-	1,100	385	-	66	-	28	-	25	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	918	95	20	29.6	0.156	0.18
November	4,196	2,730	21	140	.737	.82
December	4,702	1,500	26	152	.800	.92
Calendar year 1936	50,077	5,720	19	137	.721	9.79
January	78,301	9,210	67	2,526	13.3	15.33
February	4,045	325	60	144	.758	.79
March	5,793	551	45	122	.642	.74
April	6,510	2,850	41	217	1.14	1.27
May	7,666	2,620	28	247	1.30	1.50
June	11,124	6,140	29	371	1.95	2.18
July	5,497	572	21	112	.589	.68
August	1,258	305	22	40.6	.214	.25
September	4,422	1,080	21	147	.774	.86
Water year 1936-37	130,422	9,210	20	357	1.88	25.52

North Fork of Obion River near Union City, Tenn.

Location.- Staff gage, lat. 36°24', long. 89°00', at bridge on State Highway 22, 4½ miles southeast of Union City, Obion County, and 9 miles above confluence with Obion River.

Drainage area.- 490 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge during year, 49,200 second-feet Jan. 22 (gage height, 22.0 feet, from floodmarks); minimum, 97 second-feet on many days; minimum gage height, 4.6 feet Oct. 1-7, 13-16, 18-25, 29-31, Nov. 1, 2.
1929-37: Maximum discharge, that of Jan. 22, 1937; minimum, 85 second-feet Aug. 10, 1931; minimum gage height, 3.4 feet Aug. 27, Sept. 10, 1931.

Remarks.- Records fair. Discharge for Jan. 20-26 computed from stage graph constructed on basis of four gage readings and floodmarks; discharge for period of missing gage heights, Aug. 10-21, determined by hydrographic comparison. Gage read once daily except as noted above.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	97	125	920	1,530	201	212	3,120	179	135	106	97
2	97	97	125	755	1,020	201	201	6,300	179	135	106	135
3	97	2,620	125	483	636	201	201	6,040	179	157	106	125
4	97	995	125	314	391	201	920	3,960	314	115	106	115
5	97	715	125	223	314	201	1,420	2,120	553	125	106	115
6	97	430	824	201	290	201	847	1,420	417	106	168	115
7	97	314	2,420	870	278	212	469	636	256	106	157	106
8	106	157	870	636	1,460	201	365	339	234	106	146	106
9	212	135	553	945	824	201	302	256	201	106	115	106
10	157	135	314	3,030	601	201	278	245	6,300	106	113	106
11	106	125	256	2,620	553	201	256	234	6,040	106	110	125
12	102	125	234	1,920	302	201	256	212	895	106	110	106
13	97	125	190	755	290	201	256	201	675	106	125	106
14	97	115	179	655	895	326	256	201	456	106	110	106
15	97	125	157	3,030	525	290	278	190	223	106	110	106
16	97	125	157	1,920	378	302	267	190	212	106	110	106
17	106	125	157	3,530	314	302	245	179	190	115	110	106
18	97	125	168	11,600	290	302	234	179	201	115	110	106
19	97	125	234	14,000	278	302	234	234	190	106	110	106
20	97	125	190	13,100	278	1,380	234	223	525	106	110	106
21	97	125	157	16,400	256	601	234	201	256	106	115	106
22	97	125	146	44,300	223	378	234	190	190	106	125	106
23	97	125	146	30,200	212	267	234	179	168	106	125	106
24	97	125	146	14,900	201	267	1,180	179	212	106	115	106
25	97	125	146	12,700	201	267	895	179	179	106	106	106
26	135	125	135	10,800	201	245	234	179	157	106	97	190
27	125	125	135	9,570	201	234	212	179	146	106	97	157
28	106	125	1,700	3,960	201	234	179	179	135	106	97	135
29	97	125	847	1,180	-	234	179	179	135	97	97	125
30	97	125	430	824	-	234	1,460	179	135	97	97	115
31	97	-	2,420	2,550	-	223	-	179	-	97	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,289	212	97	106	0.216	0.25
November	8,185	2,620	97	273	.557	.62
December	13,936	2,420	125	450	.918	1.06
Calendar year 1936	83,449	2,620	96	228	.465	6.34
January	208,891	44,300	201	6,738	13.8	15.91
February	13,143	1,530	201	469	.957	1.00
March	9,012	1,380	201	291	.594	.68
April	12,772	1,460	179	426	.869	.97
May	28,481	6,300	179	919	1.88	2.17
June	20,132	6,300	135	671	1.37	1.53
July	3,414	157	97	110	.224	.26
August	3,512	168	97	113	.231	.27
September	3,457	190	97	115	.235	.26
Water year 1936-37	328,224	44,300	97	899	1.83	24.98

South Fork of Forked Deer River at Jackson, Tenn.

Location.- Chain gage, lat. 35°36', long. 88°49', at bridge on State Highway 5, 1 mile south of Jackson, Madison County. Zero of gage is 331.14 feet above mean Gulf level.

Drainage area.- 574 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 14,800 second-feet Jan. 23 (gage height, 19.02 feet); minimum, 96 second-feet Aug. 4, 19-21; minimum gage height, 2.58 feet Apr. 19, 23.

1929-37: Maximum discharge observed, about 35,800 second-feet Jan. 21, 1935 (gage height, 22.66 feet); minimum, 73 second-feet July 1, 1936; minimum gage height, 1.58 feet July 9, 1929.

Remarks.- Records fair. Gage read twice daily except on Aug. 22, discharge for which was determined by hydrographic comparison.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 5 to Dec. 6, May 17 to June 9, June 18 to July 3)

Oct. 1 to Feb. 14, July 5 to Sept. 30				Feb. 15 to July 4			
2.7	84	9.0	1,720	1.9	171	10.0	2,070
3.0	122	11.0	2,450	2.5	225	12.0	2,880
4.0	290	13.0	3,400	3.0	275	15.0	5,050
5.0	525	15.0	5,050	4.0	395		
6.0	785	17.0	8,300	6.0	785		
7.0	1,070	19.0	14,800	8.0	1,380		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	156	156	1,160	925	354	285	4,460	189	171	102	180
2	116	156	164	3,940	600	341	285	4,750	235	171	102	451
3	109	1,450	180	2,410	550	329	275	4,370	306	171	102	550
4	109	2,370	172	2,040	500	329	317	3,020	410	2,450	96	333
5	109	1,160	164	2,110	475	381	457	1,790	329	2,880	223	242
6	109	758	954	1,130	451	354	367	954	285	1,320	142	188
7	379	451	1,510	731	678	341	317	524	245	525	116	172
8	841	356	575	550	575	660	317	441	235	290	116	164
9	427	251	356	626	1,510	410	295	381	255	214	109	164
10	290	223	403	2,000	575	354	275	341	2,490	180	172	403
11	142	206	475	1,960	427	329	275	317	1,720	164	128	270
12	128	197	356	2,530	403	317	255	317	524	149	102	164
13	122	188	270	2,610	427	354	255	1,410	341	156	116	142
14	122	180	270	1,900	1,480	1,410	265	1,130	306	135	109	135
15	116	172	251	4,370	638	617	255	473	560	128	109	135
16	475	164	242	3,650	473	410	245	367	542	128	128	172
17	270	164	242	5,050	473	381	245	329	410	954	172	172
18	232	172	379	7,080	425	381	235	295	295	1,070	109	135
19	172	164	525	8,300	410	367	235	317	295	1,320	102	135
20	164	164	333	9,550	395	341	235	285	306	925	96	135
21	156	164	251	12,800	1,410	306	255	265	255	652	96	128
22	156	164	242	14,400	597	295	265	245	329	270	160	122
23	156	164	232	14,800	457	295	235	245	235	197	251	122
24	156	180	232	13,200	457	2,000	1,350	235	225	172	1,160	116
25	156	172	223	11,400	395	758	983	225	216	164	813	142
26	206	164	214	6,080	341	410	785	225	207	149	403	142
27	188	164	333	4,370	354	354	395	216	198	128	242	122
28	172	164	1,190	2,650	395	329	329	198	235	122	223	116
29	164	164	652	1,190	-	317	306	198	189	122	197	116
30	164	156	451	869	-	306	4,190	198	180	116	188	116
31	164	-	2,110	1,450	-	295	-	189	-	109	188	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	6,386	841	109	206	0.359	0.41
November	10,758	2,370	156	359	.625	.70
December	14,107	2,110	156	455	.793	.91
Calendar year 1936	147,193	6,620	73	402	.700	9.52
January	146,906	14,800	550	4,739	8.26	9.52
February	16,796	1,510	341	600	1.05	1.09
March	14,425	2,000	295	465	.810	.93
April	14,783	4,190	235	493	.859	.96
May	28,710	4,750	189	926	1.61	1.86
June	12,547	2,490	180	418	.728	.81
July	15,702	2,880	109	507	.883	1.02
August	6,372	1,160	96	206	.359	.41
September	5,684	550	116	189	.329	.37
Water year 1936-37	293,176	14,800	96	803	1.40	18.99

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South Fork of Forked Deer River at Chestnut Bluff, Tenn.

Location.- Staff gage, lat. 35°52', long. 89°21', at highway bridge 1 mile west of Chestnut Bluff, Crockett County, and 12 miles above confluence with North Fork of Forked Deer River. Zero of gage is 256.71 feet above mean Gulf level.

Drainage area.- 1,080 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge during year, 26,600 second-feet Jan. 25 (gage height, 21.33 feet, from floodmarks); minimum, 139 second-feet Oct. 4-6 (gage height, 10.15 feet).

1929-37: Maximum discharge, 33,300 second-feet Jan. 22, 1935 (gage height, 22.3 feet, from floodmarks); minimum, 108 second-feet Sept. 11, 1934; minimum gage height, 3.2 feet Aug. 5-13, 1930.

Remarks.- Records fair. Stage-discharge relation affected by backwater from Mississippi River Jan. 28 to Feb. 17, for which period discharge was computed on basis of daily current-meter measurements and comparison with hydrograph for station at Jackson. Gage heights Jan. 22-26 derived from stage graph constructed on basis of crest stage and gage readings for preceding and following days. Gage read twice daily.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting control method used Nov. 7-11, July 9-18, 22-31, Aug. 1-21, 27-31, Sept. 1-30)

Oct. 1 to Nov. 6				Nov. 7 to Sept. 30					
10.0	110	12.0	1,220	10.9	190	13.0	1,210	18.0	9,000
10.2	149	12.5	1,580	11.2	290	14.0	1,940	19.0	13,500
10.5	219	13.0	1,870	11.5	395	15.0	2,750	20.0	18,800
11.0	385	14.0	2,360	12.0	590	16.0	3,820	21.0	24,800
11.5	760	15.0	3,240	12.5	865	17.0	5,760	21.5	27,800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	194	205	3,020	4,980	505	412	2,500	238	255	154	205
2	149	194	205	4,260	3,300	465	378	4,820	238	238	148	190
3	149	2,080	220	4,260	1,620	448	360	4,820	255	220	142	485
4	139	2,820	238	4,100	610	430	800	5,260	325	685	142	685
5	139	2,820	238	3,820	500	448	1,640	5,500	412	1,280	148	360
6	139	3,020	1,210	3,570	408	485	1,490	5,500	430	1,640	220	308
7	232	2,920	2,420	3,340	542	465	930	5,260	342	1,940	184	255
8	219	1,860	2,420	2,500	685	485	590	4,430	290	1,640	157	220
9	1,060	930	2,420	1,420	1,340	740	505	2,580	290	740	148	205
10	595	590	1,720	1,860	1,820	545	465	1,070	1,940	448	142	255
11	385	430	1,350	2,100	1,720	465	412	635	2,020	308	154	545
12	276	325	1,070	2,660	1,060	448	378	505	2,340	272	181	412
13	232	290	685	3,120	825	505	378	545	2,340	238	325	290
14	194	272	545	3,570	1,640	1,560	395	1,070	1,280	220	220	220
15	182	255	465	4,820	2,280	1,720	360	1,280	740	190	184	190
16	430	238	412	4,620	1,950	1,490	342	800	740	181	160	190
17	1,510	220	395	6,300	1,100	800	325	545	685	590	255	190
18	870	220	378	12,500	930	635	308	465	590	1,000	255	220
19	455	220	590	12,500	740	545	325	448	448	1,940	184	184
20	327	205	635	12,000	865	545	308	448	395	1,860	166	172
21	276	205	505	16,000	1,490	485	308	378	412	1,860	160	166
22	246	205	430	23,000	1,720	448	360	360	342	1,070	740	160
23	219	205	395	25,400	1,560	412	325	342	378	590	2,340	160
24	206	205	378	26,600	740	740	1,280	378	325	378	2,500	154
25	194	220	342	26,600	635	1,560	1,790	325	290	290	2,500	308
26	206	220	342	24,800	545	1,660	2,100	308	272	290	2,180	685
27	232	220	448	20,600	485	1,070	1,490	290	272	255	1,070	412
28	232	220	1,000	15,400	485	635	740	272	272	220	545	272
29	219	205	1,420	10,600	-	505	545	255	290	190	360	220
30	206	205	1,420	7,980	-	448	1,720	255	272	181	272	190
31	206	-	2,920	6,100	-	430	-	238	-	166	220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	10,284	1,510	139	332	0.307	0.35
November	22,213	3,020	194	740	.685	.76
December	27,421	2,920	205	885	.819	.94
Calendar year 1936	240,387	5,020	102	657	.608	8.27
January	299,420	26,600	1,420	9,659	8.94	10.31
February	36,575	4,980	408	1,306	1.21	1.26
March	22,322	1,860	412	720	.667	.77
April	21,759	2,100	308	725	.671	.75
May	51,882	5,500	238	1,674	1.55	1.79
June	19,463	2,340	238	649	.601	.67
July	21,375	1,940	166	690	.639	.74
August	16,556	2,500	142	534	.494	.57
September	8,508	685	154	284	.263	.29
Water year 1936-37	557,778	26,600	139	1,528	1.41	19.20

Middle Fork of Forked Deer River near Alamo, Tenn.

Location.- Staff gage, lat. 35°52', long. 89°04', at bridge on State Highway 54, 5 miles north of Alamo, Crockett County, and 15 miles above confluence with North Fork.

Drainage area.- 410 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 15,000 second-feet Jan. 23 (gage height, 15.00 feet); minimum, 80 second-feet Oct. 3; minimum gage height, 1.44 feet Mar. 13.

1929-37: Maximum discharge observed, 19,500 second-feet Jan. 21, 1935 (gage height, 15.46 feet); minimum discharge, 68 second-feet June 30, July 1, 1936; minimum gage height, 1.26 feet July 1, 11, 17, 1931.

Remarks.- Records fair. Gage read once daily.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting control method used Mar. 25 to Apr. 29)

Oct. 1 to Jan. 23, Apr. 30 to Sept. 30				Jan. 24 to Apr. 29			
1.5	80	11.0	2,190	1.0	125	10.0	1,940
2.0	145	12.0	2,690	2.0	270	11.0	2,190
3.0	335	13.0	4,450	3.0	430	12.0	2,690
4.0	550	14.0	8,650	4.0	600	13.0	4,450
5.0	770	15.0	15,000	5.0	790	14.0	8,650
8.0	1,460			6.0	1,000	15.0	15,000
10.0	1,940			8.0	1,460		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	103	116	1,050	711	210	181	4,800	110	103	110	103
2	86	103	116	2,770	478	210	174	5,950	110	97	110	103
3	80	2,490	116	1,250	382	195	174	5,550	130	91	103	839
4	86	1,630	123	908	350	195	334	2,290	660	2,430	103	293
5	91	662	116	462	318	195	430	1,050	214	908	103	314
6	91	528	1,580	253	302	195	255	660	196	770	110	293
7	97	335	770	233	302	210	195	377	145	770	103	145
8	214	145	704	214	334	240	160	253	123	638	110	130
9	161	130	293	243	711	255	160	214	116	293	103	116
10	178	123	196	908	398	195	160	196	1,990	161	103	116
11	130	116	335	885	270	195	160	170	793	138	253	704
12	97	116	293	2,250	255	195	146	161	572	130	103	335
13	91	116	145	1,720	255	181	146	243	205	123	356	161
14	91	110	138	1,210	711	790	160	704	145	116	110	123
15	91	103	130	4,450	636	564	160	462	1,890	116	103	123
16	86	103	130	2,090	382	350	146	214	335	110	103	116
17	484	103	130	2,250	270	255	139	161	314	528	97	116
18	145	110	145	8,650	240	240	146	145	161	839	103	116
19	103	110	178	7,300	240	225	146	161	398	462	103	110
20	103	110	243	6,400	255	225	139	153	178	419	97	110
21	86	110	178	8,650	654	210	146	130	145	273	103	103
22	91	103	153	12,000	398	195	195	130	145	145	116	110
23	91	110	138	15,000	286	195	210	178	153	130	253	110
24	97	116	138	11,300	240	1,140	1,280	130	123	123	462	103
25	97	116	130	13,400	225	711	636	116	110	293	153	103
26	123	116	130	7,300	225	398	564	116	103	839	138	550
27	116	116	145	5,550	225	240	270	116	103	196	116	205
28	110	116	484	1,990	210	210	210	110	205	130	110	130
29	103	116	484	673	-	181	174	103	196	116	103	116
30	103	116	273	582	-	181	4,140	110	116	116	103	110
31	103	-	4,140	1,050	-	174	-	110	-	116	103	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	3,716	484	80	120	0.293	0.34
November	8,681	2,490	103	289	.705	.79
December	12,390	4,140	116	400	.976	1.13
Calendar year 1936	102,542	6,710	68	280	.683	9.31
January	122,991	15,000	214	3,967	9.68	11.16
February	10,263	711	210	367	.895	.93
March	9,155	1,140	174	295	.720	.83
April	11,536	4,140	139	385	.939	1.05
May	25,263	5,950	103	815	1.99	2.29
June	10,184	1,990	103	339	.827	.92
July	11,719	2,430	91	378	.922	1.06
August	4,246	462	97	137	.334	.39
September	6,106	839	103	204	.498	.56
Water year 1936-37	236,250	15,000	80	647	1.58	21.45

Hatchie River at Bolivar, Tenn.

Location.- Staff gage, lat. 35°16', long. 88°59', at bridge on State Highway 18, 250 feet upstream from Illinois Central Railroad bridge, 2,000 feet below mouth of Spring Creek, and 1 mile north of Bolivar, Hardeman County. Zero of gage is 323.86 feet above mean Gulf level.

Drainage area.- 1,430 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 25,000 second-feet Jan. 4 (gage height, 18.00 feet); minimum, 171 second-feet Aug. 12 (gage height, 1.74 feet).
1929-37: Maximum discharge observed, 43,400 second-feet Jan. 20, 1935 (gage height, 20.00 feet); minimum, 114 second-feet Sept. 1, 1936 (gage height, 1.08 feet).

Remarks.- Records good. Gage read twice daily.

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

Oct. 1 to Nov. 11		Nov. 12 to Sept. 30			
2.0	231	1.5	145	15.0	7,400
3.0	380	2.0	213	16.0	12,100
5.0	700	4.0	513	17.0	18,300
8.0	1,210	9.0	1,310	18.0	25,000
9.5	1,480	10.0	1,480		
11.0	1,900	11.0	1,750		
12.0	2,370	12.0	2,220		
13.0	3,300	13.0	3,090		
14.0	5,420	14.0	4,640		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090	2,100	528	3,900	5,300	1,680	1,230	1,280	378	718	228	348
2	785	1,900	528	8,180	4,640	1,650	1,090	2,010	363	528	213	483
3	524	1,760	543	17,700	4,070	1,590	1,010	2,520	468	363	199	622
4	396	2,430	590	25,000	3,590	1,460	1,070	2,780	558	333	199	974
5	333	2,940	670	23,000	2,880	1,360	1,280	2,980	750	408	199	974
6	318	3,580	926	17,700	2,160	1,290	1,620	3,090	750	393	199	734
7	938	3,580	1,480	12,700	1,790	1,290	1,910	3,200	622	408	199	958
8	2,150	3,920	2,160	9,040	1,540	1,500	2,160	3,200	483	483	199	1,020
9	3,170	4,340	2,980	7,400	1,750	1,620	2,290	3,090	408	734	199	734
10	2,840	4,840	3,450	7,400	2,060	1,710	2,290	2,980	670	878	185	894
11	2,750	5,120	6,080	7,040	2,290	1,560	2,010	2,600	958	878	185	1,020
12	2,840	4,250	8,180	6,700	2,360	1,400	1,620	1,870	1,050	750	185	1,150
13	3,050	3,900	7,780	6,700	2,360	1,210	1,290	1,590	926	528	273	1,050
14	3,300	3,200	6,700	6,380	2,290	1,330	1,090	1,870	638	423	288	622
15	3,440	2,160	6,080	7,780	2,060	1,520	974	2,160	483	348	258	393
16	3,580	1,460	5,300	7,780	1,830	1,560	910	2,160	408	288	243	333
17	3,300	1,120	4,850	11,000	1,590	1,500	862	1,830	393	273	228	318
18	2,660	862	4,070	13,300	1,820	1,360	814	1,430	408	378	258	318
19	2,310	734	3,450	12,700	1,290	1,290	766	1,120	638	654	303	363
20	1,790	670	3,090	16,400	1,310	1,340	734	910	718	1,130	273	333
21	1,280	654	2,360	19,600	1,520	1,400	702	782	513	1,380	228	288
22	870	622	1,870	17,700	1,790	1,330	686	670	408	1,290	213	258
23	636	606	1,480	20,900	1,910	1,200	654	638	378	894	348	243
24	556	590	1,250	18,300	1,830	1,410	814	574	513	513	590	228
25	492	606	1,090	17,000	1,650	1,680	1,360	590	483	363	702	228
26	508	622	974	14,500	1,710	2,060	1,750	590	348	303	830	273
27	604	654	942	11,500	1,830	2,160	1,710	528	288	273	782	273
28	1,260	606	1,310	9,040	1,790	2,160	1,340	483	258	288	543	273
29	1,640	574	1,790	7,780	-	2,010	1,020	453	243	363	378	258
30	1,940	543	2,440	6,380	-	1,710	1,090	423	363	303	288	243
31	2,100	-	3,590	5,800	-	1,430	-	393	-	258	273	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	53,450	3,580	318	1,724	1.21	1.40
November	60,943	5,120	543	2,031	1.42	1.58
December	88,531	8,180	528	2,856	2.00	2.31
Calendar year 1936	638,320	8,900	114	1,744	1.22	16.61
January	376,300	25,000	3,900	12,140	8.49	9.79
February	62,810	5,300	1,290	2,243	1.57	1.63
March	47,770	2,160	1,200	1,541	1.08	1.25
April	38,146	2,290	654	1,272	.890	.99
May	50,794	3,200	393	1,639	1.15	1.33
June	15,865	1,050	243	529	.370	.41
July	17,124	1,380	258	552	.386	.45
August	9,688	830	185	313	.219	.25
September	16,206	1,150	228	540	.378	.42
Water year 1936-37	837,627	25,000	185	2,295	1.60	21.81

Hatchie River near Stanton, Tenn.

Location.- Staff gage, lat. 35°31', long. 89°21', at bridge on State Highway 1, 1 mile below Nashville, Chattanooga & St. Louis Railway bridge and 4 miles north of Stanton, Haywood County. Zero of gage is 267.34 feet above mean Gulf level.

Drainage area.- 1,940 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 46,800 second-feet Jan. 25 (gage height, 19.50 feet); minimum, 356 second-feet Aug. 12-14; minimum gage height, 2.16 feet Aug. 14.
1929-37: Maximum discharge observed, 59,000 second-feet Jan. 22, 1935 (gage height, 20.35 feet); minimum, 278 second-feet Sept. 1, 1936 (gage height, 1.66 feet).

Remarks.- Records good. Gage read twice daily.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 23-27)

Oct. 1-22				Oct. 23 to Sept. 30			
2.0	321	10.0	1,940	2.0	330	14.0	3,700
3.0	476	11.0	2,280	4.0	595	14.5	4,270
4.0	641	12.0	2,700	5.0	760	15.0	5,400
5.0	818	13.0	3,300	7.0	1,140	15.5	7,400
6.0	1,010			9.0	1,550	16.0	10,600
7.0	1,220			11.0	2,060	17.0	19,000
8.0	1,440			12.0	2,430	18.0	28,800
9.0	1,680			13.0	2,990	19.5	46,800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,460	1,380	798	2,930	8,550	2,090	2,190	2,340	640	473	473	539
2	1,420	1,520	760	3,460	7,950	2,060	2,190	2,750	610	460	460	499
3	1,260	1,880	742	3,700	6,900	2,060	2,090	3,060	595	539	434	473
4	1,070	2,340	724	3,990	6,050	2,060	1,880	3,060	610	625	421	553
5	856	2,700	724	12,200	5,700	2,060	1,820	2,990	640	610	408	625
6	675	2,750	874	25,700	5,120	2,030	1,800	2,870	689	724	395	706
7	624	2,810	1,550	27,700	4,640	1,950	1,750	2,810	742	525	395	836
8	746	2,810	1,920	22,800	4,270	1,920	1,720	2,750	817	525	382	855
9	1,120	2,810	1,920	15,600	4,120	1,950	1,800	2,700	893	525	382	836
10	1,510	2,810	1,950	13,000	3,990	1,920	1,850	2,750	1,010	539	369	950
11	1,720	2,810	2,030	12,200	3,540	1,900	1,950	2,810	1,240	595	369	1,460
12	1,860	2,870	2,120	10,600	3,250	1,900	2,000	2,870	1,420	706	356	1,520
13	1,980	2,930	2,190	9,900	2,930	1,950	2,090	2,990	1,400	798	356	1,340
14	2,060	3,060	2,340	9,200	2,870	2,120	2,160	3,120	1,300	798	356	1,180
15	2,140	3,180	2,870	12,200	2,750	2,260	2,190	2,990	1,140	724	382	1,100
16	2,320	3,320	3,780	11,400	2,750	2,190	1,950	2,810	1,010	625	408	950
17	2,400	3,460	7,950	11,400	2,700	2,060	1,650	2,750	836	539	408	724
18	2,520	3,540	7,950	20,800	2,700	1,980	1,320	2,530	672	539	408	610
19	2,660	3,460	6,900	21,800	2,640	1,920	1,180	2,340	640	893	395	539
20	2,750	3,250	6,050	22,800	2,700	1,900	1,100	2,220	595	1,060	395	499
21	2,850	2,640	5,700	38,000	2,810	1,800	1,040	2,060	625	1,010	395	486
22	2,850	1,720	5,120	41,600	2,750	1,720	1,030	1,650	689	1,140	672	486
23	2,870	1,220	4,440	41,600	2,480	1,650	969	1,280	689	1,240	1,440	473
24	2,530	1,030	4,120	40,400	2,220	1,780	1,040	1,060	625	1,280	742	447
25	1,850	931	3,700	42,900	2,120	2,160	1,180	950	581	1,100	689	460
26	1,240	874	3,390	28,800	2,060	2,190	1,160	874	567	931	656	486
27	912	855	3,060	22,800	2,120	2,160	1,240	836	581	689	689	434
28	817	836	2,530	16,400	2,090	2,120	1,440	798	581	567	724	421
29	760	836	2,120	13,800	-	2,120	1,600	760	567	512	760	421
30	950	817	1,950	11,400	-	2,120	1,920	706	499	486	689	421
31	1,180	-	2,580	9,900	-	2,160	-	672	-	473	610	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	51,960	2,870	624	1,676	0.864	1.00
November	67,449	3,540	817	2,248	1.16	1.29
December	94,852	7,950	724	3,060	1.58	1.82
Calendar year 1936	697,541	11,700	278	1,906	.982	13.37
January	580,980	42,900	2,930	18,740	9.66	11.14
February	104,770	8,550	2,060	3,742	1.93	2.01
March	62,260	2,260	1,650	2,008	1.04	1.20
April	49,299	2,190	969	1,643	.847	.95
May	67,156	3,120	672	2,166	1.12	1.29
June	23,503	1,420	499	783	.404	.45
July	22,250	1,280	460	718	.370	.43
August	16,018	1,440	356	517	.266	.31
September	21,329	1,520	421	711	.366	.41
Water year 1936-37	1,161,826	42,900	356	3,183	1.64	22.30

Wolf River at Rossville, Tenn.

Location.- Chain gage, lat. 35°04', long. 89°33', at county highway bridge, half a mile north of Rossville, Fayette County, and 8 miles downstream from Moscow and mouth of North Fork.

Drainage area.- 531 square miles.

Records available.- July 1929 to September 1937.

Extremes.- Maximum discharge observed during year, 12,000 second-feet Jan. 23 (gage height, 10.78 feet); minimum, 139 second-feet Aug. 2, 11-15, 20, 21, Sept. 23, 24; minimum gage height, 3.38 feet Aug. 14.

1929-37: Maximum discharge, 31,000 second-feet Jan. 20, 1935 (gage height, 13.75 feet, from floodmarks); minimum, 125 second-feet Oct. 1-27, 1931; minimum gage height, 2.24 feet Aug. 12-14, 1930.

Remarks.- Records good below and fair above 6,000 second-feet. Probably slight regulation during low-water periods caused by operation of mill dam at Moscow. Gage read twice daily.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 11, 12, Apr. 1 to June 10)

Oct. 1-10				Oct. 11 to Sept. 30			
3.0	120	9.0	3,220	3.5	148	8.5	1,800
4.0	216	9.5	5,340	4.0	194	9.0	3,200
5.0	332	10.0	7,850	5.0	306	9.5	5,100
6.0	464			6.0	430	10.0	7,500
7.0	650			7.0	630	10.5	10,200
8.0	1,050			7.5	805	11.0	13,200
8.5	1,650			8.0	1,090		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	227	270	224	2,850	695	354	294	258	224	166	148	148
2	238	224	224	5,320	576	354	294	318	194	166	148	175
3	216	576	235	7,000	475	354	282	342	194	166	148	175
4	195	1,450	235	8,050	444	330	282	354	25e	166	148	175
5	185	1,900	235	3,200	404	330	306	391	404	175	148	194
6	185	1,600	492	1,600	378	318	330	444	530	175	157	184
7	320	2,200	1,450	1,300	366	404	330	430	430	175	148	175
8	581	1,600	1,700	855	378	905	354	417	258	175	148	194
9	840	1,180	3,020	576	765	855	318	318	224	166	148	194
10	5,810	855	2,500	805	805	765	294	258	417	175	148	175
11	2,500	404	1,600	1,020	602	576	270	235	905	184	139	175
12	1,700	306	1,180	1,380	510	404	270	235	1,020	175	139	184
13	805	282	855	1,600	475	354	258	391	765	166	139	258
14	391	270	510	1,600	444	730	258	552	404	166	139	294
15	246	246	430	1,240	404	765	258	530	235	157	139	204
16	258	235	366	3,380	378	602	246	459	204	157	175	157
17	306	235	318	5,320	366	459	246	404	194	157	157	157
18	294	224	318	8,600	342	391	246	306	184	184	148	157
19	391	224	342	6,000	342	354	224	258	184	235	148	157
20	552	224	330	6,500	366	330	235	235	194	270	148	157
21	730	224	330	9,700	630	330	235	235	175	282	139	148
22	530	224	318	10,800	660	318	235	214	175	294	148	148
23	306	224	294	11,400	552	306	224	417	175	246	166	139
24	224	235	270	10,200	510	1,020	258	270	166	175	184	139
25	214	235	258	9,700	475	1,520	318	224	166	166	194	157
26	214	235	258	5,550	404	1,450	318	214	166	166	175	204
27	224	235	282	3,380	391	1,090	378	214	157	157	204	175
28	235	235	805	1,900	378	905	378	204	157	166	184	166
29	306	235	1,090	1,300	-	530	306	204	166	157	157	157
30	366	224	1,090	1,020	-	342	258	194	166	157	148	157
31	378	-	2,350	855	-	306	-	194	-	148	148	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October	19,967	5,810	185	644	1.21	1.40
November	16,811	2,200	224	560	1.05	1.17
December	23,909	3,020	224	771	1.45	1.67
Calendar year 1936	148,319	5,810	137	405	.763	10.38
January	134,001	11,400	576	4,323	8.14	9.39
February	13,515	805	342	483	.910	.95
March	18,051	1,520	306	582	1.10	1.27
April	8,503	378	224	283	.533	.59
May	9,719	552	194	314	.591	.68
June	9,019	1,020	157	303	.571	.64
July	5,670	294	148	183	.345	.40
August	4,807	204	139	155	.292	.34
September	5,279	294	139	176	.331	.37
Water year 1936-37	269,323	11,400	139	738	1.39	18.87

St. Francis River near Patterson, Mo.

Location.- Wire-weight gage, lat. 37°11'40", long. 90°30'10", in N½ sec. 16, T. 29 N., R. 5 E., at bridge on State Highway 34, 3 miles east of Patterson. Zero of gage is 372.45 feet (revised) above mean sea level (general adjustment of 1929).
Drainage area.- 956 square miles.
Records available.- June 1921 to September 1937.
Average discharge.- 16 years, 1,130 second-feet.
Extremes.- Maximum discharge during year, 55,200 second-feet Jan. 15 (gage height, 24.50 feet); minimum discharge observed, 21 second-feet Sept. 1 (gage height, 0.30 foot).
1921-37: Maximum discharge, 79,200 second-feet Mar. 11, 1935 (gage height, 28.70 feet); minimum discharge, 8 second-feet Aug. 30 to Sept. 1, 1936; minimum gage height, 0.16 foot Aug. 31, Sept. 1, 1936.
Maximum stage known, 31.8 feet in August 1915, from floodmarks (estimated discharge, 100,000 second-feet).
Remarks.- Records good except those for period of missing heights, Nov. 17-19, which were estimated and are fair. Gage read once daily below and twice daily above 10.0 feet.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-6)

Oct. 1 to Jan. 14

1.0	92	6.0	2,650	18.0	28,100
1.5	191	8.0	4,800	20.0	35,000
2.0	314	10.0	7,900	22.0	43,100
3.0	626	12.0	11,900	24.0	52,500
4.0	1,060	14.0	16,500	25.0	57,900
5.0	1,710	16.0	22,100		

Jan. 15 to Sept. 30

0.2	13	2.0	347
0.4	30	3.0	717
0.6	52	4.0	1,220
0.8	81	5.0	1,840
1.0	114	6.0	2,650
1.5	214		

Note.- Same as preceding table above 6.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	158	626	128	4,320	8,120	717	514	11,500	182	114	102	21
2	138	700	126	3,150	4,940	674	478	8,260	171	123	87	26
3	124	20,900	138	2,650	2,460	633	478	16,000	161	123	86	66
4	111	8,080	138	2,350	2,200	592	2,200	6,570	161	674	81	65
5	100	3,150	128	1,630	1,840	552	6,410	3,980	226	717	74	75
6	94	2,060	368	1,220	1,580	514	5,200	3,350	276	1,000	69	72
7	3,050	1,710	1,060	8,080	1,770	478	3,150	2,550	304	514	65	69
8	4,200	1,710	915	20,900	1,840	478	2,280	1,910	332	377	63	65
9	10,600	1,560	740	15,500	11,500	443	*2,100	1,460	332	250	60	112
10	5,950	1,060	662	4,940	3,450	393	1,910	1,220	592	214	60	123
11	2,060	870	590	3,450	2,950	377	1,520	1,050	1,650	182	60	104
12	1,010	626	520	2,450	1,910	362	1,280	901	901	192	56	112
13	662	520	454	2,160	1,770	318	1,050	807	552	171	52	123
14	554	396	396	28,800	1,460	633	950	674	409	161	48	111
15	454	354	368	56,100	1,280	552	901	592	514	132	45	52
16	368	314	340	8,010	1,160	426	807	514	807	142	41	46
17	301	300	314	4,940	950	478	717	478	1,050	304	38	39
18	275	275	301	2,950	853	552	633	443	950	1,340	37	50
19	237	250	301	2,280	761	443	592	393	901	633	35	30
20	213	225	275	1,910	717	853	633	362	674	3,870	33	*30
21	191	225	262	2,280	1,910	1,000	1,280	318	426	901	32	31
22	275	213	237	2,850	1,770	807	8,440	289	347	478	123	44
23	1,970	202	237	3,450	1,520	950	3,250	289	276	318	78	40
24	1,710	180	225	3,050	1,160	950	2,460	262	237	289	69	41
25	2,450	169	213	2,850	1,050	1,000	2,120	250	203	226	52	48
26	3,870	158	213	2,850	901	1,000	1,980	237	182	182	46	39
27	2,550	158	237	2,360	853	807	1,580	214	171	161	39	34
28	1,480	148	250	2,050	761	761	1,340	203	171	142	40	32
29	1,280	138	275	2,050	-	674	1,160	203	161	132	35	30
30	960	138	4,940	4,550	-	592	11,700	192	123	114	27	27
31	662	-	15,700	13,200	-	552	-	182	-	104	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	48,057	10,600	94	1,550	1.62	1.87	95,320
November	47,415	20,900	138	1,580	1.65	1.84	94,050
December	31,051	15,700	126	1,002	1.05	1.21	61,590
Calendar year 1936	200,686	20,900	8	548	.573	7.81	398,100
January	199,330	36,100	1,220	6,430	6.73	7.76	395,400
February	63,436	11,500	717	2,266	2.37	2.47	125,800
March	19,561	1,000	318	631	.660	.76	38,800
April	69,113	11,700	478	2,304	2.41	2.69	137,100
May	65,653	16,000	182	2,118	2.22	2.56	130,200
June	13,442	1,650	123	448	.469	.52	26,660
July	14,280	3,870	104	461	.482	.56	28,320
August	1,758	123	25	56.7	.059	.07	3,490
September	1,757	123	21	58.6	.061	.07	3,480
Water year 1936-37	574,853	36,100	21	1,575	1.65	22.38	1,140,000

*Discharge interpolated.

St. Francis River at Fisk, Mo.

Location.- Wire-weight gage, lat. 36°46'50", long. 90°12'10", in SW¼ sec. 28, T. 25 N., R. 8 E., at bridge on U. S. Highway 60 at Fisk. Zero of gage is 307.94 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,370 square miles (not including basin of Mingo Creek, which is diverted by ditches that empty into St. Francis River 6 miles below Fisk.

Records available.- October 1927 to September 1937.

Average discharge.- 10 years, 1,410 second-feet.

Extremes.- Maximum discharge during year, 31,800 second-feet Jan. 16 (gage height, 26.17 feet), not including flow through breaks in levee; minimum discharge observed, 96 second-feet Sept. 1 (gage height, 2.13 feet).

1927-37: Maximum discharge occurred during flood of March 1935, when levee on left bank broke in many places between Wappapello and Fisk, discharge in river channel at Fisk plus overflow between Fisk and Dudley (including drainage of additional local area of about 186 square miles) approximately 50,000 second-feet as measured by Corps of Engineers, U. S. Army, maximum gage height, 26.89 feet, May 15, 1933 (from floodmark). Minimum discharge, 94 second-feet Aug. 22-28, 30, 31, Sept. 1, 1936; minimum gage height, 1.24 feet Aug. 27, 28, 1936.

On basis of recent information, the gage height previously published as maximum stage known (28 feet Apr. 18, 1927) is too high.

Remarks.- Records fair. Gage read once daily below and twice daily above gage height 15.0 feet. Discharge Jan. 16-18 does not include that part of flow through levee breaks on left bank between Wappapello and Fisk which was carried by Mingo Ditch 15 and two other channels between this ditch and Dudley.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	1,110	340	6,360	6,520	1,290	828	3,640	365	276	209	96
2	310	991	330	7,800	7,800	1,240	792	6,370	352	253	199	102
3	260	1,780	320	7,500	7,800	1,200	756	7,500	339	231	180	108
4	230	4,860	300	6,360	6,060	1,160	876	8,200	339	1,910	180	115
5	240	6,200	280	4,520	4,200	1,120	1,670	8,600	326	2,590	171	137
6	250	7,500	472	2,840	2,990	1,100	3,380	7,800	378	2,470	171	137
7	260	5,240	939	2,450	2,450	1,060	5,140	6,800	405	2,390	162	137
8	428	3,260	978	4,360	2,230	1,000	4,800	5,450	435	2,150	145	129
9	1,470	2,190	1,170	7,800	2,410	978	4,050	4,100	495	1,800	145	129
10	2,300	1,780	1,100	9,000	3,960	926	3,550	3,160	897	1,380	137	145
11	3,960	1,530	1,020	9,900	5,040	900	3,160	2,740	1,490	1,010	137	137
12	3,260	1,270	939	9,400	3,510	864	2,620	2,420	1,510	710	129	137
13	2,000	1,100	840	6,720	2,840	828	2,280	2,200	1,470	510	122	145
14	1,470	952	768	6,360	2,230	804	1,980	1,770	1,240	405	122	137
15	1,220	840	708	10,400	2,020	792	1,800	1,710	1,030	352	115	137
16	978	732	672	29,200	1,900	792	1,640	1,490	897	300	115	137
17	780	624	648	24,200	1,720	780	1,490	1,360	916	276	108	137
18	600	588	624	14,800	1,600	768	1,400	1,200	1,150	352	108	129
19	528	540	612	10,400	1,500	792	1,220	1,050	1,260	525	108	122
20	472	505	540	7,200	1,440	876	1,110	859	1,320	878	108	115
21	406	483	516	6,060	1,430	952	1,130	783	1,220	1,300	108	108
22	373	450	483	6,360	1,480	965	2,200	710	974	1,730	115	102
23	472	439	461	7,200	1,600	978	3,950	625	764	1,360	115	102
24	804	417	450	6,960	1,630	978	4,310	591	591	1,010	122	102
25	1,100	406	428	6,060	1,550	952	3,730	540	495	710	129	145
26	1,150	395	417	5,240	1,470	1,030	3,600	525	405	510	129	171
27	2,000	373	450	4,520	1,410	1,080	3,160	480	365	405	122	129
28	2,130	362	494	3,650	1,340	1,030	2,710	450	326	326	115	122
29	1,840	351	505	3,260	-	1,030	2,200	420	313	288	115	108
30	1,550	351	648	3,510	-	952	2,050	391	288	253	108	102
31	1,370	-	2,530	4,680	-	876	-	378	-	231	102	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	34,551	3,960	230	1,115	0.814	0.94	68,530
November	47,619	7,500	351	1,587	1.16	1.29	94,450
December	20,982	2,530	280	677	.494	.57	41,620
Calendar year 1936	222,871	7,500	94	609	.445	6.05	442,100
January	245,070	29,200	2,450	7,905	5.77	6.65	486,100
February	82,150	7,800	1,340	2,933	2.14	2.23	162,900
March	30,054	1,290	768	969	.707	.82	59,610
April	73,582	5,140	756	2,453	1.79	2.00	145,900
May	84,312	8,600	378	2,720	1.99	2.29	167,200
June	22,355	1,510	288	745	.544	.61	44,340
July	28,891	2,590	231	932	.680	.78	57,300
August	4,151	209	102	134	.098	.11	8,230
September	3,759	171	96	125	.091	.10	7,460
Water year 1936-37	677,456	29,200	96	1,856	1.35	18.39	1,344,000

St. Francis River at Marked Tree, Ark.

Location.- Water-stage recorder, lat. 35°32', long. 90°25', in sec. 35, T. 11 N., R. 6 E., at Marked Tree, 4 miles below mouth of Little River. Zero of gage is 196.44 feet above mean sea level (U. S. Weather Bureau benchmark).

Records available.- July 1934 to September 1937. Miscellaneous measurements were made at this point in February 1918 and during September 1927 to May 1931.

Extremes.- Maximum daily discharge during year, 7,120 second-feet Feb. 6, 7; maximum gage height, 18.88 feet Feb. 7; minimum daily discharge, 169 second-feet Sept. 1-6; minimum gage height observed, 0.3 foot, Sept. 1-6.
1934-37: Maximum discharge, that of Feb. 6, 7, 1937; minimum, that of Sept. 1-6, 1937.

Remarks.- Records fair. Gage-height record collected in cooperation with U. S. Weather Bureau. Daily discharge determined by slope method; slope obtained from auxiliary gage 3 miles upstream at same datum. Flood flows diverted through St. Francis River floodway 4 miles north of station at dam of Poinsett County Drainage District No. 7, and bypassed to vicinity of Parkin, Ark.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	715	1,020	685	433	4,640	3,310	753	608	421	476	400	169
2	737	989	665	459	4,700	2,850	764	678	452	463	390	169
3	463	1,100	651	474	5,560	2,960	755	753	424	452	376	169
4	451	1,140	636	458	6,320	2,830	755	838	452	452	367	169
5	466	1,200	650	435	6,400	2,860	784	838	465	452	357	169
6	466	1,240	766	516	7,120	2,680	784	814	465	490	346	169
7	494	1,200	766	550	7,120	2,330	847	784	478	550	346	200
8	699	1,220	798	507	7,040	2,320	878	784	478	622	335	218
9	969	1,180	827	654	7,040	2,120	844	755	492	600	324	222
10	1,000	1,160	826	817	6,960	2,020	844	732	505	596	269	222
11	985	1,180	796	995	6,790	1,890	847	705	530	570	245	222
12	1,020	1,220	796	1,030	6,100	1,680	784	678	557	557	452	222
13	1,060	1,220	766	1,070	5,950	1,590	755	678	650	531	352	222
14	1,060	1,110	756	1,080	6,380	1,620	755	713	662	518	224	222
15	1,060	779	730	1,240	5,660	1,520	758	678	687	505	212	222
16	1,110	961	727	1,200	4,250	1,230	758	678	687	492	211	222
17	1,280	806	727	1,490	4,720	1,290	732	713	664	503	222	222
18	1,290	854	727	2,750	4,590	1,180	705	654	687	492	311	222
19	1,290	769	727	2,800	4,900	995	705	664	676	503	331	222
20	842	1,120	727	2,610	4,780	1,140	678	664	648	503	331	222
21	806	1,140	727	2,980	4,580	1,080	651	616	622	570	320	205
22	820	1,240	727	3,940	3,910	1,050	678	591	623	650	240	205
23	867	1,330	727	4,530	4,180	1,020	654	601	583	596	193	205
24	950	1,330	613	4,060	3,560	1,020	688	575	583	557	192	205
25	985	1,330	492	5,860	3,760	962	688	563	556	636	192	218
26	985	1,330	465	5,310	3,540	962	688	538	543	623	192	216
27	985	1,360	476	4,970	3,340	932	669	512	518	602	177	260
28	985	1,330	476	4,470	3,760	866	689	500	516	557	177	299
29	965	1,410	466	4,520	-	873	640	505	503	439	176	306
30	985	1,250	462	3,760	-	809	640	475	490	426	176	306
31	1,020	-	433	4,580	-	781	-	462	-	423	176	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	27,832	1,290	451	898	55,200
November	34,540	1,410	769	1,151	68,510
December	20,813	827	433	671	41,280
Calendar year 1936	367,690	1,580	186	1,005	729,300
January	70,548	5,860	433	2,276	139,900
February	147,650	7,120	3,340	5,273	292,900
March	50,770	3,310	781	1,638	100,700
April	22,210	e78	640	740	44,050
May	20,347	83e	462	656	40,360
June	16,617	687	421	554	32,960
July	16,406	650	423	529	32,540
August	8,614	452	176	278	17,090
September	6,523	306	169	217	12,940
Water year 1936-37	442,870	7,120	169	1,213	878,400

St. Francis River floodway near Marked Tree, Ark.

Location.- Staff gage, lat. 35°36', long. 90°27', in SE¼ sec. 10, T. 11 N., R. 6 E., at dam of Poinsett County Drainage District No. 7, 3 miles north of Marked Tree. Zero of gage is 198.71 feet above Memphis datum and 192.08 feet above mean sea level (Morgan Engineering Co. benchmark).

Records available.- September 1927 to September 1931, July 1934 to September 1937.

Extremes.- Maximum discharge observed during year, 48,300 second-feet Jan. 26-28 (gage height, 31.1 feet); no flow Oct. 1-12.
1927-31, 1934-37: Maximum discharge observed, that of Jan. 26-28, 1937; no flow at times during each year of 1934-37.

Remarks.- Records good. Gage-height record furnished by Poinsett County Drainage District No. 7. Records show water diverted out of St. Francis River and bypassing Marked Tree; water returned to St. Francis River immediately below Parkin, Ark. Gage read twice daily. During Jan. 17 to Feb. 22 considerable flow not included in records published herein, passed through two levee breaks, in NW¼ sec. 29 and center sec. 17, T. 12 N., R. 6 E., and returned to river through St. Francis Bay immediately below Parkin; for total flow from drainage area above Parkin for this period see Water-Supply Paper 838.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	900	2,250	2,250	43,100	13,300	3,880	4,420	3,060	3,880	2,590	740
2	0	900	2,060	2,250	41,200	12,200	3,880	4,640	2,820	3,580	2,370	740
3	0	1,060	2,060	2,450	40,000	11,200	3,880	4,640	2,590	3,300	2,260	820
4	0	1,220	1,880	2,650	38,100	11,200	3,880	4,870	2,590	3,180	2,160	820
5	0	1,220	1,700	2,950	36,200	10,200	3,880	5,380	2,590	2,940	1,960	900
6	0	1,380	1,880	3,250	34,400	9,300	3,880	5,960	2,590	2,820	1,860	980
7	0	1,620	1,880	3,650	33,800	8,500	3,880	6,600	2,590	2,820	1,760	1,060
8	0	1,970	1,880	4,100	31,400	7,700	3,880	7,300	2,370	2,940	1,670	1,140
9	0	2,350	1,970	5,200	30,200	7,700	4,040	7,700	2,260	3,300	1,580	1,140
10	0	2,650	1,970	6,100	29,000	6,940	4,420	8,100	2,370	3,440	1,490	1,140
11	0	3,250	2,060	7,000	27,900	6,600	4,870	8,100	2,480	3,880	1,400	1,220
12	0	3,250	2,150	8,100	26,700	6,270	5,120	8,100	2,370	4,220	1,310	1,310
13	100	3,650	2,250	9,700	25,600	5,960	5,960	8,900	2,590	5,120	1,220	1,310
14	200	3,650	2,250	12,200	25,600	5,660	6,600	9,300	2,940	5,660	1,220	1,220
15	270	4,100	2,350	13,800	24,400	5,120	6,600	9,700	3,580	5,960	1,140	1,220
16	270	4,350	2,350	15,500	23,300	5,120	6,940	10,700	4,220	6,270	1,140	1,140
17	200	4,350	2,450	17,700	22,700	4,870	6,940	11,200	5,120	6,600	1,060	1,060
18	150	4,350	2,450	21,100	22,200	4,640	7,300	11,200	5,660	6,600	980	980
19	100	4,350	2,450	23,900	21,600	4,640	7,300	10,700	6,270	6,600	900	980
20	340	4,350	2,450	26,200	21,100	4,420	7,300	10,700	6,940	6,270	820	900
21	480	4,350	2,450	30,800	19,900	4,220	7,700	9,700	7,300	5,660	820	900
22	620	4,350	2,450	35,000	19,400	4,040	7,300	8,900	6,940	5,120	820	900
23	620	4,100	2,350	38,700	18,800	3,880	7,300	8,100	6,600	4,640	820	900
24	690	4,100	2,250	42,500	17,700	3,880	6,940	7,300	6,270	4,220	900	820
25	760	3,650	2,250	45,700	16,600	3,880	6,600	6,600	5,960	3,880	900	980
26	900	3,650	2,250	47,600	16,600	3,880	6,270	5,660	5,660	3,580	900	1,060
27	900	3,250	2,250	48,300	14,400	3,880	5,660	5,120	5,120	3,300	820	1,220
28	900	2,950	2,250	47,600	14,400	3,880	5,380	4,420	4,870	3,060	820	1,400
29	900	2,450	2,150	47,600	-	3,880	4,870	4,040	4,420	2,820	820	1,490
30	900	2,250	2,150	46,300	-	3,880	4,640	3,580	4,220	2,820	820	1,580
31	900	-	2,250	45,000	-	3,880	-	3,300	-	2,590	740	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	10,200	900	0	329	20,230
November	90,020	4,350	900	3,001	178,600
December	67,790	2,450	1,700	2,187	134,500
Calendar year 1936	314,570	4,350	0	859	623,900
January	665,150	48,300	2,250	21,460	1,319,000
February	736,300	45,100	14,400	26,300	1,460,000
March	194,720	13,300	3,880	6,281	386,200
April	167,090	7,700	3,880	5,570	331,400
May	224,930	11,200	3,300	7,256	446,100
June	125,360	7,300	2,260	4,179	248,600
July	131,070	6,600	2,590	4,228	260,000
August	40,070	2,590	740	1,292	79,480
September	32,070	1,580	740	1,069	63,610
Water year 1936-37	2,484,770	48,300	0	6,808	4,928,000

Little River Ditch 81 near Kennett, Mo.

Location.- Wire-weight gage, lat. 36°14'10", long. 89°58'55", in NE¼ sec. 4, T. 18 N., R. 10 E., at bridge on State Highway 84, about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmark).

Records available.- October 1926 to September 1937.

Average discharge.- 11 years, 257 second-feet.

Extremes.- Maximum discharge during year, 2,310 second-feet Jan. 24-26; maximum gage height, 12.53 feet Jan. 26; minimum discharge, 67 second-feet Sept. 24 (gage height, 2.67 feet).

1926-37: Maximum discharge, 2,760 second-feet (included some overflow from levee breaks on St. Francis River) Apr. 21, 1927 (gage height, 15.11 feet, from graph based on gage readings); minimum discharge, 40 second-feet Aug. 11, 1934; minimum gage height, 2.31 feet Sept. 5-8, 1930.

Remarks.- Records good. Gage read once daily below and twice daily above 8.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	111	94	431	1,870	237	167	237	122	141	116	70
2	69	111	94	329	1,430	237	167	330	122	134	110	76
3	69	260	100	329	1,100	222	160	452	122	134	110	76
4	69	386	94	287	969	222	167	398	134	906	104	98
5	69	343	94	247	864	222	237	330	180	1,250	104	104
6	69	287	134	221	760	208	527	314	208	1,030	110	98
7	79	247	221	221	680	208	434	282	180	641	110	92
8	122	221	208	315	603	208	381	252	167	398	104	81
9	111	195	182	343	584	208	416	237	154	298	98	81
10	106	182	170	822	603	194	364	222	1,490	267	92	81
11	100	170	158	864	489	194	298	208	1,190	237	92	81
12	94	158	152	760	434	194	267	194	740	222	92	81
13	89	146	146	700	416	194	252	194	434	208	92	81
14	89	140	140	740	434	194	252	208	330	194	92	76
15	84	134	134	1,320	470	194	237	194	314	180	86	76
16	84	128	128	1,320	398	194	208	180	314	160	86	76
17	84	128	128	1,140	364	194	208	180	267	167	86	76
18	84	122	122	1,550	347	194	194	167	237	180	81	76
19	79	116	116	1,400	330	180	194	167	237	180	81	76
20	79	116	111	1,100	314	208	180	160	237	180	81	70
21	74	116	111	2,050	314	208	194	160	208	167	81	70
22	79	111	111	2,200	298	194	180	154	194	160	81	69
23	79	106	106	2,270	282	194	180	154	180	148	81	69
24	84	106	106	2,270	267	194	194	148	180	148	81	67
25	84	106	106	2,310	267	208	194	141	167	141	81	104
26	122	106	106	2,310	252	194	194	141	154	134	76	160
27	208	100	106	2,270	252	180	180	134	154	128	76	134
28	170	106	128	2,230	237	180	180	134	148	128	76	110
29	146	100	146	2,160	-	180	180	128	148	128	76	104
30	128	94	152	2,080	-	180	180	128	141	122	76	92
31	122	-	301	2,010	-	167	-	128	-	116	76	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,994	208	69	96.6	5,940
November	4,752	386	94	158	9,430
December	4,205	301	94	136	8,340
Calendar year 1936	35,675	386	41	97.5	70,770
January	38,599	2,310	221	1,245	76,560
February	15,628	1,870	237	558	31,000
March	6,185	237	167	200	12,270
April	7,166	527	160	239	14,210
May	6,456	452	128	208	12,810
June	8,853	1,490	122	295	17,560
July	8,627	1,250	116	278	17,110
August	2,788	116	76	89.9	5,530
September	2,605	160	67	86.8	5,170
Water year 1936-37	108,858	2,310	67	298	215,900

Little River Ditch 1 near Kennett, Mo.

Location.- Wire-weight gage, lat. 36°14'10", long. 89°58'50", in NE¼ sec. 4, T. 18 N., R. 10 E., at bridge on State Highway 84 about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmark).

Records available.- October 1926 to September 1937.

Average discharge.- 11 years, 491 second-feet.

Extremes.- Maximum discharge observed during year, 7,260 second-feet Jan. 24, 25; maximum gage height observed, 16.80 feet Jan. 25; minimum discharge, 16 second-feet Sept. 24; minimum gage height, 3.34 feet Oct. 5, 6.
1926-37: Maximum discharge, 7,520 second-feet (included some overflow from levee breaks on St. Francis River) Apr. 25, 1927; maximum gage height observed, that of Jan. 25, 1937; minimum discharge, 8 second-feet Sept. 13-18, 1932; minimum gage height, 2.57 feet Sept. 18, 1932.

Remarks.- Records good except those for period of backwater from aquatic growth May to September which are poor. Gage read once daily below and twice daily above 8.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	116	108	814	4,780	394	227	685	182	155	98	32
2	59	104	108	720	3,960	369	227	805	182	146	98	39
3	58	203	108	634	2,970	369	209	1,560	182	138	94	34
4	54	720	105	538	2,390	344	227	1,270	209	218	88	68
5	50	750	100	421	2,000	344	298	1,020	236	1,130	88	97
6	50	608	139	351	1,630	320	1,020	1,200	298	835	120	76
7	65	476	251	351	1,340	320	1,060	991	320	507	98	66
8	82	385	300	538	1,160	320	835	715	298	369	104	55
9	131	334	267	634	1,130	320	895	565	266	277	129	50
10	131	300	235	2,170	1,340	298	775	450	478	246	109	50
11	131	267	219	2,170	1,130	298	595	344	1,160	218	100	62
12	116	251	203	1,960	958	277	536	320	805	209	94	57
13	102	235	195	1,830	835	277	478	320	625	191	88	54
14	92	219	187	2,040	895	277	422	298	536	182	82	44
15	82	203	179	3,300	958	266	422	266	478	164	71	42
16	75	187	171	2,970	895	266	369	266	478	164	78	38
17	75	171	163	2,820	775	266	344	246	450	164	71	32
18	68	171	155	3,880	715	266	320	236	422	182	65	28
19	65	163	155	3,960	655	256	320	236	422	173	59	27
20	60	155	147	3,470	625	277	298	227	685	182	58	24
21	60	155	139	5,120	595	298	320	227	625	191	54	22
22	65	147	131	6,400	565	277	320	236	478	173	50	21
23	64	147	123	6,880	536	266	298	227	394	155	54	20
24	63	139	123	7,160	507	277	320	218	369	146	57	16
25	61	131	116	7,260	478	277	369	218	320	138	55	55
26	105	131	116	7,160	422	277	344	218	277	138	50	129
27	267	123	123	6,780	422	256	320	218	266	129	44	95
28	267	108	155	6,310	394	246	320	218	256	129	43	76
29	219	116	187	5,840	-	246	320	191	218	120	38	62
30	171	116	203	5,300	-	236	320	191	182	120	36	50
31	139	-	421	5,030	-	236	-	191	-	104	34	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,088	267	50	99.6	6,120
November	7,331	750	104	244	14,540
December	5,332	421	100	172	10,580
Calendar year 1936	42,735	1,180	22	117	84,760
January	104,811	7,260	351	3,381	207,900
February	35,060	4,780	394	1,252	69,540
March	9,016	394	236	291	17,880
April	13,128	1,060	209	438	26,040
May	14,373	1,560	191	464	28,510
June	12,097	1,160	182	403	23,990
July	7,393	1,130	104	238	14,660
August	2,307	129	34	74.4	4,580
September	1,521	129	16	50.7	3,020
Water year 1936-37	215,457	7,260	16	590	427,400

Little River Ditch 66 near Kennett, Mo.

Location.- Wire-eight gage, lat. 36°14'10", long. 89°58'45", in NE¼ sec. 4, T. 18 N., R. 10 E., at bridge on State Highway 84, about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmark).

Records available.- October 1926 to September 1937.

Average discharge.- 11 years, 415 second-feet.

Extremes.- Maximum discharge during year, 4,350 second-feet Jan. 24, 25 (gage height, 18.15 feet); minimum, 31 second-feet Oct. 6 (gage height, 2.80 feet).
1926-37: Maximum discharge and gage height, those of Jan. 24, 25, 1937; minimum discharge, 7 second-feet Aug. 29, 1936 (gage height, 2.33 feet).

Remarks.- Records good. Gage read once daily below and twice daily above gage height 8 feet. Ditch 66-A, an auxiliary to Ditch 66, from which it is separated by a low, narrow bank and with which cut-offs connect it, carries part of the flow above stage of 6.4 feet. Above stage of 13 feet Ditches 66 and 66-A unite in the vicinity of the gage forming one stream. For the purpose of determining the discharge of each, the division between the two ditches is taken as the top of the bank that separates them during low stages.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	92	75	851	3,380	354	232	438	140	122	77	45
2	36	80	75	939	3,290	354	232	990	140	116	77	45
3	34	120	80	809	2,940	338	217	1,600	154	116	73	45
4	33	438	75	690	2,410	338	232	1,740	160	204	73	58
5	32	940	75	564	1,880	322	292	1,580	174	251	73	65
6	31	860	92	438	1,450	322	510	1,290	189	235	73	65
7	37	676	145	386	1,190	322	939	1,040	204	204	77	58
8	44	454	256	564	1,050	322	809	871	204	235	73	54
9	46	316	256	768	1,170	307	748	655	182	251	73	54
10	59	242	214	1,290	1,400	292	654	536	283	235	69	54
11	70	200	186	1,800	1,270	292	546	460	442	204	65	54
12	70	172	165	1,690	1,000	277	474	406	536	167	65	54
13	63	152	152	1,470	830	277	420	370	615	147	62	58
14	56	138	145	1,400	851	262	403	352	588	128	58	58
15	51	132	132	2,280	939	277	386	370	352	116	58	58
16	46	120	126	2,760	895	262	354	317	300	111	58	54
17	44	114	120	2,760	748	262	322	300	267	111	54	54
18	46	114	120	2,980	636	247	307	267	370	116	54	51
19	42	102	114	3,170	582	262	307	267	424	116	54	51
20	41	97	114	3,130	546	262	277	251	317	167	54	48
21	38	97	108	3,460	492	277	277	388	267	167	51	48
22	40	97	102	3,930	492	277	307	370	235	140	51	45
23	47	92	102	4,140	492	262	322	283	204	122	54	45
24	47	92	97	4,300	456	277	322	219	189	111	54	45
25	45	92	97	4,350	438	277	338	204	174	106	54	58
26	70	92	92	4,300	403	277	322	189	160	100	51	65
27	126	86	97	4,190	386	262	307	189	147	95	48	65
28	158	86	102	4,030	370	262	292	174	147	90	48	77
29	145	86	132	3,780	-	247	277	167	134	86	45	69
30	120	80	152	3,550	-	247	292	160	128	81	45	62
31	102	-	256	3,330	-	232	-	147	-	81	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,857	158	31	59.9	3,680
November	6,459	940	80	215	12,810
December	4,054	256	75	131	8,040
Calendar year 1936	48,409	1,440	7	132	96,020
January	74,099	4,350	386	2,390	147,000
February	31,986	3,380	370	1,142	63,440
March	8,848	354	232	285	17,550
April	11,717	939	217	391	23,240
May	16,590	1,740	147	535	32,910
June	7,626	615	128	254	15,130
July	4,551	251	81	146	8,990
August	1,866	77	45	60.2	3,700
September	1,662	77	45	55.4	3,300
Water year 1936-37	171,295	4,350	31	469	339,790

Little River Ditch 66-A near Kennett, Mo.

Location.- Chain gage, lat. 36°14'10", long. 89°58'45", in NE¼ sec. 4, T. 18 N., R. 10 E., at bridge on State Highway 84, about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmark).

Records available.- January 1927 to September 1937.

Average discharge.- 10 years (1928-1937), 58.5 second-feet.

Extremes.- Maximum discharge during year, 1,650 second-feet Jan. 24-26; maximum gage height, 18.13 feet Jan. 25; no flow on many days.
1927-37: Maximum discharge, 2,340 second-feet (included some overflow from levee breaks on Mississippi River) Apr. 25, 1927 (gage height, 17.6 feet, from graph based on gage readings); no flow on many days.

Remarks.- Records fair. Gage read once daily below and twice daily above gage height 8 feet. See paragraph headed "Remarks" in date for Little River Ditch 66 near Kennett.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0		32	1,190		0	0				
2		0		46	1,120		0	58				
3		0		30	920		0	220				
4		0		11	638		0	276				
5		73		0	342		0	210				
6		58		0	180		0	124				
7		24		0	100		44	68				
8		0		0	68		24	39				
9		0		20	73		15	12				
10		0		124	148		5	0				
11		0		300	118		0	0				
12		0		264	58		0	0				
13		0		172	30		0	0				
14		0		156	36		0	0				
15		0		548	46		0	0				
16		0		810	46		0	0				
17		0		832	20		0	0				
18		0		964	5		0	0				
19		0		1,070	0		0	0				
20		0		1,050	0		0	0				
21		0		1,240	0		0	0				
22		0		1,450	0		0	0				
23		0		1,520	0		0	0				
24		0		1,650	0		0	0				
25		0		1,650	0		0	0				
26		0		1,650	0		0	0				
27		0		1,600	0		0	0				
28		0		1,520	0		0	0				
29		0		1,400			0	0				
30		0		1,280	-		0	0				
31		0		1,160	-		-	0				

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	155	73	0	5.2	307
December	0	0	0	0	0
Calendar year 1936	1,136	220	0	3.10	2,260
January	22,549	1,650	0	727	44,730
February	5,138	1,190	0	184	10,190
March	0	0	0	0	0
April	88	44	0	2.9	175
May	1,007	276	0	32.5	2,000
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1936-37	28,937	1,650	0	79.3	57,400

Little River Ditch 251 near Kennett, Mo.

Location.- Wire-weight gage, lat. 36°14'10", long. 89°58'40", in NW¼ sec. 3, T. 18 N., R. 10 E., at bridge on State Highway 84, 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmark).

Records available.- November 1926 to September 1937.

Average discharge.- 10 years (1928-37), 714 second-feet.

Extremes.- Maximum discharge during year, 6,730 second-feet Jan. 24-26; maximum gage height, 18.20 feet Jan. 25; minimum discharge, 117 second-feet Sept. 24; minimum gage height, 2.91 feet Oct. 5.
1926-37: Maximum discharge, that of Jan. 24-26, 1937; maximum gage height, that of Jan. 25, 1937; minimum discharge, 52 second-feet Sept. 5-8, 1930 (gage height, 2.10 feet).

Remarks.- Records good. Gage read once daily below and twice daily above 8.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	155	280	227	1,550	5,400	715	440	806	348	288	202	124
2	155	248	227	1,580	5,210	715	440	1,630	348	288	202	130
3	147	361	227	1,420	4,690	685	440	1,980	370	269	194	130
4	147	1,030	218	1,240	3,940	655	440	2,700	393	440	194	151
5	139	1,840	208	1,010	3,100	655	542	2,920	416	542	187	180
6	139	1,680	258	838	2,480	625	1,060	2,610	440	569	187	172
7	155	1,360	385	758	2,060	625	1,710	2,180	465	490	194	165
8	164	978	605	1,010	1,940	625	1,520	1,780	465	516	194	151
9	172	758	605	1,300	2,020	597	1,480	1,300	416	516	187	144
10	198	605	530	2,390	2,390	569	1,300	1,120	597	490	187	151
11	208	505	457	3,010	2,180	569	1,090	962	962	416	180	144
12	208	457	433	2,880	1,820	542	962	868	1,160	370	172	151
13	198	409	409	2,520	1,590	542	837	837	1,030	327	172	158
14	189	385	385	2,440	1,590	516	775	775	837	307	158	151
15	180	361	361	3,730	1,780	542	775	806	745	288	158	144
16	172	338	338	4,410	1,710	516	685	715	655	269	158	144
17	164	315	338	4,470	1,520	516	625	685	597	269	151	144
18	155	315	315	4,800	1,300	490	625	625	745	288	144	137
19	164	292	315	5,090	1,230	516	597	597	806	288	144	137
20	155	280	315	5,040	1,120	516	542	569	625	393	144	130
21	147	280	292	5,530	1,060	597	542	775	542	370	144	130
22	164	269	292	6,210	1,030	542	597	775	516	327	137	124
23	172	258	280	6,430	990	542	597	625	465	288	151	124
24	172	258	269	6,650	930	542	625	516	416	269	151	117
25	172	258	269	6,730	899	542	625	490	393	251	144	151
26	248	248	258	6,650	837	542	625	465	370	251	144	172
27	338	248	269	6,500	775	490	569	440	348	234	137	172
28	409	227	292	6,350	745	490	542	416	327	234	130	194
29	385	238	361	5,990	-	490	542	416	307	218	130	180
30	338	227	385	5,590	-	465	542	393	307	218	130	165
31	292	-	630	5,340	-	465	-	370	-	218	124	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	6,201	409	139	200	12,300
November	15,308	1,804	227	510	30,360
December	10,753	630	208	347	21,330
Calendar year 1936	123,071	2,460	72	336	244,100
January	119,456	6,730	758	3,853	236,900
February	56,336	5,400	745	2,012	111,700
March	17,436	715	465	563	34,590
April	22,691	1,710	440	756	45,010
May	32,146	2,920	370	1,037	63,760
June	16,411	1,160	307	547	32,550
July	10,501	569	218	339	20,830
August	5,031	202	124	162	9,980
September	4,467	194	117	149	8,860
Water year 1936-37	316,739	6,730	117	868	628,200

Little River Ditch 259 near Kennett, Mo.

Location.- Wire-weight gage, lat. 36°14'10", long. 89°58'35", in NW¼ sec. 3, T. 18 N., R. 10 E., at bridge on State Highway 84, about 4 miles east of Kennett. Zero of gage is about 240 feet above mean sea level (Little River Drainage District benchmark).

Records available.- November 1926 to September 1937.

Average discharge.- 10 years (1927-37), 109 second-feet.

Extremes.- Maximum discharge observed during year, 3,420 second-feet Jan. 23, 24; maximum gage height observed, 12.23 feet Jan. 23; minimum discharge, 1.8 second-feet Oct. 6, 23, 24; minimum gage height, 1.28 feet Aug. 30 to Sept. 1.
1926-37: Maximum discharge, 4,140 second-feet (Included some overflow from levee breaks on Mississippi River) April 29, 1927 (gage height, 15.57 feet, from graph based on gage readings); no flow Aug. 3 to Sept. 2, 1936; minimum gage height, that of Aug. 30 to Sept. 1, 1937.

Remarks.- Records good except those from May to September above 70 second-feet, which are poor. Gage read once daily below and twice daily above 8.0 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	3.6	3.7	325	1,310	49	7	96	31	36	18	10
2	2.0	3.6	3.4	287	833	43	7	564	28	34	18	11
3	1.9	233	3.4	269	648	39	6	606	28	31	17	10
4	1.9	480	3.2	188	585	37	7	369	33	1,380	16	16
5	1.9	440	2.9	146	480	34	92	298	35	1,360	15	14
6	1.8	363	34	121	382	28	269	250	48	971	15	13
7	3.1	306	251	197	306	28	188	189	48	442	14	12
8	3.3	251	215	206	287	26	306	162	43	266	14	12
9	4.2	197	172	522	287	23	344	142	43	149	14	12
10	4.0	154	138	1,130	251	19	215	118	1,860	130	13	13
11	3.1	129	110	905	215	19	154	112	1,750	106	12	12
12	2.9	105	80	627	188	17	110	101	1,550	90	12	11
13	2.7	86	50	585	172	12	92	96	1,080	79	12	11
14	2.4	70	43	585	363	24	90	90	480	68	11	11
15	2.2	54	32	1,200	325	23	73	84	405	59	11	10
16	2.2	43	24	861	233	23	59	79	423	51	12	10
17	2.1	35	19	585	180	19	48	74	266	64	11	10
18	2.0	26	15	1,650	154	18	40	74	175	55	11	10
19	1.9	19	19	1,460	138	14	36	64	142	59	11	11
20	1.9	17	9	1,080	129	61	39	64	124	59	10	10
21	1.9	14	7	2,190	113	40	34	64	106	59	10	10
22	2.0	10	5	2,760	111	27	60	59	96	51	10	10
23	1.8	10	6	3,420	97	25	41	55	84	44	10	11
24	1.8	7	4.7	3,170	86	28	56	48	74	39	10	10
25	1.9	7	4.7	2,950	74	34	84	48	64	36	10	18
26	3.9	6	4.0	2,600	67	25	61	44	55	32	10	30
27	4.8	5	6	2,360	61	19	40	43	51	28	10	24
28	7	5	7	2,120	54	15	37	40	48	26	10	28
29	7	4.5	12	1,780	-	11	30	38	44	24	10	16
30	6	3.9	25	1,530	-	11	59	36	40	22	10	15
31	4.2	-	440	1,600	-	8	-	33	-	20	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	91.7	7	1.8	2.96	182
November	3,087.6	480	3.6	103	6,120
December	1,749.0	440	2.9	56.4	3,470
Calendar year 1936	10,187.8	480	0	27.8	20,200
January	39,409	3,420	121	1,271	78,170
February	8,129	1,310	54	290	16,120
March	799	61	8	25.8	1,580
April	2,684	344	6	89.5	5,320
May	4,140	606	33	134	8,210
June	9,254	1,860	28	308	18,360
July	5,870	1,380	20	189	11,640
August	377	18	10	12.2	748
September	401	30	10	13.4	795
Water year 1936-37	75,991.3	3,420	1.8	208	150,700

White River at Beaver, Ark.

Location.- Wire-weight gage, lat. 36°28'20", long. 93°45'55", in sec. 20, T. 21 N., R. 26 W., at Missouri & North Arkansas Railway bridge a quarter of a mile east of Beaver. Zero of gage is 883.04 feet(revised) above mean sea level (general adjustment of 1929).

Drainage area.- 1,270 square miles.

Records available.- July 1909 to December 1910, May 1923 to September 1937.

Average discharge.- 14 years (1923-37), 1,645 second-feet.

Extremes.- Maximum discharge during year, 23,400 second-feet Jan. 16 (gage height, 18.58 feet); minimum discharge, 82 second-feet July 5, Aug. 31; minimum gage height, 2.53 feet Aug. 31.
1909-10, 1923-37: Maximum discharge observed, 65,000 second-feet Apr. 16,1927 (gage height, 37.0 feet); minimum, 3.0 second-feet Aug. 31, Sept. 1, 1936; minimum gage height, 1.55 feet, present datum, Oct. 1-8, 1909.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 4 to Sept. 30)

2.4	59	4.0	845	8.0	5,000
2.6	115	4.5	1,180	9.0	6,500
2.8	191	5.0	1,540	10.0	8,100
3.0	279	5.5	1,950	12.0	11,500
3.5	542	6.0	2,480	15.0	16,900
				19.0	24,100

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,480	1,180	279	5,000	9,120	975	1,040	1,390	289	106	458	115
2	1,620	1,250	289	3,580	5,870	910	975	1,950	317	96	327	103
3	1,250	*1,980	279	3,460	4,350	845	910	3,910	293	90	266	109
4	1,040	*12,300	274	3,460	3,460	814	845	6,850	279	84	274	112
5	845	*5,510	317	2,480	2,840	814	782	4,220	252	84	660	144
6	720	3,340	720	1,950	2,360	1,110	814	4,090	248	96	600	266
7	1,180	2,360	660	3,080	2,040	1,110	1,390	2,960	298	103	404	486
8	975	1,860	1,180	*5,050	1,860	975	1,620	2,260	293	126	313	630
9	1,390	1,540	1,250	12,900	1,780	910	2,720	1,860	378	167	261	*2,990
10	2,360	1,320	1,110	9,120	2,040	910	3,460	1,620	3,210	137	221	*6,100
11	1,980	1,180	975	5,420	1,620	814	2,480	1,390	1,110	140	195	*2,290
12	1,470	1,040	845	3,960	1,390	782	1,950	1,250	845	126	155	1,390
13	1,180	910	782	4,220	1,320	1,110	1,700	1,110	680	126	133	1,040
14	975	814	720	7,460	1,180	1,540	1,470	1,040	542	129	112	782
15	845	751	660	*13,300	1,110	1,250	1,320	1,110	458	129	122	630
16	720	690	600	*19,300	1,040	1,180	1,250	975	431	126	93	542
17	630	630	571	*7,850	975	1,040	1,110	845	404	109	87	458
18	571	571	542	5,230	845	975	1,040	782	352	103	106	404
19	514	542	514	3,960	845	910	975	690	352	159	147	352
20	458	514	486	3,080	814	845	*6,050	630	327	1,470	112	317
21	431	486	458	2,480	910	814	*5,360	571	298	1,700	144	284
22	404	431	431	2,260	2,260	782	*15,400	571	274	814	147	261
23	378	431	431	3,080	2,140	751	*7,910	600	243	542	256	234
24	378	378	404	2,960	1,700	1,250	4,740	571	221	404	327	217
25	690	378	378	2,480	1,390	1,780	4,480	600	195	327	230	234
26	1,040	352	378	3,340	1,250	2,260	3,460	514	179	266	167	600
27	*5,160	327	1,110	2,960	1,110	1,780	2,600	458	163	221	133	458
28	*3,460	317	975	2,840	1,040	1,470	2,040	404	147	195	112	404
29	2,260	308	*3,810	3,710	-	1,320	1,780	352	129	155	100	352
30	1,700	289	2,720	7,300	-	1,180	1,540	327	115	322	90	289
31	1,390	-	2,260	10,800	-	1,110	-	313	-	514	82	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Run-off Acre-feet
October	40,464	5,160	378	1,305	1.03	1.19	80,260
November	43,979	12,300	289	1,466	1.15	1.28	87,230
December	26,408	3,810	274	852	.671	.77	52,380
Calendar year 1936	215,036.9	12,300	3.0	588	.463	6.28	426,500
January	168,120	19,300	1,950	5,423	4.27	4.92	333,500
February	58,659	9,120	814	2,095	1.65	1.72	116,300
March	34,316	2,260	751	1,107	.872	1.01	68,060
April	83,211	15,400	782	2,774	2.18	2.43	165,000
May	51,213	8,910	313	1,652	1.30	1.50	101,600
June	13,302	3,210	115	443	.349	.39	26,380
July	9,166	1,700	84	296	.233	.27	18,180
August	6,834	660	82	220	.173	.20	13,560
September	22,593	6,100	103	753	.593	.66	44,810
Water year 1936-37	558,265	19,300	82	1,529	1.20	16.34	1,107,000

*Discharge computed from graph drawn through gage readings.

71088 O—38——4

White River at Forsyth, Mo.

Location.- Water- stage recorder, lat. 36°40'55", long. 93°06'05", in SE¼ sec. 33, T. 24 N., R. 20 W., in Forsyth, at bridge on State Highway 78, a quarter of a mile below Swan Creek. Zero of gage is 640.64 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 4,610 square miles.

Records available.- January to September 1926, February 1930 to September 1937.

Extremes.- Maximum discharge during year, 50,600 second-feet Jan. 16 (gage height, 18.49 feet); minimum, 66 second-feet Sept. 4 (gage height, 1.67 feet); minimum daily discharge, 176 second-feet Nov. 26, 29.
1926, 1930-37, Maximum discharge, 127,000 second-feet Mar. 11, 1935 (gage height, 35.23 feet); minimum, 30 second-feet Sept. 2, 3, 1936; minimum gage height, 1.20 feet July 14, 1934; minimum daily discharge, 34 second-feet Sept. 3, 1936.
Maximum stage known, 45.36 feet, from floodmark, Apr. 16, 1927 (discharge, about 160,000 second-feet).

Remarks.- Records good. Flow regulated by hydroelectric plant of Empire District Electric Co. 2 miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13,700	*4,400	575	7,420	36,300	3,700	3,350	5,990	1,430	2,000	*856	460
2	8,680	5,600	418	10,200	26,500	4,730	3,260	*12,500	1,470	890	1,360	384
3	6,700	16,600	1,050	*9,550	18,500	4,070	2,790	17,800	1,630	909	1,160	419
4	*5,200	22,700	710	8,970	14,400	3,690	*2,920	24,200	3,240	*1,160	979	181
5	3,360	23,400	1,280	8,420	11,500	3,430	3,280	18,000	5,120	1,080	1,120	*768
6	4,040	14,400	*2,740	6,940	9,840	3,330	2,370	13,000	*3,690	1,050	873	903
7	6,040	9,550	3,040	7,900	*8,680	*2,480	2,360	10,800	2,860	872	1,310	1,140
8	15,100	*7,420	2,440	16,600	8,420	3,310	4,130	8,900	3,110	924	*1,170	1,260
9	14,400	6,480	2,740	31,000	8,970	3,070	4,920	*7,680	7,770	1,080	1,050	2,680
10	11,500	5,600	3,680	*32,900	8,970	3,090	6,150	6,710	22,300	2,260	1,080	16,900
11	*9,550	3,680	2,740	22,700	8,970	3,090	*7,290	6,050	28,500	*1,000	713	20,100
12	7,900	3,360	2,440	15,900	7,660	3,040	6,440	6,060	16,300	1,120	484	*8,320
13	6,480	3,680	*2,140	13,300	6,940	4,230	5,850	6,040	*9,400	1,250	358	5,890
14	5,600	4,040	3,040	21,900	*6,260	*6,030	5,750	5,810	7,770	1,490	414	3,980
15	4,400	*1,860	2,440	42,100	6,040	6,040	5,440	5,330	13,000	997	* 389	714
16	3,040	3,040	1,650	48,700	4,800	5,380	4,860	*3,380	17,200	962	212	992
17	2,740	2,740	1,790	*37,900	2,890	4,670	4,030	3,900	16,300	613	361	1,470
18	*2,140	2,440	1,790	21,900	3,520	4,560	*2,460	3,710	10,200	*1,330	491	1,360
19	1,860	2,440	1,000	15,900	4,400	4,200	3,060	3,740	7,530	2,620	485	*589
20	2,440	1,520	*380	12,200	5,000	5,040	3,170	2,970	*6,240	2,810	496	705
21	2,740	1,650	900	10,200	*6,940	*3,390	12,900	1,620	5,740	3,520	457	933
22	2,440	*226	1,400	9,550	6,480	3,340	23,200	3,270	4,190	3,650	*458	865
23	2,440	1,860	1,100	8,420	8,420	3,280	27,300	*2,940	2,190	2,830	595	873
24	1,520	1,520	620	*8,420	8,420	5,100	17,800	2,390	1,160	2,190	423	920
25	*2,440	1,400	1,050	8,420	7,420	5,330	14,200	2,630	2,460	*1,120	621	490
26	6,480	176	1,260	8,420	6,480	5,600	11,700	3,150	2,170	1,390	620	*614
27	6,940	1,100	*1,860	8,420	6,040	5,600	9,330	1,640	*1,830	1,450	578	948
28	11,900	1,000	4,400	8,420	*4,800	*5,600	7,660	3,100	1,720	1,770	456	1,050
29	9,260	*176	4,800	8,970	-	5,280	6,700	1,680	1,390	1,420	*387	880
30	6,940	665	6,480	18,100	-	4,800	6,290	*1,170	1,540	1,280	533	803
31	6,040	-	7,420	*33,300	-	4,340	-	1,910	-	641	384	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Run-off Acre-feet
October	194,010	15,100	1,520	6,258	1.36	1.57	384,800
November	154,723	23,400	176	5,157	1.12	1.25	306,900
December	69,393	7,420	380	2,238	.485	.56	137,600
Calendar year 1936	773,828	27,000	34	2,114	.459	6.25	1,535,000
January	523,040	48,700	6,940	16,870	3.66	4.22	1,037,000
February	263,560	36,300	2,890	9,413	2.04	2.12	522,800
March	132,840	6,040	2,480	4,285	.930	1.07	263,500
April	220,960	27,300	2,360	7,365	1.60	1.78	438,300
May	198,070	24,200	1,170	6,389	1.39	1.60	392,900
June	209,450	28,500	1,160	6,982	1.51	1.68	415,400
July	47,698	3,650	613	1,539	.334	.39	94,610
August	20,873	1,360	212	673	.146	.17	41,400
September	77,591	20,100	181	2,586	.561	.63	153,900
Water year 1936-37	2,112,208	48,700	176	5,787	1.26	17.04	4,189,000

*Sunday.

White River near Flippin, Ark.

Location.- Staff gage, lat. 36°19', long. 92°34', in NW¼ sec. 9, T. 19 N., R. 15 W., 2½ miles northeast of Flippin, 12 miles above mouth of Crooked Creek, and 19½ miles above mouth of North Fork of White River. Zero of gage is 420.92 feet above mean sea level (White River Power Co. benchmark).

Drainage area.- 6,170 square miles.

Records available.- October 1928 to September 1937.

Extremes.- Maximum discharge observed during year, 58,900 second-feet Jan. 17 (gage height, 21.54 feet); minimum, 348 second-feet Aug. 18 (gage height, 4.58 feet).
1928-37: Maximum discharge observed, 164,000 second-feet Mar. 12, 1935 (gage height, 38.1 feet); minimum discharge, 105 second-feet Sept. 14, 15, 1936; minimum gage height, 4.08 feet Dec. 18, 1932.
Maximum stage known, 46.6 feet Apr. 16, 1927.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23,000	6,770	1,140	8,380	40,500	5,800	5,350	7,550	2,210	1,930	1,540	620
2	14,000	6,280	1,060	9,530	43,300	4,910	4,480	30,800	2,350	1,790	880	620
3	10,400	20,600	1,080	10,700	33,400	5,800	4,080	25,800	2,210	1,790	880	580
4	7,820	22,600	880	10,700	20,600	4,910	3,690	23,800	2,070	1,930	1,790	620
5	5,800	25,400	840	10,100	16,800	4,910	3,150	29,100	2,210	5,130	1,540	580
6	3,880	25,000	1,420	9,230	14,000	4,080	3,690	20,600	5,570	2,350	1,420	520
7	3,690	14,700	1,540	12,800	11,700	3,880	3,330	15,500	4,910	1,790	1,140	520
8	7,820	10,700	3,690	16,800	10,700	3,330	1,790	13,400	2,980	1,660	1,190	880
9	21,800	7,820	2,980	25,000	9,830	3,510	2,980	10,700	4,080	1,360	1,420	1,140
10	18,000	6,770	2,660	38,200	10,100	3,880	3,690	9,530	14,900	1,300	1,140	4,690
11	12,400	5,800	2,820	35,100	10,400	3,690	6,770	8,100	29,500	1,540	1,190	16,200
12	10,700	4,910	2,980	24,600	10,100	3,690	8,380	7,290	31,200	2,660	1,190	22,200
13	8,380	3,510	3,150	18,800	9,230	4,080	7,560	7,290	18,400	1,660	840	8,660
14	6,770	3,880	2,660	41,000	9,530	4,690	6,520	7,290	10,700	1,660	840	6,520
15	5,800	3,880	2,350	46,200	7,290	6,280	6,040	7,030	9,230	1,660	660	4,480
16	4,910	2,320	2,210	51,500	6,040	6,280	5,800	6,280	14,400	1,540	620	2,350
17	4,280	2,500	2,070	58,900	4,910	6,280	6,040	4,480	18,800	1,420	550	1,190
18	2,820	2,500	1,930	41,900	3,880	5,350	5,130	4,480	16,800	1,190	390	1,300
19	2,660	2,500	2,070	27,000	3,690	4,690	5,130	4,480	15,100	1,080	372	1,790
20	2,210	2,500	2,210	18,000	3,330	5,570	6,280	4,280	8,940	4,690	480	1,420
21	2,350	2,820	1,790	14,400	8,380	5,800	16,200	4,280	7,030	4,280	550	1,420
22	2,500	2,350	1,240	14,000	10,700	3,510	22,600	3,330	6,040	3,690	550	1,300
23	2,210	2,350	1,420	12,400	11,400	3,880	27,900	2,350	4,480	3,880	550	1,190
24	2,980	1,080	1,540	12,400	10,700	3,880	27,400	2,980	2,980	2,350	740	1,080
25	2,660	2,210	1,480	11,700	10,400	4,080	23,400	2,820	1,540	2,210	700	1,080
26	8,380	1,790	880	11,700	8,380	5,350	14,700	2,820	1,480	1,540	700	1,080
27	10,100	1,930	1,140	11,100	7,290	5,800	13,000	3,880	2,980	1,540	620	1,030
28	7,030	930	1,930	11,400	6,280	5,570	9,530	2,980	1,930	1,660	660	980
29	12,700	1,420	2,350	12,400	-	5,800	8,660	2,980	1,930	1,790	660	980
30	10,400	1,420	4,080	15,800	-	5,800	8,380	2,980	2,070	1,790	700	880
31	8,940	-	6,040	35,100	-	5,800	-	2,210	-	1,660	580	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Run-off Acre-feet
October	247,390	23,000	2,210	7,980	1.29	1.49	490,700
November	199,740	25,400	930	6,658	1.08	1.20	396,200
December	65,650	6,040	840	2,118	.343	.40	130,200
Calendar year 1936	937,205	27,500	108	2,561	.415	5.65	1,859,000
January	676,840	58,900	8,380	21,830	3.54	4.08	1,342,000
February	362,860	43,300	3,330	12,600	2.04	2.12	699,900
March	150,880	6,280	3,330	4,867	.789	.91	299,300
April	271,640	27,900	1,790	9,055	1.47	1.64	538,800
May	281,390	30,800	2,210	9,077	1.47	1.70	558,100
June	249,020	31,200	1,480	8,301	1.35	1.51	493,900
July	66,520	5,130	1,080	2,146	.348	.40	131,900
August	27,082	1,790	372	874	.142	.16	53,720
September	87,900	22,200	520	2,930	.475	.53	174,300
Water year 1936-37	2,676,912	58,900	372	7,334	1.19	16.14	5,310,000

White River at De Valls Bluff, Ark.

Location.- Water-stage recorder, lat. 34°47', long. 91°27', in sec. 16, T. 2 N., R. 4 W., 1 mile northeast of De Valls Bluff and 23 miles (revised) above mouth of Cache River. Zero of gage is 152.67 feet above mean sea level.

Drainage area.- 23,800 square miles.

Records available.- December 1927 to September 1937.

Extremes.- Maximum discharge during year, 151,000 second-feet Jan. 23 (gage height, 29.20 feet); minimum discharge, 5,460 second-feet Sept. 5-6; minimum gage height, 4.59 feet Sept. 6.
1927-37: Maximum discharge observed, that of Jan. 23, 1937; minimum, 3,200 second-feet Aug. 30 to Sept. 4, 1936 (gage height, 1.4 feet).
Maximum stage known, 34.6 feet Apr. 23, 1927.

Remarks.- Records good. Stage-discharge relation affected by backwater Jan. 25 to Mar. 22; discharge determined by slope method, using slope obtained from U. S. Weather Bureau gage at Clarendon, 25 miles downstream. At stages above gage height 27 feet, overflow occurs in the region of Des Arc and Augusta, bypassing some of the flow of White River into Cache River. Records for White River at Clarendon, which includes flow of Cache River, published in Water-supply Paper 838 for period Dec. 1, 1936, to Apr. 30, 1937.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18,200	28,200	9,460	17,100	84,800	36,000	24,300	36,600	18,600	19,300	10,300	5,660
2	20,800	27,700	9,040	24,300	80,200	35,900	23,400	37,100	17,400	17,900	9,740	5,660
3	22,900	27,700	8,760	28,500	74,700	36,500	22,500	37,100	16,200	16,700	9,320	5,560
4	24,300	27,700	8,340	30,700	70,500	35,700	21,600	38,200	15,400	15,600	8,900	5,560
5	24,700	28,500	8,080	32,700	67,400	34,700	21,200	39,400	15,000	14,500	8,620	5,460
6	23,800	30,000	9,460	34,500	64,200	33,600	20,400	40,600	14,500	13,400	8,340	5,560
7	21,800	31,500	12,200	35,500	62,000	33,400	19,800	41,300	14,300	12,800	7,960	6,880
8	19,500	32,700	17,700	36,600	60,200	32,800	19,300	42,700	14,200	13,000	7,720	9,460
9	17,200	33,600	22,900	38,800	56,500	31,800	19,100	43,400	14,000	13,400	7,480	10,400
10	15,300	34,500	25,000	41,300	53,500	30,900	19,500	44,900	14,300	13,400	7,360	10,000
11	14,300	35,000	25,200	43,400	49,900	29,700	20,000	45,700	14,800	13,000	7,240	9,040
12	15,400	34,500	24,300	44,900	46,500	28,200	20,200	47,300	15,300	12,500	7,120	7,960
13	18,200	33,600	22,900	46,500	44,000	27,000	20,400	49,100	17,700	12,200	7,000	7,360
14	20,200	31,900	21,400	49,100	42,300	25,800	20,400	49,100	22,300	12,500	6,880	7,240
15	21,000	29,700	20,000	54,200	39,100	24,800	20,600	48,100	25,700	13,100	6,880	9,740
16	20,600	27,400	18,600	60,100	37,400	23,900	20,800	46,500	28,000	13,400	6,760	13,000
17	19,700	25,200	17,200	69,400	35,800	23,200	21,000	45,700	29,400	13,200	6,640	13,700
18	18,200	22,900	16,100	88,500	34,300	23,000	21,000	44,900	30,400	13,100	6,400	13,000
19	16,600	21,000	15,100	96,600	34,200	22,600	20,800	44,100	31,100	12,800	6,280	11,900
20	15,100	19,500	14,300	104,000	34,700	22,700	20,400	42,700	32,300	12,600	6,060	10,600
21	13,700	17,900	13,500	118,000	33,900	22,200	20,000	40,600	32,700	12,500	5,860	9,320
22	12,600	16,700	12,800	140,000	34,200	22,000	19,500	39,400	33,200	12,800	5,760	8,200
23	11,600	15,800	12,200	151,000	34,500	22,300	19,100	37,100	33,600	13,800	5,760	7,360
24	10,900	14,600	11,600	150,000	34,400	22,500	20,600	34,500	33,200	15,000	5,760	6,760
25	10,400	13,700	11,000	136,000	35,300	22,700	24,700	32,300	32,300	15,600	5,760	6,640
26	10,400	12,800	10,400	125,000	35,600	23,400	27,700	29,400	30,400	15,300	6,060	6,520
27	11,600	11,900	9,880	116,000	35,900	24,500	30,400	27,400	28,200	14,600	6,520	6,400
28	18,400	11,000	9,460	109,000	35,700	25,200	32,300	25,400	26,200	13,700	6,640	6,760
29	24,500	10,300	9,320	103,000	-	25,200	34,100	23,400	23,600	12,800	6,400	7,000
30	27,000	9,880	9,600	96,700	-	25,200	35,500	21,600	21,200	11,900	6,060	7,120
31	28,000	-	11,900	90,400	-	24,700	-	20,000	-	11,000	5,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	566,900	28,000	10,400	18,290	1,124,000
November	717,380	36,000	9,880	23,910	1,423,000
December	447,700	25,200	8,080	14,440	888,000
Calendar year 1936	4,086,970	35,000	3,200	11,170	8,106,000
January	2,309,800	151,000	17,100	74,510	4,581,000
February	1,351,700	84,800	33,900	48,280	2,681,000
March	852,100	36,500	22,000	27,490	1,690,000
April	680,600	35,500	19,100	22,690	1,350,000
May	1,195,600	49,100	20,000	38,570	2,371,000
June	695,500	33,600	14,000	23,180	1,380,000
July	427,400	19,300	11,000	13,790	847,700
August	219,440	10,300	5,760	7,079	435,300
September	245,820	13,700	5,460	8,194	487,600
Water year 1936-37	9,709,940	151,000	5,460	26,600	19,259,000

James River at Galena, Mo.

Location.- Wire-weight gage, lat. 36°48'20", long. 93°27'50", in NW¼ sec. 7, T. 24 N., R. 23 W., at bridge on State Highways 13 and 44 at Galena, half a mile above Railey Creek. Zero of gage is 923.37 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 1,000 square miles.

Records available.- October 1921 to September 1937.

Average discharge.- 15 years (1922-37), 1,011 second-feet.

Extremes.- Maximum discharge observed during year, 17,900 second-feet Jan. 15 (gage height, 14.80 feet); minimum observed, 94 second-feet Sept. 22 (gage height, 1.49 feet).

1921-37: Maximum discharge, 60,400 second-feet Mar. 11, 1935 (gage height, 27.05 feet); minimum, 22 second-feet Aug. 26, 27, 29, 30, Sept. 4, 1936; minimum gage height, 0.45 foot Aug. 30, 1936.

Remarks.- Records good. Gage read twice daily or oftener.

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

(Shifting-control method used Nov. 4 to Jan. 13, Mar 12 to Apr. 23)

1.4	80	4.0	1,340
1.6	113	5.0	2,200
1.8	154	6.0	3,220
2.2	263	8.0	5,730
2.6	439	10.0	8,800
3.0	676	12.0	12,300
3.5	992	15.0	18,300

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,100	863	280	1,480	7,060	992	646	3,110	361	738	280	125
2	1,560	*1,440	280	1,560	4,530	927	615	2,300	361	707	263	123
3	1,340	*7,790	263	1,480	3,330	863	585	6,610	385	676	280	129
4	1,060	*4,660	263	1,410	2,690	800	555	3,330	496	676	297	125
5	927	2,890	263	1,260	2,300	800	526	2,590	3,110	615	412	361
6	2,690	2,200	496	1,120	2,100	738	469	2,200	1,740	585	297	615
7	4,160	1,650	615	1,410	1,920	707	439	1,650	1,190	555	263	280
8	4,160	1,410	555	5,050	2,010	676	496	1,410	927	496	232	203
9	4,530	1,260	496	*10,600	3,220	615	469	1,190	*3,410	496	218	203
10	3,220	1,120	439	*5,870	2,790	585	469	1,060	7,680	439	218	190
11	2,300	992	412	3,680	2,200	555	469	927	*7,910	469	203	166
12	1,820	927	361	2,790	1,920	526	439	1,190	3,560	469	190	154
13	1,480	600	337	2,390	1,650	615	412	1,410	2,390	469	190	133
14	1,260	769	297	*4,900	1,480	863	469	1,190	*8,580	439	177	125
15	1,060	676	297	*14,000	1,340	1,060	439	1,060	10,700	385	166	133
16	927	615	280	7,520	1,260	1,060	412	927	*10,500	337	154	115
17	863	585	263	4,920	1,120	927	385	863	6,010	337	154	119
18	738	555	263	3,680	1,060	927	361	800	4,040	361	177	117
19	676	526	248	2,890	1,060	863	337	707	3,000	1,410	177	113
20	615	496	248	2,390	1,060	800	337	615	2,490	1,460	166	106
21	555	469	218	2,100	1,820	800	927	555	1,920	992	166	99
22	555	439	218	1,820	2,890	738	1,260	1,060	1,560	738	166	94
23	496	385	203	1,650	2,100	676	1,120	1,410	1,410	615	166	95
24	469	385	203	1,480	1,650	927	1,260	1,060	1,260	496	154	102
25	526	385	190	1,340	1,480	1,120	1,190	863	1,120	615	166	121
26	2,010	337	177	1,260	1,260	1,060	992	769	1,060	863	154	109
27	2,300	297	439	1,190	1,120	927	927	646	992	555	144	113
28	1,740	297	863	1,120	1,060	863	800	555	927	439	133	109
29	1,410	297	1,120	1,120	-	800	800	526	863	385	133	111
30	1,120	263	1,120	*2,450	-	738	992	469	800	361	125	100
31	992	-	1,190	*10,800	-	707	-	412	-	317	125	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	49,659	4,530	469	1,602	1.60	1.84	98,500
November	35,778	7,790	263	1,193	1.19	1.33	70,960
December	12,897	1,190	177	416	.416	.46	25,580
Calendar year 1936	169,464	7,790	22	463	.463	6.30	336,100
January	106,730	14,000	1,120	3,443	3.44	3.97	211,700
February	59,480	7,060	1,060	2,124	2.12	2.21	118,000
March	25,255	1,120	526	815	.815	.94	50,090
April	19,597	1,260	337	653	.653	.73	38,870
May	43,464	6,610	412	1,402	1.40	1.61	86,210
June	90,752	10,700	361	3,025	3.02	3.37	180,000
July	18,515	1,480	317	597	.597	.69	36,720
August	6,146	412	125	198	.198	.23	12,190
September	4,666	615	94	156	.156	.17	9,300
Water year 1936-37	472,961	14,000	94	1,296	1.30	17.57	938,100

*Discharge computed on basis of graph drawn through gage readings.

Wilson Creek near Springfield, Mo.

Location.- Water-stage recorder, lat. 37°11'35", long. 93°20'20", in NW¼SE¼ sec. 28, T. 29 N., R. 22 W., three-quarters of a mile below Jordan Creek and 2 miles southwest of Springfield. Zero of gage is 1,196.26 feet above mean sea level (general adjustment of 1929).

Drainage area.- 19.4 square miles.

Records available.- May 1932 to September 1937.

Extremes.- Maximum discharge during year, 1,880 second-feet June 14 (gage height, 6.87 feet) from rating curve extended above 900 second-feet; minimum, 3.4 second-feet Oct. 5 (gage height, 0.39 foot); minimum daily discharge, 4.9 second-feet Oct. 4. 1932-37: Maximum discharge, about 2,440 second-feet June 27, 1932 (gage height, 7.62 feet); minimum discharge, 2.1 second-feet Sept. 13, 1936; minimum gage height, 0.26 foot Jan. 20, 1936; minimum daily discharge, 3.2 second-feet Oct. 8, 1932, Sept. 11, 1936.

Remarks.- Records good except those for periods of missing gage heights, Nov. 14-16, June 3-5, which were computed on basis of weather records and recorded range of stage and are fair. Sewage from Springfield enters creek above this station. Springfield water supply is pumped from Little Sac River Basin.

Rating table, water year 1936-37 (gage height, in feet, and discharge in second-feet)
(Shifting-control method used Oct. 1-5, July 20 to Sept. 30)

0.2	1.7	2.0	130	5.0	844
.4	5.3	2.5	189	5.5	1,040
.6	13.5	3.0	252	6.0	1,260
.8	25	3.5	348	6.5	1,590
1.0	40	4.0	480	7.0	1,950
1.5	80	4.5	654		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	17	9.0	32	74	20	14.6	46	34	16	11.2	11.7
2	7.2	140	12.2	34	59	19	14.6	130	93	29	10.8	11.7
3	5.7	44	9.0	24	52	18	14.6	69	77	18	10.8	11.7
4	4.9	31	8.3	23	47	23	14.6	55	61	13.5	43	11.2
5	22	26	47	21	47	17	13.5	50	45	12.6	14.0	70
6	130	24	21	21	49	17	14.0	43	31	14.0	13.5	13.5
7	62	22	13.5	45	46	16	13.5	36	26	13.0	13.0	11.7
8	68	19	12.2	144	68	16	26	36	25	12.6	12.2	11.7
9	40	18	11.2	63	44	14.6	15	31	184	16	11.7	12.2
10	30	16	11.2	46	40	16	12.6	27	147	30	11.7	11.7
11	25	15	10.8	38	38	15	11.7	25	64	13.5	12.6	11.2
12	22	13.0	9.9	38	37	15	12.2	52	52	11.2	11.2	10.8
13	21	12.2	9.0	67	34	38	34	26	42	11.2	10.8	10.8
14	18	11.2	9.4	231	30	19	15	27	435	11.2	10.8	10.8
15	16	13.0	9.9	95	28	17	13.5	24	291	10.4	10.8	10.8
16	16	14.0	9.9	66	26	16	12.6	22	106	9.9	10.4	10.4
17	14.0	13.0	9.4	58	25	16	12.2	28	76	9.9	10.4	10.4
18	12.6	12.6	10.8	50	24	16	17	21	78	47	10.4	9.9
19	11.7	12.2	9.4	42	29	18	12.2	19	51	50	15	9.4
20	11.7	11.7	9.0	42	43	16	96	18	43	16	11.2	9.4
21	20	11.2	9.9	36	32	13.5	63	76	39	14.0	19	9.4
22	13.0	9.9	9.0	31	27	14.0	46	80	34	13.5	10.8	9.4
23	10.8	10.4	9.4	28	24	20	46	46	31	12.6	10.4	9.9
24	10.8	9.9	8.6	27	24	31	40	37	28	12.6	9.9	10.4
25	108	9.4	7.9	28	23	19	31	32	25	40	9.4	17
26	37	8.6	13.5	27	22	16	29	28	23	13.0	9.4	10.8
27	28	9.0	45	29	21	16	25	24	20	12.2	9.0	10.8
28	25	10.4	21	38	20	16	52	22	19	12.6	9.0	10.8
29	22	9.0	21	70	-	16	72	21	16	12.2	8.6	11.2
30	19	9.4	32	263	-	16	84	17	16	12.2	10.8	10.8
31	19	-	22	95	-	15	-	21	-	11.7	12.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Run-off Acre-feet
October	868.3	130	4.9	27.7	1.43	1.65	1,700
November	582.1	140	8.6	19.4	1.00	1.12	1,150
December	451.4	47	7.9	14.6	.753	.87	895
Calendar year 1936	3,874.5	140	3.2	10.6	.546	7.44	7,680
January	1,852	263	21	59.7	3.08	3.55	3,670
February	1,033	74	20	36.9	1.90	1.98	2,050
March	556.1	38	13.5	17.9	.923	1.06	1,100
April	877.4	96	11.7	29.2	1.51	1.68	1,740
May	1,189	130	17.	38.4	1.98	2.28	2,360
June	2,212	435	16.	73.7	3.80	4.24	4,390
July	531.6	50	9.9	17.1	.881	1.02	1,050
August	384.0	43	8.6	12.4	.639	.74	762
September	391.5	70	9.4	13.0	.670	.75	777
Water year 1936-37	10,917.4	435	4.9	29.9	1.54	20.94	21,640

Buffalo River near Rush, Ark.

Location.- Staff gage, lat. 36°07', long. 92°34', in SE¼ sec. 10, T. 17 N., R. 15 W., immediately above Rush Creek, 1⅛ miles southeast of Rush and 24 miles above mouth. Zero of gage is 458.70 feet above mean sea level (White River Power Co. benchmark).

Drainage area.- 1,110 square miles.

Records available.- October 1928 to September 1937.

Extremes.- Maximum discharge observed during year, 35,000 second-feet Jan. 15 (gage height, 16.9 feet); minimum, 64 second-feet Aug. 29 to Sept. 1 (gage height, 0.78 foot).

1928-37: Maximum discharge observed, 62,100 second-feet May 14, 1933 (gage height, 23.9 feet), from rating curve extended above 28,000 second-feet; minimum discharge, 15 second-feet Aug. 30 to Sept. 2, 1936; minimum gage height, 0.6 foot Sept. 25-30, Oct. 1-3, 7-9, 1929, Sept. 10-22, 1932.

Maximum stage known, 49.5 feet Apr. 21, 1927, former site and datum (discharge, about 107,000 second-feet).

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,350	740	136	4,120	4,700	930	740	1,400	238	220	116	64
2	830	650	136	4,400	3,840	880	650	23,300	232	202	116	70
3	605	3,700	136	6,320	3,000	830	650	14,700	299	185	108	85
4	480	3,980	136	3,980	2,450	785	605	6,320	299	170	124	112
5	408	2,190	202	2,580	2,190	930	605	4,700	472	400	116	128
6	344	1,180	3,280	1,910	1,820	1,030	560	3,980	384	384	116	104
7	313	880	3,980	1,700	1,580	980	560	3,140	320	190	108	94
8	299	830	2,720	6,660	1,520	980	605	2,580	278	155	108	85
9	1,270	740	1,700	4,700	1,350	930	1,080	2,450	328	185	108	76
10	1,580	650	1,300	4,260	1,240	880	1,300	2,060	605	190	100	76
11	1,030	520	1,030	3,280	1,030	830	1,130	1,700	560	244	100	100
12	695	456	880	2,720	930	785	980	1,400	448	214	116	112
13	560	440	740	3,000	880	785	930	1,300	392	202	104	128
14	432	416	605	6,660	830	830	880	1,240	336	185	91	136
15	328	344	480	27,300	740	930	880	1,130	306	160	88	165
16	271	306	432	11,100	695	880	830	980	1,240	136	82	136
17	238	264	400	7,230	650	785	740	880	1,820	124	76	120
18	214	238	376	5,000	605	740	695	785	1,180	124	73	108
19	190	202	360	3,560	605	740	695	695	785	232	70	94
20	170	175	344	2,860	1,400	740	695	605	560	785	70	91
21	150	175	320	2,720	1,820	695	8,800	560	432	695	70	85
22	185	165	292	4,550	2,860	650	9,080	480	360	472	70	88
23	520	165	264	4,850	2,190	605	5,300	480	292	313	82	79
24	785	155	226	3,640	1,820	740	5,300	480	250	244	104	79
25	2,480	155	202	3,840	1,520	1,300	3,700	472	226	208	100	108
26	12,300	145	196	3,700	1,300	1,240	2,860	432	196	190	88	120
27	5,300	136	299	3,280	1,130	1,080	2,320	400	185	180	79	112
28	2,860	124	3,280	3,420	1,030	980	1,940	352	214	165	70	104
29	1,700	120	2,580	3,700	-	880	1,580	306	278	140	64	97
30	1,240	132	2,060	4,850	-	830	1,400	278	232	132	64	97
31	930	-	6,490	5,470	-	785	-	257	-	124	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off: Inches	Run-off: Acre-feet
October	40,057	12,300	150	1,292	1.16	1.34	79,450
November	20,373	3,980	120	679	.612	.68	40,410
December	35,582	6,490	136	1,148	1.03	1.19	70,580
Calendar year 1936	205,734	12,300	15	562	.506	6.89	408,100
January	157,590	27,300	1,700	5,084	4.58	5.28	312,600
February	45,725	4,700	605	1,633	1.47	1.53	90,690
March	26,985	1,300	605	870	.784	.90	53,520
April	58,090	9,080	560	1,936	1.74	1.94	115,200
May	79,842	23,300	257	2,576	2.32	2.68	158,400
June	13,747	1,820	185	458	.413	.46	27,270
July	7,550	785	124	244	.220	.25	14,980
August	2,845	124	64	91.8	.083	.10	5,640
September	3,053	165	64	102	.092	.10	6,060
Water year 1936-37	491,439	27,300	64	1,346	1.21	16.45	974,800

North Fork of White River at Tecumseh, Mo.

Location.- Wire-weight gage, lat. 36°36'16", long. 92°17'19", in NW¼NE¼ sec. 16, T. 22 N., R. 12 W., at bridge on State Highway 80, at Tecumseh, half a mile below Bryant Creek. Zero of gage is 547.75 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 1,180 square miles.

Records available.- October 1921 to September 1937.

Average discharge.- 15 years, 1,228 second-feet.

Extremes.- Maximum discharge observed during year, 13,300 second-feet Jan. 15 (gage height, 9.83 feet); minimum discharge, 413 second-feet Sept. 20-24; minimum gage height, 0.91 foot Sept. 20-24, 27, 29, 30.
1921-37: Maximum discharge observed, 53,000 second-feet June 13, 1928 (gage height, 24.00 feet); minimum discharge, 280 second-feet Sept. 16, 1936: minimum gage height, 0.74 foot Aug. 16, 30, 31, 1936.
Maximum stage known, 31.6 feet in July 1905, from floodmarks.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 26 to May 1, Aug. 1 to Sept. 30)

0.8	290	2.5	1,980
1.0	420	3.0	2,650
1.2	570	4.0	4,100
1.6	930	6.0	7,200
2.0	1,360	10.0	13,600

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,140	740	538	1,080	4,250	1,250	740	1,660	722	740	554	455
2	880	740	562	1,250	3,210	1,200	740	9,760	713	722	546	455
3	785	7,680	554	1,300	2,650	1,140	740	7,040	740	713	530	490
4	668	2,650	538	1,200	2,370	1,250	740	4,250	740	695	530	476
5	618	1,850	570	1,080	2,110	1,140	740	3,500	785	704	530	462
6	586	1,360	722	980	1,980	1,080	731	2,790	785	666	506	462
7	930	1,250	713	2,370	1,850	1,080	713	2,370	722	642	506	448
8	1,300	1,080	668	4,400	1,850	1,080	740	2,110	785	626	498	448
9	1,470	980	650	3,950	1,850	1,030	713	1,850	2,790	618	490	455
10	1,300	930	634	2,930	1,720	980	722	1,720	9,120	618	490	462
11	1,030	830	602	2,370	1,530	980	731	1,530	2,790	1,200	483	448
12	880	830	586	2,110	1,530	930	713	1,470	1,980	785	483	434
13	740	740	562	1,980	1,420	930	722	1,420	1,590	704	462	427
14	686	740	554	8,000	1,360	930	704	1,300	1,360	650	462	420
15	659	704	546	12,000	1,300	930	740	1,250	2,370	626	462	434
16	602	686	538	4,850	1,250	880	785	1,200	3,070	602	462	434
17	586	677	538	3,650	1,140	880	785	1,140	1,980	594	462	420
18	554	668	546	2,930	1,140	930	785	1,080	1,590	830	462	420
19	530	668	538	2,370	1,200	930	740	1,030	1,420	2,930	462	420
20	506	650	522	2,110	1,250	930	731	980	1,250	1,590	455	420
21	506	642	506	1,980	2,650	880	1,850	980	1,140	1,080	476	420
22	538	634	506	2,110	2,510	830	2,510	980	1,080	880	785	413
23	522	626	506	1,850	2,110	830	1,980	930	980	785	506	420
24	490	602	490	1,720	1,850	880	3,350	930	930	722	476	420
25	1,300	586	498	1,720	1,660	830	2,370	880	880	686	469	490
26	1,850	586	498	1,590	1,470	830	1,980	880	880	650	455	434
27	1,420	562	546	1,530	1,420	785	1,720	830	830	610	490	427
28	1,200	562	538	1,530	1,360	785	1,530	830	1,080	586	455	427
29	980	554	538	1,720	-	740	1,420	785	785	570	448	427
30	880	554	880	2,370	-	740	1,470	785	785	562	448	420
31	785	-	1,300	6,400	-	740	-	740	-	538	462	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Run-off Acre-feet
October	26,921	1,850	490	868	0.736	0.85	53,400
November	32,361	7,680	554	1,079	.914	1.02	64,190
December	18,487	1,300	490	596	.505	.58	36,670
Calendar year 1936	216,478	7,680	280	591	.501	6.82	429,370
January	87,430	12,000	980	2,820	2.39	2.76	173,400
February	51,990	4,250	1,140	1,857	1.57	1.64	103,100
March	29,350	1,250	740	947	.803	.93	58,210
April	34,935	3,350	704	1,164	.986	1.10	69,290
May	59,000	9,760	740	1,903	1.61	1.86	117,000
June	46,672	9,120	713	1,556	1.32	1.47	92,570
July	24,926	2,930	538	804	.681	.79	49,440
August	15,305	785	448	494	.419	.48	30,360
September	13,188	490	413	440	.373	.42	26,160
Water year 1936-37	440,565	12,000	413	1,207	1.02	13.90	873,790

North Fork of White River near Henderson, Ark.

Location.- Staff gage, lat. 36°22', long. 92°14', in NE¼SW¼ sec. 26, T. 20 N., R. 12 W., 1 mile southeast of Henderson, 1 mile below Bennetts Bayou, and 19 miles above mouth.

Drainage area.- 1,640 square miles.

Records available.- July 1909 to December 1910; October 1928 to September 1937.

Extremes.- Maximum discharge observed during year, 46,500 second-feet Jan. 14 (gage height, 18.70 feet); *minimum discharge* 480 *second-feet Sept. 16-24, 29;30; minimum* gage height, 1.42 feet Sept. 23, 24.
1928-37: Maximum discharge observed, 62,900 second-feet Mar. 11, 1935 (gage height, 22.2 feet); minimum, 312 second-feet Aug. 1-3, 15-17, 23, Sept. 1, 1936 (gage height, 1.34 feet).
Maximum stage known, 29.5 feet in August 1915.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,480	1,020	552	1,830	6,200	1,590	850	1,830	850	935	655	520
2	1,120	1,480	565	3,180	4,890	1,480	850	17,600	810	690	655	520
3	935	8,390	585	2,220	3,760	1,370	850	13,900	850	850	655	552
4	850	4,390	585	1,830	3,180	1,370	850	6,400	850	850	620	552
5	770	2,480	585	1,590	2,900	1,370	850	4,890	890	850	620	552
6	850	2,090	1,120	1,480	2,620	1,370	850	3,910	890	850	585	552
7	2,760	1,710	1,020	2,090	2,480	1,370	810	3,460	850	810	620	520
8	1,960	1,480	935	5,420	2,350	1,270	850	2,900	810	770	585	520
9	1,710	1,270	850	5,420	2,350	1,270	850	2,480	4,230	730	655	520
10	1,960	1,170	810	4,390	2,090	1,270	850	2,220	10,700	692	655	520
11	1,590	1,070	770	3,460	1,960	1,220	810	1,960	4,550	2,090	620	490
12	1,220	1,020	730	3,040	1,830	1,220	850	1,960	2,620	1,070	585	490
13	1,020	935	692	3,040	1,710	1,170	810	1,830	2,220	850	585	490
14	890	850	655	30,200	1,710	1,170	810	1,710	2,090	810	552	490
15	850	850	620	22,200	1,590	1,120	810	1,480	4,070	730	552	490
16	810	810	620	8,620	1,480	1,120	810	1,480	6,400	730	520	490
17	770	770	620	5,420	1,370	1,120	850	1,370	3,320	692	520	460
18	730	730	585	4,390	1,370	1,070	850	1,370	2,220	730	520	460
19	730	730	585	3,460	1,590	1,070	810	1,270	1,830	3,390	490	460
20	655	692	585	3,040	1,960	1,070	810	1,270	1,710	2,350	490	460
21	655	692	552	2,760	3,460	1,070	3,320	1,220	1,480	1,480	585	460
22	692	655	552	2,350	3,460	1,070	3,460	1,220	1,270	1,170	1,170	460
23	730	655	552	2,760	2,900	1,020	2,620	1,170	1,170	1,020	935	460
24	692	620	520	2,760	2,620	1,020	11,900	1,170	1,120	935	620	460
25	2,210	620	520	2,900	2,200	980	3,460	1,120	1,070	890	585	490
26	3,460	620	520	2,620	1,960	980	2,760	1,020	1,020	810	585	490
27	2,350	585	620	2,620	1,830	935	2,480	980	980	770	585	490
28	1,830	585	730	2,620	1,710	935	2,090	980	2,900	730	552	490
29	1,370	585	730	2,900	-	890	1,960	935	1,120	692	552	460
30	1,170	552	1,780	3,610	-	890	1,710	890	1,020	692	520	460
31	1,070	-	2,090	7,480	-	890	-	850	-	692	520	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off: Inches	Run-off: Acre-feet
October	39,889	3,460	655	1,287	0.785	0.90	79,120
November	40,106	8,390	552	1,337	.815	.91	79,550
December	23,255	2,090	520	760	.457	.53	46,130
Calendar year 1936	267,540	8,390	312	731	.446	6.07	530,700
January	161,700	30,200	1,480	4,894	2.98	3.44	300,900
February	69,550	6,200	1,370	2,484	1.51	1.57	138,000
March	35,760	1,590	890	1,154	.704	.81	70,930
April	52,440	11,900	810	1,748	1.07	1.19	104,000
May	86,845	17,600	850	2,801	1.71	1.97	172,300
June	65,910	10,700	810	2,197	1.34	1.50	130,700
July	31,550	3,390	692	1,018	.621	.72	62,580
August	18,948	1,170	490	611	.373	.43	37,580
September	14,828	552	460	494	.301	.34	29,410
Water year 1936-37	630,781	30,200	460	1,728	1.05	14.31	1,251,000

Black River at Leeper, Mo.

Location.- Chain gage, lat. 37°04'30", long. 90°42'35", in SW¼NE¼ sec. 27, T. 28 N., R. 3 E., at Missouri Southern Railroad bridge at Leeper. Zero of gage is 424.66 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 957 square miles.

Records available.- June 1921 to September 1937.

Average discharge.- 16 years, 950 second-feet.

Extremes.- Maximum discharge during year, 28,400 second-feet Jan. 15 (gage height, 14.20 feet, from graph based on gage readings); minimum discharge, 228 second-feet Aug. 28, Sept. 1, 23; (gage height, 1.36 feet).
1921-37: Maximum discharge, 78,400 second-feet May 14, 1933 (gage height, 20.1 feet); minimum, 133 second-feet Aug. 11, 1934 (gage height, 1.22 feet).
Maximum stage known, about 24.7 feet in March 1904, from floodmarks (discharge, about 125,000 second-feet).

Remarks.- Records good except those for period of missing gage heights, May 30 to July 1, which were computed on basis of records for U. S. Weather Bureau gage on Black River at Poplar Bluff, rating for which was defined by discharge measurements by U. S. Geological Survey, and are poor. Discharge estimated May 20. Gage read once daily below 4 feet and twice daily above. Gage-height record collected in cooperation with the U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	430	780	310	2,560	3,740	790	548	6,970	460	330	299	228
2	385	710	310	1,960	2,680	790	525	7,170	460	326	286	238
3	345	5,620	328	1,960	2,210	730	525	5,810	460	340	299	261
4	345	3,600	310	1,720	1,880	674	525	4,600	580	440	286	261
5	310	2,080	310	1,400	1,580	702	1,070	3,740	590	1,000	286	312
6	310	1,720	580	1,200	1,490	674	1,580	2,940	600	548	312	312
7	385	1,400	500	3,200	1,400	648	1,400	2,320	620	503	286	261
8	1,010	1,200	525	8,440	1,400	622	1,400	1,780	640	440	238	286
9	9,350	1,010	580	6,190	1,780	622	1,230	1,680	680	371	261	286
10	5,070	890	610	3,740	2,100	597	1,070	1,490	1,200	371	274	286
11	2,320	780	580	2,560	1,580	572	1,000	1,400	1,110	388	250	286
12	1,720	780	525	2,200	1,490	548	900	1,230	1,000	340	261	286
13	1,400	710	500	1,840	1,310	525	860	1,150	880	356	274	261
14	1,100	610	475	10,800	1,150	622	790	1,070	820	326	261	261
15	930	580	452	22,400	1,070	597	730	1,000	850	312	261	250
16	815	525	430	6,770	1,070	597	702	825	800	312	261	261
17	710	500	430	3,740	1,070	572	674	730	750	326	238	238
18	640	475	408	2,940	1,000	548	648	702	730	404	238	238
19	580	452	408	2,210	930	548	597	702	740	503	250	250
20	525	430	385	1,990	900	730	597	661	700	404	238	250
21	500	408	385	1,880	1,000	702	790	622	630	422	238	238
22	780	385	365	2,810	1,400	674	4,900	597	560	404	250	238
23	780	385	345	2,210	1,310	674	2,560	572	530	388	261	238
24	675	385	345	1,990	1,150	790	1,990	548	500	356	261	238
25	640	365	345	1,780	1,070	730	1,780	525	480	356	238	274
26	1,100	345	345	1,680	1,000	702	1,580	525	490	340	238	261
27	1,500	345	365	1,490	930	674	1,400	503	510	340	238	250
28	1,300	345	365	1,490	860	622	1,310	503	450	312	228	261
29	1,100	345	345	1,580	-	597	1,230	481	420	312	238	261
30	930	328	640	1,880	-	572	6,380	470	350	312	238	250
31	850	-	4,300	3,200	-	572	-	465	-	261	238	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off: Inches	Run-off: Acre-feet
October	38,835	9,350	310	1,253	1.31	1.51	77,030
November	28,488	5,620	328	950	.993	1.11	56,510
December	17,101	4,300	310	552	.577	.67	33,920
Calendar year 1936	178,292	9,350	160	487	.509	6.93	353,600
January	111,810	22,400	1,200	3,607	3.77	4.35	221,800
February	40,550	3,740	860	1,448	1.51	1.57	80,430
March	20,017	790	525	646	.675	.78	39,700
April	41,291	6,380	525	1,376	1.44	1.61	81,900
May	53,781	7,170	465	1,735	1.81	2.09	106,700
June	19,590	1,200	350	653	.682	.76	38,860
July	12,143	1,000	261	392	.410	.47	24,090
August	8,025	312	228	259	.271	.31	15,920
September	7,821	312	228	261	.273	.30	15,510
Water year 1936-37	399,452	22,400	228	1,094	1.14	15.53	792,400

Black River at Poplar Bluff, Mo.

Location.- Wire-weight gage, lat. 36°45'25", long. 90°23'25", in NW¼SE¼ sec. 2, T. 24 N., R. 6 E., at bridge on U. S. Highway 60 at Poplar Bluff, 5 miles below Indian Creek.

Drainage area.- 1,220 square miles.

Records available.- January to April, 1937.

Extremes.- Maximum discharge during period, 27,300 second-feet Jan. 16 (gage height, 17.66 feet, from graph based on gage readings); minimum discharge observed during period, 697 second-feet Apr. 3 (gage height, 1.44 feet).
Maximum discharge known, 100,000 second-feet (estimated) March, 1904; maximum stage known, 19.1 feet Mar. 12, 1935 (affected by backwater from levees constructed since 1904).

Remarks.- Records good. Discharge for Mar. 12 interpolated. Records for Oct. 1 to Dec. 31 and May 1 to Sept. 30 considered as not of sufficient accuracy to warrant publication. Gage heights furnished by U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				4,190	4,480	1,210	761					
2				3,690	4,610	1,140	729					
3				3,350	3,840	1,080	697					
4				2,570	3,050	1,020	761					
5				2,170	2,610	1,020	1,400					
6				1,890	2,370	985	1,660					
7				2,330	2,060	953	1,760					
8				3,890	1,890	921	1,760					
9				6,530	2,130	889	1,760					
10				9,910	2,270	825	1,630					
11				6,980	2,270	825	1,460					
12				4,470	2,060	809	1,270					
13				3,520	1,830	793	1,210					
14				5,320	1,790	793	1,110					
15				21,900	1,660	761	1,080					
16				24,300	1,560	761	985					
17				14,900	1,340	761	921					
18				6,960	1,270	761	889					
19				4,460	1,240	729	857					
20				3,620	1,240	761	825					
21				3,920	1,340	825	889					
22				4,470	1,530	825	1,240					
23				4,650	1,630	825	3,370					
24				3,940	1,700	889	3,090					
25				3,620	1,560	953	2,680					
26				3,200	1,430	889	2,470					
27				2,710	1,370	857	2,170					
28				2,440	1,270	857	1,890					
29				2,540	-	825	1,700					
30				2,780	-	793	1,600					
31				3,520	-	761	-					

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October							
November							
December							
Calendar year							
January	174,740	24,300	1,890	5,637	4.62	5.33	346,600
February	57,400	4,610	1,240	2,050	1.68	1.75	113,900
March	27,096	1,210	729	874	.716	.83	53,740
April	44,624	3,370	697	1,487	1.22	1.36	88,510
May							
June							
July							
August							
September							
The period							602,800

Current River near Eminence, Mo.

Location.- Water-stage recorder, lat. 37°11'00", long. 91°15'30", in SW¼NE¼ sec. 15, T. 29 N., R. 3 W., 1 mile below Jacks Fork and 8 miles northeast of Eminence. Zero of gage is about 568.8 feet above mean sea level.

Drainage area.- 1,230 square miles.

Records available.- August 1921 to September 1937.

Average discharge.- 16 years, 1,446 second-feet.

Extremes.- Maximum discharge during year, 21,600 second-feet May 3 (gage height, 13.35 feet); minimum discharge, 470 second-feet Aug. 28 to Sept. 2, Sept. 16-24; minimum gage height, 1.29 feet Sept. 23.

1921-37: Maximum discharge, 59,600 second-feet Mar. 11, 1935 (gage height, 24.35 feet); minimum discharge, 360 second-feet July 21-25, July 27 to Aug. 13, 1934; minimum gage height, 1.08 feet Aug. 3-10, 1934.

Remarks.- Records excellent except those for periods of missing gage heights, Oct. 1-5, 8-13, 15-24, Oct. 26 to Nov. 16, which were computed on basis of recorded range of stage, records for station at Van Buren, and records for Jacks Fork at Eminence and are fair.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 6, 7, Dec. 31 to Jan. 6)

1.2	420	4.0	2,920	8.0	9,010
1.4	530	5.0	4,000	10.0	13,200
1.6	680	6.0	5,420	12.0	17,900
2.0	1,010	7.0	7,130	14.0	23,300
3.0	1,920				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	790	800	530	1,460	4,810	1,370	920	4,960	880	720	530	470
2	760	1,300	530	1,370	3,650	1,370	920	9,580	920	720	530	500
3	720	7,130	530	1,370	3,120	1,280	880	14,400	920	720	530	530
4	680	3,540	530	1,190	2,720	1,280	880	6,950	1,010	760	530	600
5	640	2,550	565	1,060	2,420	1,190	880	5,580	1,010	720	530	530
6	668	2,060	720	920	2,220	1,190	880	4,530	965	680	530	530
7	1,620	1,730	680	2,430	2,120	1,140	880	3,760	920	680	600	500
8	3,400	1,520	680	7,410	2,220	1,100	920	3,320	880	640	600	500
9	2,600	1,300	680	5,420	2,620	1,060	965	2,920	920	640	530	500
10	2,080	1,150	640	4,000	2,520	1,010	1,100	2,620	3,630	640	530	600
11	1,580	1,040	600	3,020	2,120	1,010	1,060	2,320	4,800	720	565	640
12	1,230	940	565	2,520	2,020	965	965	2,120	2,420	680	565	565
13	980	880	565	2,320	1,820	965	965	1,920	1,730	640	530	530
14	760	820	565	6,950	1,730	1,100	965	1,820	1,460	640	530	500
15	690	750	530	15,800	1,640	1,190	965	1,730	1,370	600	500	500
16	640	710	530	6,420	1,550	1 140	920	1,640	1,280	600	500	470
17	620	680	530	4,530	1,460	1,100	920	1,550	1,280	600	500	470
18	590	640	530	3,650	1,370	1,100	920	1,460	1,140	600	530	470
19	580	640	530	3,020	1,370	1,100	880	1,370	1,140	760	500	470
20	570	600	530	2,520	1,550	1,100	880	1,370	1,060	760	500	470
21	580	600	530	2,420	2,120	1,060	2,460	1,280	1,010	720	500	470
22	650	565	500	2,420	2,720	1,010	3,430	1,280	965	640	530	470
23	690	565	500	2,120	2,420	1,010	2,720	1,190	880	640	530	470
24	650	565	500	1,920	2,120	1,010	2,820	1,190	840	600	530	470
25	600	565	500	1,920	1,820	1,010	2,720	1,100	800	600	500	500
26	920	565	500	1,820	1,640	1,010	2,320	1,100	800	565	500	500
27	1,690	565	500	1,730	1,550	965	2,020	1,060	760	565	500	500
28	1,410	530	530	1,730	1,460	920	1,820	1,060	760	565	470	500
29	1,180	530	530	1,820	-	920	1,640	1,010	760	530	470	500
30	980	530	1,060	2,420	-	920	6,300	965	720	530	470	500
31	860	-	1,370	5,550	-	920	-	920	-	530	470	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	32,408	3,400	570	1,045	0.850	0.98	64,280
November	36,360	7,130	530	1,212	.985	1.10	72,120
December	18,580	1,370	500	599	.487	.56	36,850
Calendar year 1936	253,820	7,130	382	693	.563	7.66	503,400
January	103,250	15,800	920	3,331	2.71	3.12	204,800
February	60,900	4,810	1,370	2,175	1.77	1.84	120,800
March	33,515	1,370	920	1,081	.879	1.01	66,480
April	46,915	6,300	880	1,564	1.27	1.42	93,050
May	88,075	14,400	920	2,841	2.31	2.66	174,700
June	38,030	4,800	720	1,268	1.03	1.15	75,430
July	20,005	760	530	645	.524	.60	39,680
August	16,130	600	470	520	.423	.49	31,990
September	15,225	640	470	508	.413	.46	30,200
Water year 1936-37	509,393	15,800	470	1,396	1.13	15.39	1,010,000

Current River at Van Buren, Mo.

Location.- Water-stage recorder, lat. 36°59', long. 91°01', in NE¼NW¼ sec. 25, T. 27 N., R. 1 W., at bridge on U. S. Highway 60, in Van Buren. Zero of gage is 445.78 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 1,640 square miles.

Records available.- June 1921 to September 1937 in reports of U. S. Geological Survey; September 1912 to June 1921 in reports of University of Missouri and of Missouri Geological Survey and Water Resources.

Average discharge.- 16 years (1921-37), 1,832 second-feet.

Extremes.- Maximum discharge during year, 25,100 second-feet Jan. 15 (gage height, 10.00 feet); minimum discharge, 625 second-feet Dec. 25-27; minimum gage height, 0.46 foot Sept. 21, 24.
1921-37: Maximum discharge, 86,600 second-feet Mar. 11, 1935 (gage height, 19.84 feet); minimum discharge, 490 second-feet Aug. 26-28, 30, 31, 1936.
Maximum stage known, 26.0 feet Mar. 26, 1904, from floodmarks.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090	1,090	750	2,840	7,160	1,870	1,140	7,160	1,200	940	708	665
2	990	1,420	750	2,690	5,140	1,870	1,140	7,170	1,200	940	708	708
3	892	4,700	750	2,550	4,220	1,740	1,140	20,500	1,220	940	708	708
4	845	6,080	750	2,410	3,740	1,740	1,140	10,400	1,310	1,140	708	845
5	796	3,440	750	2,130	3,290	1,680	1,200	7,160	1,370	990	708	845
6	845	2,690	990	1,870	3,140	1,610	1,200	5,760	1,250	892	708	750
7	2,490	2,130	1,040	2,990	2,990	1,610	1,140	4,580	1,200	892	750	708
8	2,580	1,870	990	8,090	2,840	1,550	1,200	3,900	1,140	845	796	708
9	4,570	1,680	990	8,200	3,140	1,490	1,310	3,590	1,140	845	750	708
10	2,550	1,490	940	5,980	3,140	1,430	1,310	3,140	2,550	845	708	796
11	2,130	1,370	892	4,400	2,990	1,430	1,310	2,840	5,980	892	796	845
12	1,880	1,310	845	3,590	2,690	1,370	1,250	2,690	2,990	940	796	845
13	1,430	1,200	845	3,140	2,550	1,370	1,250	2,550	2,270	845	708	796
14	1,250	1,140	796	12,800	2,410	1,430	1,200	2,410	2,000	845	708	708
15	1,090	1,090	796	22,000	2,270	1,550	1,200	2,270	1,870	796	708	708
16	1,040	1,040	750	14,100	2,270	1,490	1,200	2,130	1,740	796	665	708
17	940	990	750	7,160	2,130	1,430	1,140	2,000	1,610	796	708	665
18	892	940	750	5,340	2,000	1,430	1,140	1,870	1,550	796	708	665
19	845	940	750	4,220	2,000	1,430	1,090	1,870	1,430	990	708	665
20	845	892	750	3,740	2,130	1,430	1,090	1,740	1,430	990	665	665
21	796	892	708	3,590	2,410	1,370	1,740	1,680	1,310	940	665	665
22	940	845	708	4,220	3,140	1,310	3,740	1,610	1,250	892	708	665
23	940	845	665	3,590	3,140	1,310	3,290	1,550	1,200	845	708	665
24	892	845	665	3,290	2,840	1,370	2,990	1,490	1,140	796	708	665
25	1,040	796	625	3,140	2,550	1,310	3,140	1,430	1,090	796	708	708
26	2,000	796	625	2,990	2,270	1,310	2,690	1,370	1,090	750	665	708
27	2,000	796	625	2,840	2,130	1,250	2,410	1,370	1,040	750	665	708
28	1,870	796	708	2,690	2,000	1,200	2,130	1,310	1,040	750	665	708
29	1,490	750	665	2,840	-	1,200	2,130	1,250	1,040	750	665	708
30	1,310	750	2,000	3,140	-	1,200	5,200	1,250	990	750	665	665
31	1,140	-	3,290	5,140	-	1,200	-	1,200	-	750	665	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	44,208	4,570	796	1,426	0.870	1.00	87,690
November	45,613	6,080	750	1,520	.927	1.03	90,470
December	27,908	3,290	625	900	.549	.63	55,350
Calendar year 1936	334,482	6,080	490	914	.557	7.59	663,400
January	157,710	22,000	1,870	5,087	3.10	3.57	312,800
February	82,720	7,160	2,000	2,954	1.80	1.87	164,100
March	44,980	1,870	1,200	1,451	.885	1.02	89,220
April	53,250	5,200	1,140	1,775	1.08	1.20	105,600
May	111,240	20,500	1,200	3,588	2.19	2.52	220,600
June	47,620	5,980	990	1,587	.968	1.08	94,450
July	26,724	1,140	750	862	.526	.61	53,010
August	21,909	796	665	707	.431	.50	43,460
September	21,576	845	665	719	.438	.49	42,800
Water year 1936-37	685,458	22,000	625	1,878	1.15	15.52	1,360,000

Current River at Doniphan, Mo.

Location.- Water-stage recorder, lat. 36°37', long. 90°51', in NW¼NW¼ sec. 27, T., 23 N., R. 2 E., half a mile above State Highway 14, 2⅝ miles above Briar Creek, and 1 mile west of Doniphan. Zero of gage is 322.21 feet (revised) above mean sea level (general adjustment of 1929).
Drainage area.- 2,030 square miles.
Records available.- June 1921 to September 1937.
Average discharge.- 16 years, 2,756 second-feet.
Extremes.- Maximum discharge during year, 40,100 second-feet Jan. 14 (gage height, 16.28 feet); minimum discharge, 1,130 second-feet Aug. 21, 26-31, Sept. 1-2, 17-24, 27-30; minimum gage height, 2.09 feet Sept. 24.
1921-37: Maximum discharge, 94,400 second-feet Mar. 12, 1935 (gage height, 23.89 feet, former site and datum); minimum discharge, 880 second-feet Aug. 1-14, 16, 1934, Aug. 30, 31, Sept. 1, 1936; minimum gage height, 1.75 feet Aug. 4, 7, 9-11, 1934, former site and datum.
Maximum stage known, 26.8 feet, former site and datum, during March 1904, from floodmarks (discharge, about 130,000 second-feet, from rating curve extended above 60,000 second-feet).
Remarks.- Records excellent except those for periods of no gage height record, Aug. 4-7, 9-12, which were computed on basis of rainfall records, recorded range of stage and records for station at Van Buren and are fair.

Rating tables, water year 1936-37 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used June 14 to Sept. 30)

Oct. 1 to Nov. 2		Nov. 3 to Sept. 30			
2.2	1,160	2.0	1,130	8.0	10,100
2.6	1,540	2.4	1,480	9.0	12,200
3.0	1,980	2.8	1,910	10.0	14,700
4.0	3,380	3.6	2,940	12.0	21,200
6.0	6,550	4.0	3,500	14.0	29,500
8.0	10,100	6.0	6,550	16.4	40,600

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,540	1,750	1,300	4,550	8,430	3,080	2,030	7,910	2,030	1,580	1,300	1,130
2	1,440	2,160	1,300	4,250	7,570	2,940	1,910	7,400	1,910	1,580	1,300	1,210
3	1,340	5,450	1,300	3,950	6,230	2,800	1,910	11,200	1,910	1,480	1,300	1,210
4	1,340	6,890	1,300	3,650	5,450	2,660	1,910	18,800	2,150	1,690	1,300	1,300
5	1,250	5,450	1,300	3,220	5,000	2,660	2,030	9,720	2,150	1,690	1,390	1,390
6	1,250	4,100	1,580	2,940	4,550	2,530	1,910	7,740	2,150	1,580	1,480	1,300
7	1,620	3,360	1,690	3,800	4,250	2,530	1,910	6,550	2,030	1,480	1,390	1,300
8	2,930	2,940	1,690	5,940	4,250	2,400	2,030	5,600	1,910	1,480	1,300	1,210
9	8,620	2,660	1,690	10,600	4,250	2,400	2,030	5,000	2,030	1,390	1,300	1,210
10	4,610	2,400	1,580	8,970	4,400	2,270	2,150	4,550	4,100	1,390	1,300	1,390
11	3,380	2,150	1,580	6,890	4,250	2,270	2,150	4,250	5,300	1,480	1,300	1,300
12	2,640	2,030	1,480	5,600	3,950	2,270	2,150	3,950	5,600	1,480	1,300	1,300
13	2,240	1,910	1,480	5,000	3,800	2,150	2,030	3,800	3,800	1,480	1,300	1,300
14	1,980	1,800	1,390	21,100	3,650	2,270	2,030	3,500	3,080	1,390	1,210	1,210
15	1,750	1,800	1,390	28,700	3,500	2,270	2,030	3,360	2,800	1,390	1,210	1,210
16	1,540	1,690	1,390	24,000	3,360	2,270	2,030	3,220	2,660	1,390	1,210	1,210
17	1,440	1,580	1,300	12,000	3,220	2,270	2,030	3,080	2,400	1,390	1,210	1,210
18	1,340	1,580	1,300	7,910	3,080	2,270	1,910	2,940	2,400	1,390	1,210	1,130
19	1,340	1,480	1,300	6,390	2,940	2,270	1,910	2,800	2,270	1,580	1,210	1,130
20	1,250	1,480	1,300	5,600	3,220	2,270	1,910	2,660	2,150	1,580	1,210	1,130
21	1,250	1,480	1,300	5,910	3,650	2,150	2,150	2,660	2,030	1,480	1,210	1,130
22	1,340	1,390	1,300	7,910	4,250	2,150	3,800	2,530	1,910	1,480	1,210	1,130
23	1,440	1,390	1,210	6,390	4,550	2,150	4,700	2,530	1,910	1,390	1,210	1,130
24	1,340	1,390	1,210	5,600	4,250	2,270	4,250	2,400	1,800	1,390	1,210	1,130
25	1,640	1,300	1,210	5,300	3,800	2,270	4,250	2,270	1,690	1,390	1,210	1,210
26	2,640	1,390	1,210	5,000	3,500	2,270	4,100	2,270	1,690	1,300	1,210	1,210
27	2,930	1,300	1,300	4,550	3,360	2,150	3,800	2,270	1,910	1,300	1,130	1,130
28	2,930	1,300	1,300	4,400	3,220	2,150	3,500	2,150	1,800	1,300	1,130	1,130
29	2,500	1,300	1,300	4,550	-	2,030	3,220	2,150	1,690	1,300	1,130	1,130
30	2,110	1,300	2,960	4,850	-	2,030	4,080	2,030	1,690	1,300	1,130	1,130
31	1,860	-	5,750	6,230	-	2,030	-	2,030	-	1,300	1,130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	66,820	8,620	1,250	2,155	1.06	1.22	132,500
November	68,200	6,890	1,300	2,273	1.12	1.25	135,300
December	48,690	5,750	1,210	1,571	.774	.89	96,580
Calendar year 1936	531,070	8,620	880	1,451	.715	9.71	1,053,000
January	235,750	28,700	2,940	7,605	3.75	4.32	467,600
February	119,930	8,430	2,940	4,283	2.11	2.20	237,900
March	72,500	3,080	2,030	2,339	1.15	1.33	143,800
April	77,850	4,700	1,910	2,595	1.28	1.43	154,400
May	143,320	18,800	2,030	4,623	2.28	2.63	284,300
June	72,950	5,600	1,690	2,432	1.20	1.34	144,700
July	44,820	1,690	1,300	1,446	.712	.82	88,900
August	38,640	1,480	1,130	1,246	.614	.71	76,640
September	36,240	1,390	1,130	1,208	.595	.66	71,880
Water year 1936-37	1,025,710	28,700	1,130	2,810	1.38	18.80	2,034,000

Round Spring at Round Spring, Mo.

Location.- Staff gage, lat. 37°17', long. 91°26', in SE¼ sec. 20, T. 30 N., R. 4 W., inside spring basin at Round Spring. Zero of gage is 665.06 feet (revised) above mean sea level (general adjustment of 1929).

Records available.- October 1928 to September 1937.

Extremes.- Maximum discharge during year (estimated), 350 second-feet May 2, during period of backwater from Current River; minimum discharge, 14 second-feet Sept. 29, 30; minimum gage height, 1.08 feet Oct. 4, 6.
1928-37: Maximum discharge, 520 second-feet during backwater from Current River May 14, 1933; maximum gage height, 14.59 feet Mar. 11, 12, 1935, from floodmarks; minimum discharge, 12 second-feet Aug. 8-10, 12-15, 20, 28-31, 1934.

Remarks.- Records fair except those for periods of backwater from Current River and those for periods of missing gage heights, which were computed on basis of rainfall records and records for Greer Spring at Greer and Current River at Eminence and are poor. Gage read once daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	21	20	37	*120	42	24	*259	42	32	20	20
2	21	25	20	45	*109	38	23	*350	50	32	20	20
3	20	*91	19	39	109	38	25	*265	45	32	20	20
4	16	*80	18	36	92	34	27	*240	54	32	20	24
5	17	*70	22	32	75	37	27	*212	46	32	19	20
6	16	61	25	27	†75	36	25	*192	37	28	21	19
7	*27	51	22	159	75	36	24	*175	37	26	21	20
8	*36	45	22	*175	†77	33	24	173	34	26	20	19
9	*50	39	20	*175	86	33	26	140	54	26	20	19
10	*46	31	20	166	70	32	26	121	*145	27	20	20
11	43	29	19	127	61	32	26	103	*200	24	20	20
12	37	29	18	103	58	29	24	97	*135	24	20	19
13	31	28	17	97	53	29	26	86	121	24	20	19
14	25	28	17	275	46	29	29	75	97	24	20	19
15	25	26	17	*335	46	28	30	63	†73	22	20	19
16	22	24	17	*285	43	29	29	58	56	22	20	19
17	22	23	16	*180	39	27	29	54	51	22	20	20
18	25	22	16	103	38	28	29	54	48	26	20	19
19	24	24	16	115	39	31	25	†52	48	25	20	20
20	20	22	16	127	47	28	26	51	43	22	20	20
21	19	21	15	115	97	28	146	50	40	22	20	19
22	19	21	16	97	86	27	109	46	40	22	21	16
23	18	21	16	80	†74	28	86	45	39	21	21	16
24	17	20	16	75	64	28	103	42	36	21	21	16
25	20	20	16	63	55	28	97	42	34	22	20	16
26	†30	20	16	58	50	28	75	39	33	22	20	16
27	37	19	18	51	47	27	65	39	33	21	20	15
28	31	19	16	50	†44	27	56	39	33	21	20	15
29	28	19	16	54	-	27	53	39	32	21	20	14
30	27	19	31	75	-	26	275	39	32	21	20	14
31	23	-	50	*131	-	25	-	39	-	20	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	816	50	16	26.3	1,620
November	968	91	19	32.3	1,920
December	603	50	15	19.5	1,200
Calendar year 1936	7,760	91	13	21.2	15,400
January	3,487	335	27	112	6,920
February	1,875	120	38	67.0	3,720
March	948	42	25	30.6	1,880
April	1,589	275	23	53.0	3,150
May	3,279	350	39	106	6,500
June	1,768	200	32	58.9	3,510
July	762	32	20	24.6	1,510
August	623	21	19	20.1	1,240
September	552	24	14	18.4	1,090
Water year 1936-37	17,270	350	14	47.3	34,260

*Backwater from Current River.
†Missing gage height.

Jacks Fork at Eminence, Mo.

Location.- Wire-weight gage, lat. 37°09'15", long. 91°21'30", in W½ sec. 28, T. 29 N., R. 4 W., at bridge on State Highway 19, at Eminence. Zero of present gage is 617.91 feet (revised) above mean sea level (general adjustment of 1929). Datum of chain gage at site 1,400 feet upstream, used prior to July 26, 1934, was 2.11 feet above present datum.

Drainage area.- About 376 square miles.

Records available.- October 1921 to September 1937.

Average discharge.- 16 years, 439 second-feet.

Extremes.- Maximum discharge observed during year, 7,820 second-feet May 2 (gage height, 8.37 feet); minimum, 106 second-feet Dec. 24-28, Aug. 29 to Sept. 1; minimum gage height, 2.25 feet Aug. 29 to Sept. 1.

1921-37: Maximum discharge observed, about 40,000 second-feet June 13, 1928 (gage height, 16.24 feet, at former site and datum); minimum, 64 second-feet Aug. 28, 1936; minimum gage height, that of Aug. 29 to Sept. 1, 1937.

Remarks.- Records good. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	270	228	115	517	1,380	426	219	1,510	225	182	128	108
2	232	221	118	466	946	403	215	4,710	225	176	126	117
3	203	1,770	121	517	810	380	212	3,280	259	173	126	138
4	182	935	115	466	687	380	222	1,670	242	206	126	150
5	165	573	133	374	629	358	225	1,380	242	182	131	138
6	162	466	172	331	574	358	212	1,020	225	171	133	131
7	396	396	207	544	574	335	209	843	219	162	158	122
8	632	352	210	3,690	602	335	225	687	212	160	145	117
9	602	310	200	1,580	717	315	295	629	225	155	133	115
10	517	290	179	1,190	658	315	380	574	1,480	152	126	165
11	396	259	165	876	574	295	315	498	1,190	171	128	242
12	352	228	159	747	522	295	295	473	629	165	124	179
13	310	221	149	687	522	295	277	450	473	160	119	150
14	255	200	133	2,230	498	295	277	426	380	155	117	138
15	228	193	127	6,060	498	295	259	426	358	150	117	131
16	200	179	118	1,780	426	277	259	380	335	145	115	122
17	186	169	127	1,190	426	259	242	380	335	142	122	122
18	172	162	127	946	403	259	242	358	315	150	117	119
19	159	152	121	717	426	277	225	358	315	193	113	119
20	152	149	121	658	450	259	222	335	295	199	113	113
21	152	140	121	602	687	259	450	315	277	193	113	115
22	159	140	112	658	876	242	876	315	259	171	122	113
23	159	136	109	602	717	242	656	315	242	160	119	113
24	159	133	109	574	602	242	810	295	225	150	119	113
25	259	130	106	574	548	259	747	277	215	145	117	115
26	490	130	106	548	498	259	629	277	206	142	115	117
27	544	130	109	522	473	242	548	259	199	140	113	113
28	419	121	109	522	450	242	473	259	219	135	110	117
29	331	121	121	522	-	219	450	259	212	135	108	117
30	290	115	221	687	-	206	1,780	259	187	133	108	113
31	259	-	490	2,110	-	212	-	242	-	131	108	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	8,992	632	152	290	0.771	0.89	17,840
November	8,749	1,770	115	292	.777	.87	17,350
December	4,630	490	106	149	.396	.46	9,180
Calendar year 1936	63,597	1,770	69	174	.463	6.30	126,100
January	33,487	6,060	331	1,080	2.87	3.31	66,420
February	17,173	1,380	403	613	1.63	1.70	34,060
March	9,035	426	206	291	.774	.89	17,920
April	12,448	1,780	209	415	1.10	1.23	24,690
May	23,459	4,710	242	757	2.01	2.32	46,530
June	10,420	1,480	187	347	.923	1.03	20,670
July	4,984	206	131	161	.428	.49	9,890
August	3,769	158	108	122	.324	.37	7,480
September	3,882	242	108	129	.343	.38	7,700
Water year 1936-37	141,028	6,060	106	386	1.03	13.94	279,700

Alley Spring at Alley, Mo.

Location.- Staff gage, lat. 37°09'05", long. 91°26'30", in SE¼ sec. 25, T. 29 N., R. 5 W., at Alley, 400 feet below outlet. Zero of gage is 664.73 feet above mean sea level (general adjustment of 1929).

Records available.- October 1928 to September 1937.

Extremes.- Maximum discharge during year, 871 second-feet May 2 (gage height, 4.10 feet); minimum, 68 second-feet Sept. 21-30 (gage height, 1.28 feet).
1928-37: Maximum discharge observed, 1,060 second-feet Mar. 11, 1935 (gage height, 4.20 feet); minimum, 54 second-feet Oct. 15-18, 1934 (gage height, 1.21 feet).

Remarks.- Records good. Occasional run-off from small valley above spring is included in records. Gage read once daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	96	80	128	315	152	96	400	115	103	80	78
2	84	96	78	141	280	145	96	704	115	101	80	78
3	84	304	78	139	257	139	96	609	118	98	80	78
4	82	257	78	128	221	136	96	510	118	101	80	82
5	80	209	78	108	209	131	93	464	115	101	80	80
6	78	182	89	93	201	139	93	434	113	103	80	78
7	172	168	89	139	201	134	91	374	110	103	82	78
8	179	152	87	344	205	128	91	344	108	96	84	78
9	189	139	84	344	221	123	91	287	108	91	82	78
10	175	131	80	321	209	120	93	243	282	89	80	78
11	148	120	80	267	197	118	91	226	298	93	80	80
12	131	115	80	221	189	115	91	209	287	93	80	80
13	118	110	78	205	182	113	91	201	234	92	80	78
14	103	103	78	298	179	113	95	197	193	91	78	78
15	98	101	78	534	168	113	93	186	172	89	78	78
16	93	93	78	441	161	108	91	179	158	89	78	78
17	89	93	78	381	148	108	91	168	155	87	78	74
18	87	92	78	344	152	108	91	161	148	84	78	72
19	84	89	76	293	155	108	89	158	189	87	78	70
20	82	89	76	257	161	108	89	155	158	89	78	70
21	80	87	76	226	205	103	175	146	145	89	78	68
22	78	87	76	205	248	101	226	145	134	87	78	68
23	78	84	76	193	226	101	205	145	125	84	78	68
24	78	84	74	186	213	103	239	145	120	82	78	68
25	78	82	74	182	193	103	257	136	113	82	78	68
26	165	82	74	179	175	101	234	131	113	82	78	68
27	148	82	76	172	168	98	197	125	113	82	78	68
28	131	82	76	161	158	98	175	123	110	80	78	68
29	118	82	78	172	-	96	161	120	105	80	78	68
30	108	80	78	201	-	96	234	120	105	80	78	68
31	101	-	150	304	-	96	-	118	-	80	78	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,415	189	78	110	6,770
November	3,571	304	80	119	7,080
December	2,509	150	74	80.9	4,980
Calendar year 1936	29,685	304	59	81.1	58,860
January	7,307	534	93	236	14,490
February	5,597	315	148	200	11,100
March	3,555	152	96	115	7,050
April	3,951	257	89	132	7,840
May	7,665	704	118	247	15,200
June	4,477	298	105	149	8,880
July	2,788	103	80	89.9	5,530
August	2,452	84	78	79.1	4,860
September	2,224	82	68	74.1	4,410
Water year 1936-37	49,511	704	68	136	98,190

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Big Spring near Van Buren, Mo.

Location.- Staff gage, lat. 36°57', long. 91°00', in sec. 6, T. 26 N., R. 1 E., 400 feet below outlet and 4 miles southeast of Van Buren. Zero of gage is 429.08 feet (revised) above mean sea level (general adjustment of 1929).

Records available.- January to June 1922, April 1923 to September 1937.

Extremes.- Maximum discharge during year (estimated), 1,250 second-feet during period of backwater from Current River Jan. 14; minimum discharge observed, 258 second-feet Oct. 6.

1922-37: Maximum discharge (estimated), 1,300 second-feet during period of backwater from Current River in June 1928; minimum, 247 second-feet July 4-6, 12, 1936.

Remarks.- Records fair except those for periods of backwater from Current River, Oct. 7-10, Nov. 3-8, Dec. 30 to Jan. 4, Jan. 8 to Feb. 12, Apr. 22-28, Apr. 30 to May 14, June 10-12, and those for periods of missing gage-heights, Nov. 13-16, July 19, 22, 23, Sept. 19-22, which were computed on basis of weather records and comparison with records of Greer Spring at Greer, Mo. and are poor.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	269	308	297	550	970	484	386	550	468	365	330	316
2	265	304	294	630	930	478	386	680	463	365	330	316
3	265	760	294	530	890	468	381	800	463	361	326	316
4	262	900	290	510	850	458	377	850	468	357	326	312
5	262	850	297	484	810	448	377	870	468	352	326	312
6	258	790	320	473	780	443	377	860	473	352	326	312
7	270	740	316	737	750	438	377	840	473	348	326	312
8	290	690	316	790	720	433	377	830	468	348	326	312
9	330	653	312	830	690	428	377	810	505	343	326	308
10	360	511	312	850	670	423	377	780	540	343	326	308
11	297	428	308	780	640	418	377	750	560	343	326	308
12	294	354	304	760	620	413	372	730	540	343	322	308
13	294	335	304	750	610	409	372	700	502	339	322	304
14	290	325	304	1,250	588	409	372	670	486	339	322	304
15	286	319	301	1,150	569	404	372	653	471	339	322	304
16	286	318	301	1,090	552	404	372	624	450	339	322	301
17	283	316	301	1,040	536	400	372	599	426	339	322	301
18	283	316	297	990	522	400	372	569	420	339	322	301
19	283	312	297	950	516	395	372	552	411	350	322	301
20	279	312	297	930	511	395	438	529	406	343	322	300
21	279	308	297	910	511	395	478	511	402	343	322	300
22	283	308	297	930	522	395	520	505	397	342	320	299
23	283	304	294	900	516	395	540	500	388	341	320	299
24	279	304	294	870	511	395	560	494	384	339	320	297
25	290	301	294	850	522	395	550	489	379	335	320	297
26	443	301	290	830	500	395	520	484	374	335	316	297
27	409	301	290	820	494	395	490	478	374	335	316	297
28	377	297	290	810	489	390	480	478	370	335	316	294
29	346	297	286	840	-	390	489	473	370	330	316	294
30	320	297	360	890	-	390	495	473	365	330	316	294
31	312	-	600	950	-	386	-	468	-	330	316	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	9,327	443	258	301	18,500
November	12,859	900	297	429	25,510
December	9,654	600	286	311	19,150
Calendar year 1936	106,305	900	247	290	210,800
January	25,674	1,250	473	828	50,920
February	17,789	970	489	635	35,280
March	12,869	484	386	415	25,530
April	12,705	560	372	423	25,200
May	19,599	870	468	632	38,870
June	13,264	560	365	442	26,310
July	10,642	365	330	343	21,110
August	9,990	330	316	322	19,810
September	9,124	316	294	304	18,100
Water year 1936-37	163,496	1,250	258	448	324,300

Eleven Point River near Bardley, Mo.

Location.- Wire-weight gage, lat. 36°38', long. 91°12', in NW¼ sec. 20, T. 23 N., R. 2 W., at bridge on State Highway 42 about 7 miles southwest of Bardley. Zero of gage is 410.84 feet (revised) above mean sea level (general adjustment of 1929).

Drainage area.- 690 square miles.

Records available.- October 1921 to September 1937.

Average discharge.- 16 years, 751 second-feet.

Extremes.- Maximum discharge for each of the water years indicated has been revised as follows:

1926-27, 40,000 second-feet Apr. 14 (gage height 18.74 feet, from floodmarks).
1927-28, 27,200 second-feet June 13 (gage height 15.60 feet).
1934-35, 20,200 second-feet Mar. 12 (gage height 13.74 feet).

Maximum discharge during water year 1936-37, 20,900 second-feet Jan. 14 (gage height, 13.94 feet); minimum discharge observed, 195 second-feet Jan. 6 (gage height, 1.70 feet).

1921-37: Maximum discharge, 40,000 second-feet (revised) Apr. 14, 1927 (gage height, 18.74 feet, present datum, from floodmarks), from rating curve extended above 15,000 second-feet; minimum discharge, 188 second-feet Aug. 30, 31, Sept. 1, 6, 16, 1936; minimum gage height, 1.06 feet, present datum, Sept. 6-11, 1925.

Maximum stage known, 19.7 feet, present datum, from floodmarks, in August 1915 (discharge, about 44,000 second-feet, from rating curve extended above 15,000 second-feet).

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 11 to Sept. 24)

Oct. 1 to Jan. 13				Jan. 14 to Sept. 30					
1.6	170	3.0	835	2.0	240	4.0	1,550	10.0	9,100
1.8	225	3.5	1,190	2.2	325	6.0	3,450	10.5	10,400
2.0	290	4.0	1,570	2.4	426	8.0	5,750	11.0	11,800
2.5	535			2.8	660	9.0	7,150	12.0	14,800
				3.2	930	9.5	8,010	14.0	21,200

Revised daily discharge, in second-feet, for high-water periods in 1927, 1928, 1935

1927	1927	1928
Apr. 13..... 8,420	Apr. 19.....12,400	Apr. 6.....11,200
14.....26,800	Dec. 13.....14,800	June 13.....15,400
15.....15,400	14.....24,800	1935
16.....11,500	15.....14,200	Mar. 11.....11,200
		12.....16,700

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	255	330	249	405	2,070	895	597	860	568	481	350	289
2	249	330	249	355	1,800	860	597	1,150	568	481	350	312
3	243	1,340	249	330	1,630	860	568	1,710	568	481	350	302
4	234	900	243	282	1,550	826	568	1,550	628	481	325	316
5	231	738	240	228	1,470	792	568	1,630	597	454	325	302
6	234	645	380	195	1,390	792	568	1,550	568	426	325	298
7	249	590	380	705	1,310	792	538	1,390	538	426	325	294
8	255	535	355	1,260	1,310	758	568	1,230	538	426	325	289
9	262	480	330	1,420	1,230	758	568	1,150	568	426	325	284
10	290	455	310	1,420	1,150	725	597	1,070	1,890	400	316	307
11	283	430	290	1,260	1,070	725	568	1,070	1,230	426	316	316
12	266	405	286	1,120	1,070	692	568	1,000	930	400	316	298
13	255	380	276	1,120	1,070	692	538	930	792	400	312	298
14	249	380	269	13,900	1,000	692	568	930	725	400	307	289
15	240	355	262	10,300	1,000	660	538	895	792	374	316	284
16	237	330	262	3,800	930	628	538	860	792	374	307	280
17	231	330	262	2,650	895	628	538	826	826	400	307	280
18	228	310	255	2,160	860	660	538	792	1,000	374	307	280
19	228	310	255	1,800	895	660	510	792	758	758	307	280
20	225	290	249	1,710	1,070	660	510	758	660	597	307	272
21	225	290	243	1,630	1,310	628	628	725	628	481	350	272
22	262	290	243	2,750	1,310	597	826	725	597	454	316	264
23	310	290	237	2,160	1,230	597	826	692	568	426	316	264
24	276	283	234	1,880	1,150	692	826	660	538	400	307	264
25	330	269	237	1,800	1,070	725	1,000	660	538	400	298	284
26	1,190	266	231	1,630	1,000	692	930	660	510	374	294	272
27	618	262	269	1,550	1,000	660	895	628	538	374	289	268
28	505	255	290	1,470	930	628	860	628	568	350	289	264
29	455	255	286	1,550	-	628	826	597	538	350	294	264
30	405	249	618	1,710	-	597	860	597	510	350	289	264
31	380	-	970	2,250	-	597	-	597	-	350	294	-

Discharge, in second-feet of Eleven Point River near Bardley, Mo. for water years 1926-27, 1927-28, 1934-35 to 1936-37

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October 1926	11,959	1,100	307	386	0.559	0.64	23,700
November	21,581	1,160	490	719	1.04	1.16	42,800
December	18,177	785	455	586	.849	.98	36,000
Calendar year 1926	201,673	1,550	265	553	.801	10.86	400,000
January 1927	40,133	4,120	510	1,290	1.87	2.16	79,300
February	32,225	1,720	785	1,150	1.67	1.74	63,900
March	36,449	3,260	675	1,180	1.71	1.97	72,600
April	151,110	26,800	1,440	5,037	7.30	8.14	299,700
May	76,880	5,560	1,790	2,480	3.59	4.14	152,000
June	81,690	6,860	1,580	2,720	3.94	4.40	162,000
July	41,240	2,000	1,100	1,330	1.93	2.22	81,800
August	41,980	2,160	1,100	1,350	1.96	2.26	83,000
September	30,345	2,860	845	1,010	1.46	1.63	60,100
Water year 1926-27	583,769	26,800	307	1,599	2.32	31.44	1,157,000
October 1927	29,515	1,580	785	952	1.38	1.59	58,500
November	29,045	1,650	785	968	1.40	1.56	57,600
December	91,270	24,800	785	2,944	4.27	4.92	181,000
Calendar year 1927	681,882	26,800	510	1,868	2.71	36.73	1,352,000
January 1928	37,490	1,440	1,100	1,210	1.75	2.01	74,400
February	33,950	1,440	1,030	1,170	1.70	1.83	67,300
March	38,230	1,440	1,100	1,230	1.78	2.05	75,600
April	73,210	11,200	1,100	2,440	3.54	3.95	145,200
May	36,405	1,580	965	1,170	1.70	1.96	71,900
June	93,210	15,400	965	3,107	4.50	5.02	184,900
July	47,120	2,960	1,120	1,520	2.20	2.54	93,500
August	30,105	1,120	835	971	1.41	1.63	59,700
September	23,037	900	675	768	1.11	1.24	45,700
Water year 1927-28	562,587	24,800	675	1,537	2.23	30.30	1,115,000
October 1934	5,977	219	180	193	.280	.32	11,860
November	5,926	283	180	198	.287	.32	11,750
December	7,789	380	219	251	.364	.42	15,450
Calendar year 1934	104,844	970	180	287	.416	5.65	208,000
January 1935	16,269	1,650	240	525	.761	.88	32,270
February	10,510	480	290	375	.543	.57	20,850
March	64,845	16,700	290	2,092	3.03	3.49	128,600
April	29,355	1,650	645	978	1.42	1.58	58,220
May	36,845	3,260	645	1,189	1.72	1.98	73,080
June	69,760	6,580	1,340	2,325	3.37	3.76	138,400
July	36,850	2,360	835	1,189	1.72	1.98	73,090
August	21,913	970	562	707	1.02	1.18	43,460
September	14,235	535	405	474	.687	.77	28,230
Water year 1934-35	320,274	16,700	180	877	1.27	17.25	635,300
October 1935	12,655	480	380	408	.591	.68	25,100
November	13,599	562	405	453	.657	.73	26,970
December	15,365	900	380	496	.719	.83	30,480
Calendar year 1935	342,201	16,700	240	938	1.36	18.43	678,800
January 1936	10,405	380	290	336	.487	.56	20,640
February	9,047	430	276	312	.452	.49	17,940
March	9,315	380	272	300	.435	.50	18,480
April	12,662	770	262	422	.612	.68	25,110
May	8,239	310	237	266	.386	.44	16,340
June	7,353	480	219	245	.355	.40	14,580
July	6,605	280	198	213	.309	.36	13,100
August	6,176	240	188	199	.288	.33	12,250
September	7,816	590	188	261	.378	.41	15,500
Water year 1935-36	119,237	900	188	326	.472	6.41	236,500
October 1936	9,900	1,190	225	319	.462	.53	19,640
November	12,572	1,340	249	419	.607	.68	24,940
December	9,509	970	231	307	.445	.51	18,860
Calendar year 1936	109,599	1,340	188	299	.433	5.89	217,400
January 1937	66,790	13,900	195	2,155	3.12	3.60	132,500
February	33,770	2,070	860	1,206	1.75	1.82	66,980
March	21,796	895	597	703	1.02	1.18	43,230
April	19,628	1,000	510	654	.948	1.06	38,930
May	29,312	1,710	597	946	1.37	1.58	58,140
June	21,069	1,890	510	702	1.02	1.14	41,790
July	13.294	758	350	429	.622	.72	26,370
August	9,754	350	289	315	.457	.53	19,350
September	8,550	316	264	285	.413	.46	16,980
Water year 1936-37	255,944	13,900	195	701	1.02	13.81	507,700

Note.- The above records for water years 1926-27, 1927-28, 1934-35, 1935-36 supersede those published in previous water-supply papers.

Greer Spring at Greer, Mo.

Location.- Water-stage recorder, lat. 36°47'10", long. 91°20'50", in SE¼SW¼ sec. 36, T. 25 N., R. 4 W., 300 feet below lower outlet of spring, 1 mile above Eleven Point River, and 1 mile north of Greer. Zero of gage is 564.00 feet (revised) above mean sea level (general adjustment of 1929).

Records available.- August to December 1904, November 1921 to September 1937.

Average discharge.- 15 years (1922-37), 340 second-feet.

Extremes.- Maximum discharge during year, 905 second-feet Jan. 14 (gage height, 1.84 feet); minimum, 128 second-feet Dec. 24 (gage height, 0.28 foot).
1921-37: Maximum discharge and gage height, those of Jan. 14, 1937; minimum discharge, 116 second-feet Aug. 26-31, Sept. 14-17, 1936 (gage height, 0.27 foot).

Remarks.- Records good; they include occasional run-off from small drainage area above gage.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	176	144	262	526	373	273	392	321	285	226	188
2	141	179	144	281	514	368	269	448	312	277	223	188
3	136	308	141	288	502	364	269	514	312	277	223	188
4	133	325	139	281	491	360	269	514	308	273	223	188
5	136	304	141	269	485	350	266	520	304	269	220	185
6	133	281	155	258	474	346	262	514	300	266	210	185
7	141	266	158	308	469	346	258	502	296	266	213	185
8	150	258	155	392	458	342	262	485	292	262	217	182
9	170	248	155	417	458	333	277	474	288	258	217	182
10	176	237	153	422	453	329	281	464	350	258	217	185
11	167	223	147	412	437	325	277	453	392	254	213	188
12	158	213	144	402	427	321	273	443	382	251	213	185
13	153	207	141	407	422	316	269	432	373	251	213	173
14	147	201	141	684	412	316	269	422	364	251	210	170
15	144	191	141	624	407	312	266	417	360	248	207	167
16	141	182	141	593	392	308	262	412	350	248	207	164
17	139	179	141	580	387	304	262	402	346	248	204	164
18	139	173	139	568	382	308	258	392	337	244	207	161
19	136	170	139	555	378	304	251	387	325	258	207	161
20	136	170	136	543	397	300	251	382	321	262	204	161
21	133	164	133	531	432	296	296	373	316	258	204	158
22	136	161	133	555	448	288	350	368	312	251	204	158
23	136	158	130	531	448	285	355	360	308	248	201	158
24	133	155	130	520	448	292	382	350	300	244	201	158
25	155	153	130	508	437	296	417	350	296	244	197	158
26	234	150	133	497	422	288	417	346	296	240	194	161
27	226	150	133	485	402	285	407	342	292	237	194	161
28	213	147	133	474	387	281	397	337	292	234	194	167
29	201	144	136	474	-	277	387	333	288	234	191	164
30	188	147	210	491	-	277	382	329	285	230	191	164
31	182	-	277	520	-	277	-	325	-	230	188	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,863	234	133	157	9,650
November	6,020	325	144	201	11,940
December	4,573	277	130	148	9,070
Calendar year 1936	58,106	325	116	159	115,200
January	14,132	684	258	456	28,030
February	12,295	526	378	439	24,390
March	9,767	373	277	315	19,370
April	9,114	417	251	304	18,080
May	12,782	520	325	412	25,350
June	9,618	392	285	321	19,080
July	7,856	285	230	253	15,580
August	6,433	226	188	208	12,760
September	5,157	188	158	172	10,230
Water year 1936-37	102,610	684	130	281	203,500

Lagrue Bayou near Stuttgart, Ark.

Location.- Staff gage, lat. 34°32', long. 91°21', in NW¼ sec. 17, T. 2 S., R. 3 W., 11 miles east of Stuttgart. Zero of gage is 175.14 feet above mean Gulf level.

Records available.- August 1935 to September 1937.

Extremes.- Maximum discharge during year, 2,960 second-feet Jan. 24 (gage height, 16.9 feet, from floodmark), from rating curve extended above 1,200 second-feet; no flow Aug. 13-19.
1935-37: Maximum discharge, that of Jan. 24, 1937; no flow during periods in May, June, and August 1936 and on Aug. 13-19, 1937.

Remarks.- Records poor. Flow affected by diversions for seasonal irrigation. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	23	2	377	833	305	29	15	8	14	4	17
2	12	17	2	714	765	266	23	47	9	27	3	18
3	9	120	6	665	714	222	18	47	25	29	2	23
4	7	230	13	620	635	176	35	43	92	23	2	51
5	5	239	25	560	560	176	127	27	176	17	2	67
6	4	230	390	500	470	169	198	17	198	13	1	67
7	4	198	635	455	377	269	155	13	275	11	1	55
8	6	162	635	416	305	416	92	11	295	9	1	51
9	8	127	620	500	257	442	67	10	295	8	1	55
10	14	114	590	731	214	416	55	8	275	6	1	127
11	16	97	545	833	148	351	45	8	266	6	1	169
12	14	82	485	980	82	285	35	12	222	6	1	176
13	14	72	429	1,060	59	248	27	141	183	6	0	134
14	12	63	364	1,110	59	295	22	148	134	7	0	102
15	9	51	338	1,170	59	295	17	141	97	6	0	92
16	7	43	305	1,140	59	275	15	108	67	6	0	87
17	5	29	285	1,200	45	222	13	87	51	6	0	77
18	8	23	266	1,410	37	176	11	77	45	5	0	67
19	8	16	230	1,560	94	127	10	72	47	4	0	67
20	7	11	206	1,920	390	82	8	72	45	4	1	59
21	6	8	162	2,320	515	59	8	72	35	4	1	55
22	5	6	108	2,640	530	43	7	72	25	3	3	55
23	4	5	67	2,840	500	33	6	190	18	3	5	55
24	4	4	41	2,920	500	67	6	72	14	3	16	45
25	4	4	29	2,600	442	97	5	43	11	3	39	47
26	29	3	17	2,200	390	97	4	29	10	4	47	55
27	63	2	17	1,760	351	72	4	20	9	5	45	59
28	67	2	45	1,470	338	55	4	16	16	4	39	59
29	59	2	67	1,230	-	41	3	14	25	3	29	55
30	47	2	201	1,060	-	37	41	11	14	3	22	51
31	35	-	364	930	-	33	-	9	-	3	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	506	67	4	16.3	1,000
November	1,985	239	2	66.2	3,940
December	7,489	635	2	242	14,850
Calendar year 1936	22,957	1,210	0	62.7	45,539
January	39,891	2,920	377	1,287	79,120
February	9,728	833	37	347	19,300
March	5,847	442	33	189	11,600
April	1,090	198	3	36.3	2,160
May	1,652	190	8	53.3	3,280
June	2,982	295	8	99.4	5,910
July	251	29	3	8.10	498
August	284	47	0	9.16	563
September	2,097	176	17	69.9	4,160
Water year 1936-37	73,802	2,920	0	202	146,381

Arkansas River at Granite, Colo.

Location.- Water-stage recorder, lat. 39°03', long. 106°16', in sec. 31, T. 11 S., R. 79 W., at Granite, just above mouth of Cache Creek.
Drainage area.- 431 square miles.
Records available.- April to October 1895, May 1897 to September 1899, April 1910 to September 1927, and October 1933 to September 1937 in reports of Geological Survey; May 1897 to September 1899 and April 1910 to September 1937 in reports of State engineer.
Average discharge.- 27 years (1910-37) 334 second-feet.
Extremes.- Maximum discharge during year, 1,820 second-feet May 30 (gage height, 3.94 feet); minimum daily discharge, 54 second-feet Jan. 30 to Feb. 1.
1895, 1897-99, 1910-37: Maximum discharge, 2,900 second-feet June 16, 1924 (gage height, 4.57 feet); minimum not determined.
Remarks.- Records good. Discharge for period of ice effect, Dec. 13 to Mar. 15, computed on basis of records for station at Salida, four discharge measurements, and weather records. Minor diversions for irrigation above station. Sugar Loaf and Twin Lakes Reservoirs on tributaries above station, (combined capacity, 72,120 acre-feet). The following records, furnished by the office of the State engineer, show diversions from Colorado River Basin to Arkansas River Basin above station.

Ditch or tunnel	Diverting from-	Diversion in acre-feet
Ewing Ditch	Eagle River and tributaries	3,400
Busk-Ivanhoe Tunnel	Fryingpan Creek	5,150
Twin Lakes Tunnel	Roaring Fork	31,920
Fremont Pass Ditch	Tenmile Creek	1,100
Total		41,580

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	121	156	61	54	74	82	136	1,110	1,140	395	183
2	136	108	141	60	56	76	94	141	673	1,060	395	172
3	134	87	139	56	58	78	88	158	436	770	405	189
4	130	101	112	58	60	78	82	183	448	743	400	204
5	127	103	74	60	62	78	77	261	497	664	420	204
6	136	101	70	60	61	82	77	264	453	649	405	198
7	127	105	76	62	62	86	74	322	514	657	380	127
8	125	101	79	62	60	90	74	405	869	642	366	116
9	119	101	84	62	58	88	74	431	797	572	370	136
10	119	101	80	60	56	86	84	797	770	542	357	156
11	114	99	87	60	58	88	97	779	788	542	335	136
12	112	103	76	59	60	90	101	797	878	627	335	130
13	116	103	70	59	62	90	116	851	682	584	326	123
14	119	103	66	58	62	90	151	952	453	566	314	114
15	116	101	62	58	60	90	257	1,160	605	524	306	112
16	116	105	62	58	61	90	306	1,340	752	497	298	112
17	114	103	66	58	62	82	254	1,320	824	514	306	112
18	112	108	67	56	64	74	233	1,400	770	734	348	112
19	110	97	66	56	64	79	508	1,440	779	690	310	121
20	119	94	65	58	62	74	508	1,240	824	717	243	127
21	121	97	64	58	64	72	590	1,110	914	657	213	123
22	114	94	65	56	66	90	649	1,040	1,130	572	204	125
23	116	92	64	56	68	79	605	1,080	1,340	536	195	132
24	103	85	62	58	68	73	514	806	1,230	524	144	134
25	112	87	60	59	67	73	247	620	1,300	524	156	130
26	116	87	60	58	68	70	233	673	1,690	370	172	125
27	119	85	60	56	70	72	219	717	1,380	395	164	119
28	119	82	60	56	73	72	195	752	1,200	410	169	116
29	108	85	60	55	-	127	166	942	1,170	442	192	114
30	112	114	60	54	-	123	146	1,640	1,170	400	223	116
31	121	-	61	54	-	119	-	1,280	-	357	210	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,706	144	103	120	7,350
November	2,953	121	82	98.4	5,860
December	2,374	156	60	76.6	4,710
Calendar year 1936	156,278	1,780	60	427	310,000
January	1,801	62	54	58.1	3,570
February	1,746	73	54	62.4	3,460
March	2,633	127	70	84.9	5,220
April	6,901	649	74	230	13,690
May	25,037	1,640	136	808	49,660
June	26,446	1,690	436	882	52,450
July	18,621	1,140	357	601	36,930
August	9,056	420	144	292	17,960
September	4,118	204	112	137	8,170
Water year 1936-37	105,392	1,690	54	289	209,000

Arkansas River at Salida, Colo.

Location.- Water-stage recorder, lat. 38°31', long. 106°01', in sec. 31, T. 50 N., R. 9 E., at Salida. South Arkansas River enters 3 miles below. Prior to Dec. 3, 1936, station located 1½ miles downstream; records equivalent.

Drainage area.- 1,210 square miles.

Records available.- April 1895 to October 1903, November 1909 to September 1927. October 1933 to September 1937 in reports of U. S. Geological Survey; April 1895 to October 1903 and November 1909 to September 1937 in reports of State engineer.

Average discharge.- 27 years (1910-37) 628 second-feet.

Extremes.- Maximum discharge during year, 2,400 second-feet June 26 (gage height, 3.56 feet); minimum daily discharge, 163 second-feet Apr. 10.
1895-1903, 1909-37: Maximum discharge, 5,100 second-feet June 16, 1924 (gage height, 7.2 feet, former site and datum); minimum daily discharge, 140 second-feet Sept. 19-21, 1902.

Remarks.- Records good. Diversions for irrigation above station. Flow regulated by storage in Clear Creek Reservoir (capacity, 11,444 acre-feet) and as noted in description for Arkansas River at Granite, Colo.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	447	422	304	251	212	205	208	227	1,620	1,540	677	372
2	434	335	324	242	212	219	181	235	1,220	1,580	625	337
3	422	297	320	208	219	216	191	275	1,010	1,260	617	332
4	426	300	343	235	216	216	184	316	692	1,150	632	366
5	414	335	305	235	235	216	174	440	888	1,050	632	372
6	402	335	260	246	231	216	181	568	840	968	640	366
7	398	331	270	246	235	235	174	603	776	1,030	625	360
8	383	314	265	256	212	251	168	792	1,050	1,040	596	284
9	394	293	270	242	208	251	166	848	1,080	960	561	289
10	394	297	256	235	212	231	163	1,100	1,060	880	561	294
11	387	304	251	231	238	223	181	1,160	1,080	808	547	289
12	379	307	242	231	235	223	191	1,140	1,220	864	568	265
13	371	310	246	227	227	223	201	1,230	1,190	888	582	260
14	368	314	251	227	223	205	216	1,350	928	904	575	246
15	360	307	251	227	219	198	316	1,520	952	856	561	238
16	364	307	260	227	212	196	492	1,710	1,060	800	568	235
17	353	307	275	223	216	205	520	1,830	1,230	752	540	235
18	349	307	256	227	223	208	360	1,850	1,220	928	589	231
19	349	300	256	219	227	205	526	1,940	1,220	952	640	231
20	349	297	251	223	212	184	737	1,820	1,210	1,040	540	238
21	364	287	251	223	208	194	722	1,700	1,290	928	434	242
22	356	275	256	198	223	194	792	1,510	1,420	856	427	246
23	353	272	242	212	223	198	752	1,660	1,700	800	408	260
24	346	254	238	219	219	171	684	1,380	1,580	792	348	270
25	346	254	235	223	219	171	486	1,120	1,590	824	337	275
26	353	245	246	223	219	174	332	1,060	2,020	714	360	256
27	353	257	238	205	216	168	326	1,040	1,910	677	360	246
28	349	263	242	205	208	174	305	1,100	1,630	760	343	238
29	338	266	246	201	-	184	265	1,260	1,480	792	337	231
30	414	263	238	205	-	227	201	1,860	1,500	768	384	235
31	430	-	238	201	-	231	-	1,810	-	684	414	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,745	447	338	379	23,300
November	8,955	422	245	298	17,760
December	8,126	343	235	262	16,120
Calendar year 1936	273,757	2,630	180	748	543,000
January	6,973	256	198	225	13,830
February	6,159	238	208	220	12,220
March	6,414	251	168	207	12,720
April	10,395	792	163	346	20,620
May	36,454	1,940	227	1,176	72,310
June	37,666	2,020	692	1,256	74,710
July	28,845	1,580	677	930	57,210
August	16,028	677	337	517	31,790
September	8,339	372	231	278	16,540
Water year 1936-37	186,099	2,020	163	510	369,100

Arkansas River at Canon City, Colo.

Location.- Water-stage recorder, lat. 38°26', long. 105°15', in sec. 32, T. 18 S., R. 70 W., in Canon City, just above mouth of Sand Creek.

Drainage area.- 3,090 square miles.

Records available.- May 1888 to September 1927, October 1933 to September 1937 in reports of Geological Survey; May 1888 to September 1937 in reports of State engineer.

Average discharge.- 50 years (1887-1937), 732 second-feet.

Extremes.- Maximum discharge during year, 9,850 second-feet Aug. 29 (gage height, 6.35 feet), from rating curve extended above 4,000 second-feet; minimum daily discharge, 198 second-feet Sept. 29, 30.

1888-1937: Maximum discharge, 19,000 second-feet Aug. 2, 1921 (gage height, 10.7 feet), from rating curve extended above 4,000 second-feet; minimum daily discharge, 90 second-feet Apr. 7, 1935.

Remarks.- Records good except those for period of ice effect, Jan. 8 to Feb. 18, which were computed on basis of records for station at Salida and weather records and are fair. Diversions for irrigation above station. For statements of regulation see descriptions for Arkansas River at Granite and at Salida.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	574	588	332	310	230	276	272	265	2,070	1,870	654	521
2	534	594	396	301	230	280	261	257	1,840	1,950	623	350
3	502	464	413	268	235	261	246	265	1,350	1,650	567	341
4	489	413	453	276	245	249	261	297	1,060	1,360	554	318
5	476	459	447	318	255	246	231	341	975	1,240	574	359
6	464	489	359	332	255	246	235	489	975	1,080	560	332
7	453	502	341	301	250	268	238	588	854	1,020	588	332
8	447	514	355	288	235	310	201	608	864	1,050	554	605
9	447	447	341	275	230	314	204	734	1,070	996	521	272
10	441	396	327	265	225	310	211	874	1,020	924	489	246
11	435	396	314	256	250	289	228	1,080	1,010	835	489	253
12	424	424	323	250	250	301	246	1,170	1,070	787	495	249
13	413	435	318	250	260	310	268	1,280	1,150	845	508	246
14	407	430	332	250	265	314	293	1,360	1,030	854	527	231
15	391	413	350	260	255	297	369	1,460	914	826	508	218
16	386	413	341	260	255	293	502	1,760	996	751	502	214
17	386	402	341	255	275	289	574	1,910	1,170	897	560	207
18	380	402	318	250	280	375	601	2,010	1,220	787	534	201
19	380	386	305	245	261	402	476	2,180	1,240	894	574	201
20	369	364	301	245	265	305	669	2,200	1,250	914	567	207
21	386	355	305	240	224	314	726	1,940	1,300	874	441	211
22	396	364	318	235	297	280	751	1,840	1,380	787	364	207
23	396	336	323	225	305	276	692	1,880	1,670	734	391	214
24	386	314	318	230	293	265	646	1,780	1,700	726	332	214
25	396	314	314	245	284	253	631	1,460	1,980	709	293	211
26	430	336	310	245	257	265	447	1,250	2,040	734	305	218
27	459	327	293	240	276	268	375	1,150	2,420	654	489	221
28	464	323	310	235	310	265	364	1,170	1,940	709	332	204
29	447	314	310	225	-	268	341	1,250	1,670	734	1,190	198
30	459	323	293	225	-	276	297	2,070	1,730	787	548	198
31	547	-	284	230	-	297	-	2,340	-	709	581	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	13,564	574	369	438	26,900
November	12,237	594	314	408	24,270
December	10,385	453	284	335	20,600
Calendar year 1936	297,030	2,820	137	812	589,200
January	8,030	332	225	259	15,930
February	7,252	310	224	259	14,380
March	8,962	402	246	289	17,780
April	11,856	751	201	395	23,520
May	39,258	2,340	257	1,266	77,870
June	40,958	2,420	854	1,365	81,240
July	29,687	1,950	654	958	58,880
August	16,214	1,190	293	523	32,160
September	7,999	605	198	267	15,870
Water year 1936-37	206,402	2,420	198	565	409,400

Arkansas River near Pueblo, Colo.

Location.- Water-stage recorder, lat. 38°16', long. 104°41', in sec. 34, T. 20 S., R. 65 W., at intake of south-side waterworks, 4 miles west of center of Pueblo.
Drainage area.- 4,730 square miles.
Records available.- May 1885 to September 1886, September 1894 to September 1927, October 1933 to September 1937 (at present site) and June to September 1887 (at site 9 miles above Pueblo) in reports of Geological Survey; May 1885 to September 1886 and September 1894 to September 1937 in reports of State engineer. Records May 1925 to September 1934 do not include water diverted around station into intake of north-side waterworks.
Average discharge.- 33 years (1894-1924, 1934-37), 767 second-feet; 9 years (1925-34), 624 second-feet (does not include water diverted around station into intake of north-side waterworks.
Extremes.- Maximum discharge during year, 9,300 second-feet Aug. 29; minimum daily discharge, 75 second-feet Jan. 10.
1885-87, 1894-1937: Maximum discharge, 103,000 second-feet, June 3, 1921 (gage height, 24.66 feet, from gage at Pueblo), by slope-area method and including estimated discharge of Dry Creek, 19,500 second-feet: minimum daily discharge, 18 second-feet (includes 13 second-feet diverted around station into intake of north-side waterworks Apr. 7, 1935.
Remarks.- Records good except those estimated for periods of ice effect, Jan. 6 to Feb. 13, which are poor, and those estimated for Sept. 16-18, which are fair. Diversions for irrigation above station. For statements of regulation see descriptions for Arkansas River at Salida and at Granite. Records include diversions above station to intake of north-side waterworks for municipal supply of Pueblo.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	659	512	349	261	300	220	289	123	2,140	1,430	496	441
2	642	591	377	310	330	220	267	97	1,990	1,550	466	348
3	671	481	427	310	435	233	203	189	1,360	1,510	417	282
4	577	423	459	299	390	207	222	179	898	1,190	386	354
5	536	425	466	299	442	207	245	187	718	976	441	664
6	582	550	533	190	445	202	208	243	777	815	394	519
7	517	497	412	140	395	207	226	403	802	722	417	440
8	478	531	421	115	350	230	208	476	744	781	422	810
9	471	467	413	90	285	297	187	650	963	760	400	259
10	500	416	379	75	265	284	187	722	889	710	359	215
11	502	422	381	218	290	241	187	1,070	811	673	349	199
12	480	467	377	215	320	221	235	1,110	828	612	330	209
13	433	473	296	241	345	252	235	1,080	909	615	388	177
14	413	447	274	242	390	279	262	1,250	919	676	458	177
15	430	470	259	267	337	273	307	1,340	690	640	388	145
16	384	445	271	316	354	268	477	1,780	689	600	371	135
17	397	449	267	316	387	241	619	2,080	785	533	358	126
18	394	455	288	240	327	246	591	2,100	870	840	473	117
19	382	455	280	265	300	362	469	2,080	775	816	417	103
20	383	430	304	237	287	315	485	2,160	910	716	442	95
21	432	385	321	237	263	256	562	1,900	803	770	423	87
22	499	426	324	235	244	233	582	1,860	937	632	298	91
23	455	397	317	235	329	186	695	1,820	1,150	564	285	91
24	428	390	285	232	302	172	752	1,800	1,400	524	262	89
25	383	364	293	229	267	177	628	1,610	1,380	571	186	117
26	490	398	299	220	302	217	546	1,390	1,990	566	408	151
27	476	419	296	262	284	217	278	1,250	2,180	510	1,800	160
28	445	441	283	265	285	213	245	1,180	1,820	506	404	140
29	452	349	331	238	-	204	212	1,370	1,560	563	1,420	120
30	420	362	276	262	-	203	170	1,580	1,390	657	3,080	118
31	472	-	283	270	-	289	-	2,220	-	608	744	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	14,783	671	382	477	29,320
November	13,357	591	349	445	26,490
December	10,541	533	259	340	20,910
Calendar year 1936	289,137	5,110	44	790	573,500
January	7,331	316	75	236	14,540
February	9,250	445	244	330	18,350
March	7,372	362	172	238	14,620
April	10,799	752	170	360	21,420
May	37,299	2,220	97	1,203	73,980
June	33,977	2,180	689	1,133	67,390
July	23,636	1,550	506	762	46,880
August	17,482	3,080	186	564	34,680
September	6,979	810	87	233	13,840
Water year 1936-37	192,806	3,080	75	528	382,400

Arkansas River near Nepesta, Colo.

Location.- Water-stage recorder above diversion dam of Oxford Farmers Co. Canal, lat. 38°11', long. 104°10', in sec. 31, T. 21 S., R. 60 W., 1¼ miles west of Nepesta.

Drainage area.- 9,130 square miles.

Records available.- September 1897 to October 1903, July 1909 to November 1912, and October 1933 to September 1937 in reports of Geological Survey; September 1897 to October 1903, July 1909 to November 1912, and January 1914 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 8,060 second-feet Aug. 31 (gage height, 5.37 feet); minimum daily discharge, 50 second-feet (estimated) Jan. 10.
1897-1903, 1909-12, 1914-37: Maximum discharge, 180,000 second-feet at point 9 miles upstream June 4, 1921, by slope-area method; no flow at times during 1902, 1910, 1931, 1934.

Remarks.- Records good except those for period of ice effect, Jan. 1 to Feb. 8, which were computed on basis of one discharge measurement and records for station at Pueblo and are poor. Regulation and diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	612	358	293	260	370	178	293	337	1,070	918	493	1,170
2	648	430	316	320	380	242	275	220	828	1,060	400	648
3	636	530	387	340	335	332	279	275	1,240	1,070	381	540
4	612	510	406	380	350	266	270	486	418	1,120	381	560
5	540	493	458	400	400	238	321	530	1,090	1,000	493	1,820
6	600	479	510	250	410	258	311	424	1,070	879	254	800
7	560	486	479	100	400	275	311	540	1,110	720	254	861
8	437	472	451	90	430	311	307	570	1,190	732	262	3,360
9	424	510	444	80	465	342	254	780	1,120	780	246	307
10	387	458	424	50	266	369	224	840	944	756	224	486
11	424	444	400	200	242	332	214	892	648	648	184	660
12	486	437	387	180	418	293	201	892	648	612	181	540
13	472	437	406	190	486	284	316	1,060	624	684	214	246
14	444	444	530	210	493	293	332	1,170	744	600	254	181
15	444	472	444	260	590	327	430	1,260	828	672	230	152
16	437	530	510	350	520	332	510	1,620	866	560	173	160
17	424	479	486	260	486	279	756	1,990	792	560	181	140
18	412	486	400	260	412	307	879	1,730	918	1,090	165	143
19	406	430	307	260	364	358	816	1,840	1,060	465	284	122
20	406	465	258	260	353	393	744	2,030	1,040	307	293	97
21	375	520	224	280	279	298	510	1,780	970	307	342	80
22	430	590	234	270	327	262	458	1,600	1,020	288	270	85
23	406	612	266	300	224	316	660	1,690	1,210	227	198	76
24	381	648	307	300	321	242	590	1,860	1,260	217	195	73
25	375	510	358	300	307	250	479	1,650	1,220	230	192	68
26	418	418	424	290	192	275	437	1,380	1,630	238	184	82
27	418	412	500	330	87	288	636	1,190	1,730	369	792	120
28	375	430	493	330	127	275	387	1,140	1,290	381	792	138
29	348	293	451	300	-	284	270	1,140	1,330	530	412	120
30	375	258	510	350	-	288	298	2,280	1,140	458	3,320	100
31	353	-	510	340	-	275	-	2,050	-	720	2,630	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	14,065	648	348	454	27,900
November	14,041	648	258	468	27,850
December	12,573	530	224	406	24,940
Calendar year 1936	306,091	14,300	20	836	607,100
January	8,090	400	50	261	16,050
February	10,034	590	87	358	19,900
March	9,062	393	178	292	17,970
April	12,768	879	201	426	25,320
May	37,246	2,280	220	1,201	73,880
June	31,048	1,730	418	1,035	61,580
July	19,198	1,120	217	619	38,080
August	14,874	3,320	165	480	29,500
September	13,935	3,360	68	464	27,640
Water year 1936-37	196,934	3,360	50	540	390,600

Arkansas River at La Junta, Colo.

Location.- Water-stage recorder, lat. 37°59', long. 103°31', in sec. 2, T. 24 S., R. 55 W., at East Bridge in La Junta, just above mouth of King Arroya. During the period of record this station has been maintained at several different locations at La Junta, and all records are equivalent.

Drainage area.- 12,200 square miles.

Records available.- May to August 1889, December 1893 to December 1895, January to December 1901, April to October 1903, August to November 1908, April 1912 to December 1913, and October 1933 to September 1937 in reports of Geological Survey; December 1893 to December 1895, January to December 1901, April to October 1903, August to November 1908, and April 1912 to September 1937 in reports of State engineer.

Average discharge.- 25 years (1912-37), 266 second-feet.

Extremes.- Maximum discharge, 21,800 second-feet June 1 (gage height, 7.20 feet); minimum daily discharge, 10 second-feet Jan. 21.
1889, 1893-95, 1901, 1903, 1908, 1912-37: Maximum discharge, 200,000 second-feet June 4, 1921 (gage height, 18.4 feet), by slope-area method; no flow Jan. 20-23, Mar. 20-22, 1915.

Remarks.- Records good except those for periods of ice effect, Dec. 20-27, Jan. 6 to Feb. 1, which were computed on basis of one discharge measurement and weather records and are fair. Regulation and diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	499	157	225	185	19	21	32	65	5,050	309	144	124
2	396	147	214	158	19	26	32	132	870	350	82	116
3	379	202	231	175	21	53	23	58	455	474	82	235
4	424	273	235	152	28	55	39	31	303	543	62	85
5	362	121	152	151	52	51	61	69	135	481	78	1,380
6	480	92	73	54	31	31	46	122	177	398	91	2,280
7	523	88	50	30	34	26	118	103	508	312	25	837
8	386	88	45	19	191	27	148	68	657	187	39	2,880
9	305	92	42	15	106	26	114	241	329	147	26	399
10	279	105	36	19	100	33	42	251	418	162	34	144
11	232	130	34	25	52	32	46	373	78	350	34	279
12	221	146	47	31	29	32	30	454	46	138	32	364
13	237	209	46	41	52	48	24	479	34	57	33	358
14	208	203	53	36	22	116	48	491	19	52	33	356
15	250	233	191	27	21	116	57	594	18	50	30	470
16	280	254	198	35	25	112	112	663	20	87	28	175
17	318	259	141	46	20	62	316	629	76	126	28	51
18	285	263	88	34	21	38	548	646	220	260	32	38
19	238	258	48	27	18	37	355	422	342	278	47	38
20	243	251	36	21	19	70	309	402	439	84	44	38
21	257	219	25	10	25	129	240	654	228	72	188	38
22	277	225	22	16	37	69	162	378	261	54	27	30
23	249	251	26	21	70	36	143	671	405	75	26	25
24	225	228	22	32	85	41	409	625	577	33	33	24
25	164	223	23	26	170	36	496	705	582	16	74	26
26	154	218	28	24	64	24	307	621	847	20	112	26
27	163	230	41	20	32	60	175	586	472	24	47	23
28	223	222	100	17	24	62	195	592	316	70	263	19
29	383	214	187	23	-	57	143	496	207	78	87	20
30	393	213	182	18	-	44	84	811	459	25	698	22
31	184	-	187	19	-	54	-	3,790	-	32	766	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	9,217	523	154	297	18,280
November	5,814	273	88	194	11,530
December	3,028	235	22	97.7	6,010
Calendar year 1936	138,612.1	14,200	6.1	379	274,900
January	1,507	185	10	48.6	2,990
February	1,387	191	18	49.5	2,750
March	1,624	129	21	52.4	3,220
April	4,854	548	23	162	9,630
May	16,222	3,790	31	523	32,180
June	14,548	5,050	18	485	28,860
July	5,344	543	16	172	10,600
August	3,325	766	25	107	6,600
September	10,900	2,880	19	363	21,620
Water year 1936-37	77,770	5,050	10	213	154,300

Arkansas River at Lamar, Colo.

Location.- Water-stage recorder, lat. 38°06', long. 102°37', in sec. 30, T. 22 S., R. 46 W., at highway bridge, 1 mile north of Lamar.

Drainage area.- 19,800 square miles.

Records available.- May to December 1913 and October 1933 to September 1937 in reports of Geological Survey; May 1913 to September 1937 in reports of State engineer.

Average discharge.- 24 years, 289 second-feet.

Extremes.- Maximum discharge during year, 12,100 second-feet June 1 (gage height, 6.00 feet); minimum daily discharge, 1.7 second-feet Aug. 7, 8.
1913-37: Maximum discharge, 165,000 second-feet June 5, 1921, by slope-area method; no flow at times during 1913-15.

Remarks.- Records good except those for period of ice effect, Dec. 17 to Feb. 4, which were computed on basis of one discharge measurement, weather records, and estimates by observer and are fair. Diversions and regulation for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	5.0	4.0	15	18	37	5.0	5.8	6,800	3.8	18	789
2	6.6	9.0	4.0	10	20	11	5.0	4.5	4,530	4.6	8.3	305
3	6.6	4.5	6.6	8	30	9.0	5.0	3.5	384	3.3	6.0	7.8
4	6.6	4.5	7.5	10	26	5.8	2.5	4.0	520	3.8	6.4	343
5	6.6	3.5	12	10	34	5.8	2.5	4.5	516	10	2.4	94
6	5.8	15	63	10	33	5.8	2.5	4.0	111	7.4	2.2	3,900
7	4.5	3.5	77	10	33	5.8	2.5	4.5	50	9.9	1.7	3,490
8	21	3.0	20	6	80	5.0	2.5	4.5	17	12	1.7	879
9	9.0	4.5	11	8	80	5.8	3.5	3.5	315	9.9	2.2	3,450
10	6.6	4.5	7.4	10	65	4.5	4.5	3.5	1,090	818	2.4	492
11	6.6	3.5	5.8	14	70	3.0	4.0	3.5	342	3.3	2.2	54
12	9.0	4.0	5.0	18	95	4.0	6.6	4.0	41	3.3	2.2	15
13	6.6	4.5	4.0	20	70	4.5	8.2	4.5	126	3.8	8.8	11
14	6.6	4.0	4.0	22	72	3.5	7.4	5.8	85	3.8	2.8	6.9
15	8.2	3.0	4.5	28	55	4.5	5.8	6.6	64	4.2	9.4	6.4
16	5.8	3.5	4.0	28	35	4.5	5.2	5.8	6.4	4.2	18	4.6
17	6.6	4.0	4.0	28	28	4.0	5.0	6.6	6.0	6.9	14	6.0
18	6.6	4.0	3.0	30	28	3.5	3.5	8.2	5.6	6.0	6.4	5.6
19	9.0	4.5	3.0	26	31	4.0	5.8	22	5.1	326	3.3	4.6
20	3.5	5.0	3.0	23	28	2.0	5.0	9.8	5.1	68	3.1	4.2
21	4.0	4.5	10	20	30	2.5	9.8	3.5	5.6	6.0	3.1	5.1
22	4.5	4.0	8.0	18	24	2.5	12	4.5	4.6	4.6	11	4.6
23	5.0	4.0	8.0	20	21	2.0	9.0	5.0	4.6	7.2	29	5.1
24	5.0	4.5	8.0	24	11	3.0	8.2	9.0	4.6	10	13	4.6
25	7.4	5.8	12	26	9.0	2.0	6.6	13	4.6	11	6.0	4.6
26	5.8	5.8	13	28	24	2.5	5.0	12	4.6	12	6.9	5.6
27	5.0	4.5	11	25	31	2.0	5.0	7.4	4.6	21	17	6.0
28	4.5	3.5	9.0	25	16	9.8	5.8	19	10	9.9	21	4.6
29	4.0	4.0	11	23	-	3.5	4.5	19	12	8.2	20	3.8
30	6.6	4.0	11	23	-	2.5	5.0	12	4.2	21	48	3.3
31	16	-	11	23	-	5.0	-	19	-	18	235	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	216.2	21	3.5	6.97	429
November	141.6	15	3.0	4.72	281
December	360.8	77	3.0	11.6	716
Calendar year 1936	120,332.1	14,400	.4	329	238,700
January	589	30	6	19.0	1,170
February	1,095.0	95	9.0	39.1	2,170
March	170.3	37	2.0	5.49	338
April	163.5	12	2.5	5.45	324
May	242.5	22	3.5	7.82	481
June	15,378.6	6,800	4.2	513	30,500
July	633.1	326	3.3	20.4	1,260
August	531.5	235	1.7	17.1	1,050
September	13,915.4	3,900	3.3	464	27,600
Water year 1936-37	33,437.5	6,800	1.7	91.6	66,320

Arkansas River at Holly, Colo.

Location.- Water-stage recorder, lat. 38°02', long. 102°06', in sec. 14, T. 23 S., R. 42 W., just above mouth of Wild Horse Creek, 300 feet below highway bridge, and half a mile south of Holly.

Drainage area.- 25,000 square miles.

Records available.- December 1893 to December 1894 and May 1901 to April 1902 (published as at Barton, or at Byron), October 1907 to September 1927, and October 1933 to September 1937 in reports of Geological Survey; October 1907 to September 1937 in reports of State engineer.

Average discharge.- 30 years, (1907-37) 354 second-feet.

Extremes.- Maximum discharge during year, 17,300 second-feet Sept. 8 (gage height, 6.26 feet); minimum daily discharge, 8 second-feet July 17-19.

1893-4, 1901-2, 1907-37: Maximum discharge, 136,000 second-feet Oct. 20, 1908 (gage height, 11.0 feet, former datum) by slope-area method; no flow Aug. 9, 1924, May 27 to June 6, and June 26 to July 3, 1925.

Remarks.- Records good except those for period of ice effect, Dec. 28 to Feb. 4, which were computed on basis of one discharge measurement, weather records, and observer's notes and are fair. Extensive regulation and several diversions above station for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	82	56	115	80	117	48	17	1,710	107	17	271
2	34	66	37	110	90	136	42	18	5,900	52	16	546
3	32	50	37	68	100	172	38	17	2,030	52	12	150
4	30	68	63	54	110	190	39	19	795	27	38	107
5	30	63	66	58	115	79	39	15	1,200	21	84	246
6	33	65	70	60	123	70	48	18	580	18	60	1,260
7	33	66	172	35	136	65	55	26	290	16	25	7,770
8	32	68	194	25	115	70	55	30	268	15	16	7,690
9	30	68	209	26	115	65	54	19	1,150	14	17	7,010
10	52	65	194	28	104	56	50	21	948	14	17	2,630
11	29	65	164	30	130	59	35	20	885	179	16	805
12	29	43	157	35	201	59	30	23	785	86	12	338
13	28	43	143	38	259	56	29	19	450	57	10	194
14	25	43	143	40	224	54	25	19	704	44	10	141
15	30	42	133	48	246	56	21	19	396	38	11	113
16	28	44	93	52	186	57	20	16	234	24	10	100
17	29	43	77	58	160	59	17	15	162	8	11	71
18	33	38	70	57	150	50	17	11	127	8	11	60
19	34	40	68	59	130	49	18	10	107	8	10	52
20	29	42	69	61	130	52	23	15	93	201	9	44
21	27	42	72	58	120	59	24	17	80	132	9	41
22	37	43	88	54	104	56	23	15	66	55	9	35
23	50	43	94	50	96	52	19	16	60	38	9	34
24	75	43	93	70	88	59	19	14	55	34	9	34
25	79	56	101	80	84	54	23	15	31	31	10	32
26	86	59	93	96	57	77	21	21	27	29	19	30
27	91	59	79	95	57	63	21	24	59	24	11	27
28	72	63	80	89	77	52	21	21	323	20	11	24
29	57	56	85	88	-	54	17	24	281	19	14	24
30	57	52	83	85	-	55	17	23	165	15	10	23
31	65	-	80	82	-	57	-	20	-	15	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,330	91	25	42.9	2,640
November	1,620	82	38	54.0	3,210
December	3,163	209	37	102	6,270
Calendar year 1936	168,117	17,500	11	459	333,400
January	1,904	115	25	61.4	3,780
February	3,587	259	57	128	7,110
March	2,209	190	49	71.3	4,380
April	908	55	17	30.3	1,800
May	577	30	10	18.6	1,140
June	19,961	5,900	27	665	39,590
July	1,401	201	8	45.2	2,780
August	537	84	9	17.3	1,070
September	29,902	7,770	23	997	59,310
Water year 1936-37	67,099	7,770	8	184	133,100

Arkansas River at Syracuse, Kans.

Location.- Water-stage recorder, lat. 37°58', long. 101°45', in NW¼ sec. 18, T. 24 S., R. 40 W., at highway bridge, half a mile south of Syracuse.

Drainage area.- 25,500 square miles.

Records available.- August 1902 to July 1908, June 1921 to September 1937.

Average discharge.- 16 years (1921-37), 330 second-feet.

Extremes.- Maximum discharge during year, 17,000 second-feet Sept. 8 (gage height, 7.68 feet); minimum, 1 second-foot Aug. 12, 13, 16, 25, Aug. 28 to Sept. 1; minimum gage height 1.29 feet Aug. 25.
1902-6, 1921-37: Maximum gage height, about 11.75 feet (present datum) June 6, 1921 (discharge not determined); minimum discharge, 1 second-foot at various times in 1931, 1934 and 1937. Bank-full stage, 7.0 feet.

Remarks.- Records fair except for period of ice effect, Jan. 1 to Feb. 11 (based on three discharge measurements, engineer's notes, and canal records), and those for periods of rapidly changing stages June 2-15, Sept. 2-15, which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	76	72			122	72	9	112	76	3	1
2	38	77	69			132	52	8	3,770	54	3	280
3	32	78	72	60		132	41	8	1,920	40	3	193
4	30	79	74			157	38	8	646	29	4	62
5	30	80	79			164	37	7	498	22	3	81
6	51	81	79		115	122	41	7	610	14	3	109
7	56	81	84	45		109	37	6	380	13	3	7,180
8	51	84	112			95	35	6	394	11	3	7,450
9	41	79	129	40		89	37	6	888	10	2	4,680
10	43	74	126	40		86	33	6	1,060	9	2	2,700
11	51	76	136			81	32	6	965	106	2	1,270
12	51	74	129		143	72	29	6	910	62	1	619
13	52	72	129	60	189	69	26	6	594	32	1	380
14	49	72	129		213	100	23	6	682	24	2	270
15	40	72	126		221	81	20	7	628	14	2	213
16	35	69	126	86	189	79	19	7	252	10	1	178
17	35	69	112		174	81	22	6	160	9	2	154
18	37	64	103		150	74	17	5	136	2	3	136
19	37	58	95	90	143	69	14	5	136	2	3	112
20	37	60	100		132	64	13	5	112	43	3	86
21	37	60	98		126	64	12	4	89	103	2	67
22	45	60	98		115	64	11	4	69	38	2	51
23	50	60	103	100	112	62	10	4	58	19	2	38
24	54	60	106		106	62	10	4	47	12	2	23
25	60	74	109		98	52	8	4	38	8	3	17
26	69	81	112		47	72	8	3	33	5	19	13
27	74	72	106		47	81	8	3	27	5	2	10
28	76	69	103		79	81	8	3	29	5	1	9
29	74	69	95	110	-	76	8	3	154	5	1	8
30	75	69	89		-	81	8	3	112	5	1	8
31	75	-	86		-	79	-	3	-	4	1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,520	76	30	49.0	3,010
November	2,149	84	58	71.6	4,260
December	3,186	136	69	103	6,320
Calendar year 1936	165,144	14,800	3	451	327,500
January	2,421	-	40	78.1	4,800
February	3,549	221	47	127	7,040
March	2,752	164	52	88.8	5,460
April	729	72	8	24.3	1,450
May	168	9	3	5.4	333
June	15,509	3,770	27	517	30,760
July	797	106	2	25.7	1,580
August	85	19	1	2.7	169
September	26,398	7,450	1	880	52,360
Water year 1936-37	59,263	7,450	1	162	117,500

Arkansas River at Garden City, Kans.

Location.- Water-stage recorder, lat. 37°57', long. 100°52', in NW¼ sec. 19, T. 24 S., R. 32 W., half a mile south of Garden City.

Drainage area.- 28,800 square miles.

Records available.- June 1922 to September 1937.

Average discharge.- 15 years, 212 second-feet.
Average discharges previously published that have been found to be erroneous have been corrected as follows:
1923-34: 228 second-feet (supersedes figure published in Water-Supply Paper 762).
1923-35: 219 second-feet (supersedes figure published in Water-Supply Paper 787).
1923-36: 223 second-feet (supersedes figure published in Water-Supply Paper 807).

Extremes.- Maximum discharge during year, 5,440 second-feet Sept. 8 (gage height, 6.15 feet); no flow during several periods.
1922-37: Maximum discharge, 21,200 second-feet Aug. 9, 1929; maximum gage height, 8.56 feet (based on resident engineer's notes) May 31, 1936; no flow during several periods. Bank-full stage, 7.0 feet.

Remarks.- Records poor.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	28	13	12	8	75	9		158			0
2	0	21	13	4	10	78	4		1,800			0
3	0	4	5	4	9	26	2		2,510			0
4	0	4	5	2	14	28	3		967			0
5	0	4	15	5	19	24	3		226			0
6	0	1	2	5	24	16	3		140			0
7	0	2	4	4	10	15	2		157			1
8	0	6	16	2	13	6	2		90			2,680
9	0	8	21	1	13	1	4		83			2,080
10	0	4	9	1	15	0	2		174			2,250
11	0	4	5	2	28	0	1		250			791
12	0	7	5	3	49	0	0		183			261
13	0	9	3	3	75	0	0		148			72
14	0	12	6	1	97	24	0		57			34
15	0	10	6	2	133	55	0		30			20
16	0	9	8	8	163	97	0		27			4
17	0	12	7	15	179	82	0		15			2
18	0	14	9	15	153	38	0		7			1
19	0	18	5	14	133	10	0		27			0
20	0	18	4	6	153	21	0		20			0
21	2	13	7		153	4	0		40			0
22	8	13	2		168	2	0		37			0
23	5	15	6		142	2	0		15			0
24	2	4	8		52	4	0		15			0
25	3	13	8	4	15	10	0		0			0
26	7	21	8		7	33	0		0			0
27	6	15	6		15	19	0		0			0
28	9	23	8		30	14	0		0			0
29	9	10	9		-	8	0		0			0
30	8	5	19	4	-	7	0		0			0
31	7	-	16	5	-	9	-		-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	66	9	0	2.1	131
November	327	28	1	10.9	649
December	258	21	2	8.3	512
Calendar year 1936	100,422	14,800	0	274	199,200
January	154	15	1	5.0	305
February	1,880	179	7	67.1	3,730
March	708	97	0	22.8	1,400
April	35	9	0	1.2	69
May	0	0	0	0	0
June	7,176	2,510	0	239	14,230
July	0	0	0	0	0
August	0	0	0	0	0
September	8,196	2,680	0	273	16,260
Water year 1936-37	18,800	2,680	0	51.5	37,290

Arkansas River at Larned, Kans.

Location.- Water-stage recorder, lat. 38°10, long. 99°06', in NE¼ sec. 5, T. 22 S., R. 16 W., at Larned, about 800 feet about mouth of Pawnee River.

Drainage area.- 34,900 square miles.

Records available.- June 1922 to September 1937.

Average discharge.- 15 years, 228 second-feet.

Extremes.- Maximum discharge during year, 1,480 second-feet Sept. 12 (gage height, 3.62 feet); no flow during several periods.
1922-37: Maximum discharge, 14,300 second-feet Aug. 25, 1923 (gage height, 9.5 feet); no flow during several periods. Bank-full stage, 8.5 feet.

Remarks.- Records fair except those for period of ice effect, Jan. 3 to Feb. 13 computed on basis of one discharge measurement, and weather records), and those for periods of shifting control, Feb. 14 to Apr. 10, June 5-7, August 1 to September 30, which are poor. Stage-discharge relation affected by backwater from Pawnee River Aug. 13-15.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	23	37	36		133	69	24	24	23	18	0
2	38	25	38	24		133	66	24	23	23	12	0
3	30	27	38			109	64	24	20	21	8	0
4	30	28	39			96	59	26	40	19	7	0
5	28	29	44			92	57	24	1,250	16	4	0
6	25	31	38			94	53	24	830	13	2	0
7	27	34	34		10	90	53	24	410	11	2	0
8	29	36	48			86	54	30	262	9	1	0
9	31	37	64			82	59	26	221	8	1	0
10	28	36	64		12	80	57	23	766	6	1	505
11	26	36	50			79	51	23	503	5	0	950
12	25	36	51			77	48	24	236	4	0	1,130
13	24	36	39			68	47	22	171	3	1	790
14	25	34	38		77	75	46	21	148	2	1	461
15	25	34	37		159	140	90	46	19	143	4	0	285
16	25	34	36			130	103	46	19	130	19	0	186
17	24	36	38			109	86	43	18	113	28	0	133
18	23	36	38	3		109	82	43	16	98	34	0	111
19	22	34	38			107	80	41	13	82	526	0	82
20	20	34	38			118	79	40	11	71	285	0	69
21	20	32	36			123	84	39	9	64	249	0	54
22	21	31	36			143	86	36	14	56	146	13	44
23	21	29	36			130	86	33	11	46	103	12	39
24	21	31	36			116	80	31	9	41	77	5	33
25	21	31	36	5		111	73	30	9	38	61	0	30
26	20	31	37			64	71	30	9	33	48	0	28
27	21	31	37			71	69	31	19	31	38	0	24
28	21	31	36			90	68	31	17	30	32	0	23
29	19	32	36			-	68	31	21	26	30	0	22
30	19	34	34			-	71	29	24	24	27	0	20
31	19	-	34			-	71	-	22	-	24	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	768	40	19	24.8	1,520
November	969	37	23	32.3	1,920
December	1,241	64	34	40.0	2,460
Calendar year 1936	83,559	5,380	-	228	165,700
January	308	36	-	9.9	611
February	1,917	159	-	68.5	3,800
March	2,643	133	68	85.3	5,240
April	1,363	69	29	45.4	2,700
May	599	30	9	19.3	1,190
June	5,930	1,250	20	198	11,760
July	1,894	526	2	61.1	3,760
August	88	18	0	2.8	175
September	5,019	1,130	0	167	9,960
Water year 1936-37	22,739	1,250	0	62.3	45,100

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Arkansas River at Wichita, Kans.

Location.- Water-stage recorder, lat. 37°41', long. 97°21', in SE¼ sec. 20, T. 27 S., R. 1 E., on Douglas Avenue Bridge, in Wichita, half a mile below mouth of Little Arkansas River.

Drainage area.- 41,600 square miles.

Records available.- July 1934 to September 1937. June 1921 to March 1935, at site 1½ miles above mouth of Little Arkansas River.

Extremes.- Maximum discharge observed during year, 2,760 second-feet Oct. 9, Feb. 9, July 18 (gage height, 4.2 feet); minimum, 52 second-feet Jan. 10-30; minimum gage height, 1.07 feet Sept. 4.
1934-37: Maximum discharge, 12,500 second-feet June 3, 1935 (gage height, 9.67 feet); minimum, 3 second-feet Sept. 3, 1934 (gage height, 0.37 foot).

Remarks.- Records fair except those for Oct. 1 to Mar. 20, which are poor. Discharge for many days of faulty recorder operation determined from daily gage readings collected in cooperation with U. S. Weather Bureau. Discharge determined throughout year by a special shifting-control method.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	159	199	71	71	199	281	186	119	611	129	294	108
2	150	199	71	71	98	281	166	116	455	129	264	103
3	148	199	71	71	98	281	162	110	611	115	210	99
4	142	199	71	71	98	281	159	122	774	115	176	83
5	137	199	98	71	98	281	152	127	696	103	164	104
6	137	199	144	71	144	281	146	115	580	103	145	99
7	148	199	71	71	736	281	137	129	470	96	104	103
8	217	144	71	71	1,040	281	137	132	634	91	91	197
9	1,350	144	71	71	2,140	281	137	116	782	93	112	604
10	2,080	144	71	52	1,860	281	139	119	876	89	114	1,640
11	1,490	144	71	52	1,800	281	137	115	1,090	89	111	1,580
12	807	144	71	52	1,580	281	137	110	1,000	105	115	1,150
13	638	144	71	52	1,300	346	139	103	1,120	195	134	924
14	404	144	71	52	1,290	346	142	99	979	176	113	720
15	329	144	71	52	970	281	142	89	759	122	127	735
16	264	144	71	52	751	281	513	99	689	110	133	612
17	264	144	71	52	624	281	353	93	720	215	111	537
18	264	144	71	52	411	281	229	86	657	1,970	299	466
19	199	98	71	52	411	224	181	91	573	2,140	292	390
20	199	98	71	52	411	281	176	86	513	1,960	345	338
21	199	98	71	52	411	252	159	86	449	2,280	282	287
22	199	98	71	52	346	236	159	100	385	2,210	212	246
23	199	98	71	52	346	242	159	252	333	1,780	172	222
24	199	98	71	52	346	265	146	499	294	1,780	232	208
25	199	98	71	52	346	270	139	499	252	1,440	212	192
26	199	98	71	52	346	270	129	270	205	1,030	192	186
27	199	98	71	52	346	259	124	573	186	818	172	178
28	199	98	71	52	281	205	127	365	170	800	172	152
29	199	98	71	52	-	181	122	219	146	614	138	150
30	199	98	71	52	-	176	119	247	137	459	123	146
31	199	-	71	98	-	181	-	720	-	374	114	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,715	2,080	137	378	23,240
November	4,153	199	98	138	8,240
December	2,301	144	71	74.2	4,560
Calendar year 1936	110,425	4,350	21	302	219,000
January	1,829	98	52	59.0	3,630
February	18,827	2,140	98	672	37,340
March	8,230	346	176	265	16,320
April	5,053	513	119	168	10,020
May	6,006	720	86	194	11,910
June	17,146	1,120	137	572	34,010
July	21,730	2,280	89	701	43,100
August	5,475	345	91	177	10,860
September	12,559	1,640	83	419	24,910
Water year 1936-37	115,024	2,280	52	315	228,100

Arkansas River at Arkansas City, Kans.

Location.- Water-stage recorder, lat. 37°04', long. 97°03', in NW¼ sec. 25, T. 34 S., R. 3 E., at Chestnut Avenue highway bridge, half a mile west of Arkansas City and 5 miles above mouth of Walnut River.

Drainage area.- 44,700 square miles.

Records available.- September 1902 to July 1906, September 1921 to September 1937.

Average discharge.- 16 years, (1921-37), 1,202 second-feet.

Extremes.- Maximum discharge during year, 11,700 second-feet July 20 (gage height, 14.06 feet); minimum, 248 second-feet Jan. 9 (gage height, 6.89 feet).
1902-06 1921-37: Maximum gage height, 25.64 feet June 11, 1923, from flood-marks (discharge not determined); minimum discharge, 1 second-foot Oct. 9, 1921, (due to diversion by power canal of Kansas Gas & Electric Co., which was washed out June 10, 1923). Minimum discharge after canal washed out, 30 second-feet Aug. 19, 1933. Bank-full stage, 16 feet.

Remarks.- Records good. Discharge determined throughout year by shifting-control method. Backwater may occur for short periods during flashy peaks on Walnut River.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	346	395	277	365	678	605	540	321	9,980	566	1,050	556
2	346	392	293	372	1,360	623	530	310	3,430	545	935	525
3	339	361	287	328	1,050	623	535	307	2,950	525	858	491
4	324	354	287	318	921	611	566	297	1,660	515	788	477
5	314	335	321	287	566	578	520	304	1,760	495	736	463
6	310	321	357	277	556	578	482	310	1,560	472	691	437
7	392	318	328	267	743	572	468	335	1,360	450	635	432
8	743	324	310	284	1,980	572	459	354	1,200	437	594	550
9	1,980	321	297	284	2,580	550	445	376	4,620	424	566	2,400
10	2,720	310	290	304	3,350	525	437	376	8,580	407	545	5,130
11	2,720	314	314	328	2,440	505	441	368	8,860	399	520	3,690
12	1,980	321	328	342	2,200	482	432	365	3,940	395	505	2,260
13	1,360	328	339	354	2,150	510	432	368	2,440	380	482	1,930
14	1,050	321	335	372	1,820	907	463	388	1,980	399	468	1,460
15	865	324	328	380	1,760	988	428	384	3,270	515	477	1,360
16	736	318	335	372	1,460	769	424	392	2,720	659	463	1,240
17	653	324	328	365	1,200	653	482	357	2,100	802	445	1,120
18	594	324	328	354	1,050	605	578	335	1,610	3,930	424	1,050
19	550	324	328	350	837	623	515	321	1,460	9,420	403	935
20	520	318	339	372	782	647	477	293	1,280	11,100	491	865
21	505	318	342	491	756	647	515	297	1,160	6,760	665	788
22	505	324	324	491	736	623	428	611	1,050	3,430	3,970	717
23	500	290	321	525	704	629	403	2,510	965	2,880	3,780	653
24	495	290	321	468	684	691	372	921	893	2,380	1,280	611
25	486	287	328	424	672	837	365	730	816	2,200	1,050	561
26	472	307	415	420	678	942	350	1,710	756	2,040	995	525
27	459	293	495	403	684	756	339	6,290	710	1,760	972	500
28	432	284	388	399	635	647	328	8,860	653	1,560	830	472
29	420	304	350	388	-	600	332	8,860	617	1,410	750	445
30	415	287	365	392	-	572	324	3,770	594	1,320	672	432
31	399	-	380	324	-	550	-	4,310	-	1,160	617	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	23,930	2,720	310	772	47,460
November	9,631	395	284	321	19,100
December	10,378	495	277	335	20,580
Calendar year 1936	183,133	4,940	74	500	363,200
January	11,400	525	267	368	22,610
February	35,032	3,350	556	1,251	69,480
March	20,020	988	482	646	39,710
April	13,410	578	324	447	26,600
May	45,730	8,860	293	1,475	90,700
June	74,974	9,980	594	2,499	148,700
July	59,735	11,100	380	1,927	118,500
August	27,657	3,970	403	892	54,860
September	33,075	5,130	432	1,102	65,600
Water year 1936-37	364,972	11,100	267	1,000	723,900

Arkansas River near Muskogee, Okla.

Location.- Wire-weight gage, lat. 35°46', long. 95°18', in NW¼ sec. 21, T. 15 N., R. 19 E., 1 mile below confluence of Neosho and Verdigris Rivers and 3½ miles northeast of Muskogee. Zero of gage is 471.38 feet above mean sea level (Corps of Engineers, U. S. Army, benchmark).

Drainage area.- 96,800 square miles.

Records available.- March 1935 to September 1937.

Extremes.- Maximum discharge observed during year, 141,000 second-feet June 13 (gage height, 23.25 feet); minimum discharge, 1,780 second-feet Dec. 5, 25, 26; minimum gage height, 5.05 feet Aug. 20.

1935-37: Maximum discharge observed, 243,000 second-feet June 9, 1935 (gage height, 30.8 feet), from rating curve extended above 110,000 second-feet; minimum, 340 second-feet Aug. 11-14, 1936 (gage height, 3.80 feet).

Maximum stage known, 34.1 feet in June 1923.

Remarks.- Records good. Gage read twice daily.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 21 to Sept. 30)

5.0	1,480	10.0	20,000	15.0	52,800
6.0	3,800	11.0	25,200	17.0	71,900
7.0	7,050	12.0	31,000	19.0	92,500
8.0	11,000	13.0	37,400	21.0	115,000
9.0	15,300	14.0	44,600	23.0	139,000

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43,200	5,000	1,980	13,200	105,500	7,050	9,800	8,600	24,700	4,700	9,800	7,800
2	22,600	5,000	2,080	14,400	67,000	6,700	8,600	11,900	18,600	5,650	16,700	7,800
3	15,800	32,900	1,880	12,300	38,800	6,350	8,200	9,800	18,600	4,700	12,700	4,400
4	11,400	64,000	1,880	10,200	30,400	7,050	7,900	7,800	22,600	4,700	9,000	4,400
5	8,600	74,900	1,780	11,000	24,200	6,350	8,600	5,650	29,300	5,650	7,050	3,550
6	7,400	40,300	1,980	9,400	26,400	6,000	10,200	5,300	29,300	5,000	5,650	3,300
7	20,400	18,600	1,980	8,600	23,600	6,350	13,600	4,400	31,600	3,550	5,650	3,300
8	94,700	11,400	2,080	7,800	23,100	6,000	20,500	4,700	28,100	3,550	6,000	4,400
9	116,000	8,600	2,550	7,050	22,600	5,650	17,200	5,300	20,500	3,800	5,650	6,700
10	92,500	7,050	3,050	7,400	28,100	6,000	16,700	5,000	25,200	4,100	4,400	20,500
11	67,900	6,350	2,800	11,900	25,200	6,350	15,300	4,400	85,200	3,800	3,300	57,400
12	74,900	6,000	2,800	10,600	23,100	6,000	11,400	4,400	119,000	3,800	2,920	41,700
13	69,900	5,300	2,550	10,200	21,600	6,350	9,400	4,100	135,000	3,800	2,920	30,400
14	63,000	5,000	2,550	28,100	22,100	9,000	8,600	5,650	94,700	3,800	2,920	22,600
15	54,600	4,100	2,420	79,000	20,500	10,600	9,800	8,200	55,600	3,300	3,050	20,000
16	40,300	4,100	2,190	96,900	17,200	14,400	9,400	11,000	69,900	2,920	2,420	13,600
17	18,600	3,800	2,080	66,000	13,600	13,200	5,650	11,900	117,000	2,680	2,550	14,400
18	12,300	3,550	1,980	34,800	12,300	11,400	5,650	9,400	125,000	2,680	2,920	17,200
19	10,200	3,300	1,980	28,700	11,000	9,800	7,400	7,050	90,400	5,300	2,680	15,300
20	9,000	3,300	2,080	22,600	13,200	9,400	13,200	4,100	43,900	19,500	2,190	15,800
21	7,050	2,920	1,880	28,100	11,400	7,800	26,400	4,100	27,500	45,400	2,300	8,600
22	6,700	2,800	1,980	33,600	11,900	9,400	32,300	4,400	21,600	55,600	6,700	6,700
23	6,350	2,680	1,880	25,800	19,500	9,000	32,900	3,050	19,500	51,200	10,600	6,000
24	6,000	2,420	1,880	18,100	15,800	10,600	26,400	9,100	16,700	43,200	10,600	5,650
25	6,000	2,300	1,780	15,800	12,300	13,600	16,200	28,700	13,200	31,000	10,200	5,650
26	7,050	2,080	1,780	13,200	9,800	33,600	12,700	27,500	11,900	15,300	7,050	5,300
27	7,800	2,080	4,700	11,400	9,000	34,800	12,700	22,600	10,600	12,700	10,200	4,700
28	8,600	2,080	6,350	11,000	7,400	25,200	8,200	23,100	8,600	11,000	9,000	3,800
29	7,400	2,080	7,800	12,300	-	14,900	7,800	24,700	5,300	10,200	9,400	3,800
30	6,700	2,080	9,800	37,400	-	12,300	7,400	29,300	5,000	9,400	9,000	3,050
31	5,650	-	14,400	91,400	-	9,800	-	28,700	-	8,600	8,200	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	928,600	116,000	5,650	29,950	1,842,000
November	336,070	74,900	2,080	11,200	666,600
December	98,900	14,400	1,780	3,190	196,200
Calendar year 1936	2,815,500	116,000	340	7,693	5,584,000
January	788,250	96,900	7,050	25,430	1,563,000
February	666,100	105,000	7,400	23,790	1,321,000
March	341,000	34,800	5,650	11,000	676,400
April	400,000	32,900	5,650	13,330	793,400
May	343,900	29,300	3,050	11,090	682,100
June	1,324,100	135,000	5,000	44,140	2,626,000
July	390,580	55,600	2,680	12,600	774,700
August	203,720	16,700	2,190	6,572	404,100
September	367,800	57,400	3,050	12,260	729,500
Water year 1936-37	6,189,020	135,000	1,780	16,960	12,280,000

Arkansas River at Van Buren, Ark.

Location.- Water-stage recorder, lat. 35°26', long. 94°22', in sec. 24, T. 9 N., R. 32 W., at Van Buren, 1½ miles below Lee Creek. Zero of gage is 372.36 feet above mean sea level (general adjustment of 1929).

Drainage area.- 150,300 square miles.

Records available.- October 1927 to September 1937.

Average discharge.- 10 years, 27,930 second-feet.

Extremes.- Maximum discharge observed during year, 154,000 second-feet Jan. 17 (gage height, 21.9 feet); minimum discharge, 2,680 second-feet Dec. 25; minimum gage height, 4.05 feet Aug. 19.

1927-37: Maximum discharge, 418,000 second-feet June 19, 1935; maximum gage height, 34.1 feet June 19, 1935, just before break in levee; minimum discharge, 216 second-feet Aug. 19, 21, 1934.

Maximum stage known, 35.0 feet Apr. 16, 1927.

Remarks.- Records good. Gage heights for Nov. 5-7, Dec. 15-18, Dec. 26 to Sept. 30 (when intake was covered with deposits of sand from gravel plant), computed from graph drawn through twice-daily readings by observer. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119,000	9,600	2,820	22,400	128,000	11,400	14,600	12,000	35,300	8,900	9,600	7,100
2	72,200	8,000	2,820	23,600	140,000	10,600	13,100	12,000	100,000	8,300	10,300	6,500
3	37,600	11,000	2,900	23,000	102,000	9,600	12,000	13,100	74,600	7,700	14,600	6,650
4	24,200	23,000	3,100	19,400	59,200	9,600	11,000	15,400	36,800	6,950	14,600	6,650
5	16,700	58,300	3,400	15,800	45,600	11,700	11,400	13,100	37,600	6,380	11,000	6,650
6	13,400	75,800	4,400	14,200	37,600	13,400	13,400	11,000	54,700	6,800	8,300	5,880
7	11,000	52,900	6,950	15,800	33,900	14,200	15,400	9,950	61,000	9,250	6,950	5,120
8	15,900	29,000	8,600	26,600	31,800	17,200	16,700	8,900	56,500	8,300	5,880	5,380
9	92,000	16,700	8,300	29,000	29,000	20,600	24,800	8,300	52,000	7,100	7,100	6,380
10	125,000	12,400	5,880	31,800	27,800	16,700	24,800	8,600	36,800	6,650	6,950	7,100
11	102,000	10,300	4,750	33,200	29,700	13,800	21,800	8,300	43,200	6,380	6,000	15,500
12	75,800	8,900	4,620	33,900	31,800	12,800	20,600	8,000	96,000	6,000	5,120	61,300
13	74,600	8,000	4,300	31,800	28,400	12,400	18,200	12,400	130,000	5,250	4,500	64,000
14	73,400	7,100	4,100	40,800	25,400	11,400	14,600	17,200	142,000	5,000	3,900	53,800
15	64,000	6,380	4,100	96,000	24,800	12,000	12,000	20,000	107,000	4,750	3,700	40,800
16	56,500	6,000	4,100	140,000	24,200	16,700	11,000	17,200	67,000	4,500	3,700	33,900
17	46,400	5,500	4,000	150,000	20,600	19,400	10,600	15,000	73,400	4,300	3,700	29,000
18	27,200	5,120	3,600	119,000	17,200	20,000	12,400	14,600	113,000	3,900	3,300	23,000
19	15,400	4,880	3,400	74,600	15,400	16,200	11,700	12,800	130,000	3,900	3,200	19,400
20	12,000	4,500	2,900	49,600	14,600	13,800	9,600	9,950	98,800	5,120	5,120	20,600
21	10,300	4,200	2,820	36,800	15,800	12,400	17,200	8,900	62,000	19,500	4,500	16,700
22	8,900	4,100	2,820	42,400	17,700	11,700	40,800	8,900	38,400	38,400	3,600	12,800
23	8,300	3,800	2,750	47,200	15,000	12,000	60,100	8,300	27,800	48,800	6,000	10,600
24	8,000	3,700	2,750	44,000	16,700	16,200	64,000	7,700	23,000	53,800	9,950	9,600
25	10,600	3,500	2,680	36,800	20,600	21,200	47,200	7,400	20,000	43,200	9,950	13,100
26	22,400	3,300	2,820	33,900	16,200	25,400	29,000	22,400	16,200	29,700	11,400	13,800
27	33,200	3,100	9,250	31,800	13,400	36,800	21,200	32,500	14,200	17,200	9,950	11,400
28	31,800	3,000	19,400	31,800	12,400	41,600	18,200	27,200	12,400	13,800	8,600	8,600
29	26,600	2,900	26,600	33,200	-	33,200	15,400	20,600	10,600	11,700	9,950	6,500
30	17,700	2,900	27,800	44,000	-	21,800	13,100	22,400	9,950	11,000	10,300	5,880
31	11,700	-	24,800	79,400	-	16,700	-	27,800	-	10,300	8,900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,263,800	125,000	8,000	40,770	2,507,000
November	397,880	75,800	2,900	13,260	789,200
December	213,530	27,800	2,680	6,888	423,500
Calendar year 1936	4,008,800	140,000	710	10,950	7,951,000
January	1,451,800	150,000	14,200	46,830	2,880,000
February	994,800	140,000	12,400	35,530	1,973,000
March	532,500	41,600	9,600	17,180	1,056,000
April	625,900	64,000	9,600	20,860	1,241,000
May	441,900	32,500	7,400	14,250	876,500
June	1,780,250	142,000	9,950	59,340	3,531,000
July	422,830	53,800	3,900	13,640	838,700
August	230,620	14,600	3,200	7,439	457,400
September	533,690	64,000	5,120	17,790	1,059,000
Water year 1936-37	8,889,500	150,000	2,680	24,350	17,630,000

Arkansas River at Little Rock, Ark.

Location.- Water-stage recorder, lat. 34°45', long. 92°16', in sec. 3, T. 1 N., R. 12 W., at Little Rock. Zero of gage is 223.61 feet above mean sea level (general adjustment of 1929).

Drainage area.- 157,900 square miles.

Records available.- September 1927 to September 1931, October 1933 to September 1937.

Extremes.- Maximum discharge during year, 170,000 second-feet Jan. 18 (gage height, 18.74 feet); minimum, 5,100 second-feet Aug. 21, 23 (gage height, -0.87 foot).
1927-31, 1933-37: Maximum discharge, 422,000 second-feet June 22, 23, 1935; minimum, 850 second-feet Aug. 23, 1934 (gage height, -4.16 feet).
Maximum stages known, 34.5 feet in June 1833 and 33.0 feet Apr. 20, 1927.

Remarks.- Records good. Discharge June 14-22 based on graph drawn through observer's once-daily readings. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	104,000	37,300	6,320	57,400	84,000	27,200	37,900	28,900	21,900	15,200	13,600	10,300
2	117,000	29,400	6,320	58,200	122,000	24,400	30,600	33,600	22,900	13,600	14,000	11,200
3	103,000	25,000	6,320	59,800	148,000	22,400	25,500	43,800	30,600	12,200	12,200	10,900
4	78,200	27,800	6,320	60,600	140,000	21,400	23,400	54,200	76,300	11,200	11,500	10,000
5	54,200	32,400	7,100	54,200	107,000	20,400	21,900	48,000	73,500	10,600	11,200	10,300
6	39,200	34,800	10,600	47,300	82,100	20,900	20,400	42,400	48,000	10,000	14,000	10,900
7	30,600	59,000	26,600	42,400	65,400	21,400	19,000	39,200	39,200	9,700	15,200	12,200
8	26,100	78,200	37,900	41,100	55,000	23,400	19,400	33,000	49,400	9,400	12,500	11,500
9	22,400	66,300	36,600	50,200	48,700	26,600	22,400	28,300	60,600	9,100	10,300	12,200
10	23,400	48,000	33,600	70,800	45,200	28,300	25,500	25,000	61,400	10,600	9,100	13,600
11	71,600	34,800	29,400	86,000	41,800	31,200	28,900	22,400	60,600	10,600	8,220	15,200
12	103,000	25,000	26,100	82,100	38,600	31,800	33,000	19,900	47,300	10,300	8,220	13,600
13	99,200	19,400	20,900	81,100	37,900	28,300	33,000	20,400	51,000	10,000	8,500	12,500
14	82,100	15,600	17,300	85,000	38,600	26,100	30,000	23,400	91,000	9,100	7,940	32,700
15	76,300	13,200	15,200	103,000	37,300	26,600	28,300	28,900	116,000	8,500	7,380	53,400
16	76,300	12,200	12,900	133,000	34,800	26,600	26,100	30,000	122,000	7,940	6,580	49,400
17	70,800	11,200	11,200	155,000	33,000	25,000	22,400	30,000	104,000	7,380	6,060	41,100
18	63,000	10,600	10,000	170,000	32,400	25,000	19,400	28,900	85,000	7,100	5,560	34,200
19	55,000	10,000	9,400	155,000	31,800	27,800	18,100	25,500	82,100	6,840	5,560	31,200
20	43,800	9,400	8,800	128,000	33,000	29,400	17,700	22,400	103,000	6,580	5,320	27,200
21	32,400	9,100	8,220	117,000	36,000	30,000	19,000	20,400	113,000	6,060	5,320	23,400
22	25,500	8,500	7,940	111,000	35,400	26,600	20,400	18,600	97,200	5,800	5,320	21,400
23	20,900	8,220	7,660	118,000	34,200	23,400	33,000	16,000	72,600	6,580	5,560	20,900
24	18,600	7,660	7,100	114,000	34,200	22,900	51,000	14,400	50,200	22,600	7,380	18,600
25	18,100	7,380	6,840	116,000	32,400	25,500	69,000	13,600	37,300	38,200	6,840	15,600
26	19,300	7,100	6,580	114,000	29,400	28,300	73,500	12,900	29,400	43,800	6,580	13,600
27	42,900	6,840	6,580	102,000	30,000	31,200	60,600	11,800	24,400	41,100	9,100	12,900
28	47,300	6,580	7,660	92,000	30,600	34,200	47,300	12,200	21,900	32,400	10,600	14,800
29	48,700	6,580	16,500	85,000	-	40,500	37,900	21,400	19,400	23,900	11,500	16,000
30	47,300	6,320	34,200	79,200	-	47,300	31,800	28,300	17,300	18,100	11,200	14,000
31	43,100	-	46,600	76,300	-	45,200	-	26,100	-	14,800	10,300	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,703,300	117,000	18,100	54,950	3,378,000
November	673,880	78,200	6,320	22,460	1,337,000
December	494,760	46,600	6,320	15,960	981,300
Calendar year 1936	5,312,170	117,000	1,290	14,510	10,540,000
January	2,844,700	170,000	41,100	91,760	5,642,000
February	1,518,800	148,000	29,400	54,240	3,012,000
March	869,300	47,300	20,400	28,040	1,724,000
April	946,400	73,500	17,700	31,550	1,877,000
May	823,900	54,200	11,800	26,580	1,634,000
June	1,828,500	122,000	17,300	60,950	3,627,000
July	449,280	43,800	5,800	14,490	891,100
August	282,640	15,200	5,320	9,117	560,000
September	594,800	53,400	10,000	19,830	1,180,000
Water year 1936-37	13,030,260	170,000	5,320	35,700	25,850,000

South Arkansas River near Salida, Colo.

Location.- Water-stage recorder, lat. 38°31', long. 106°00', in sec. 5, T. 49 N., R. 9 E., three-quarters of a mile above mouth and 1¼ miles southwest of Salida.

Drainage area.- 208 square miles.

Records available.- October 1933 to September 1937 in reports of U. S. Geological Survey; April 1922 to December 1924 (at site half a mile downstream) and June 1929 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 269 second-feet May 16 (gage height, 2.87 feet); no flow Aug. 12, Sept. 10.
1922-24, 1929-37: Maximum daily discharge, 1,220 second-feet June 17, 1923; no flow at times during 1922, 1931-33, 1935, 1937.

Remarks.- Records good except those for period of ice effect, Dec. 30 to Feb. 11, which were computed on basis of two discharge measurements and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	25	44	38	50	47	27	11	78	45	6.6	7.0
2	72	27	48	41	52	44	35	14	78	19	6.2	6.6
3	70	23	54	44	60	41	30	24	78	8.8	4.6	6.2
4	66	29	57	51	65	39	32	30	67	5.8	2.2	6.2
5	61	41	60	47	75	38	35	58	62	2.8	.7	5.0
6	60	38	62	40	73	39	35	62	55	.7	.6	4.2
7	57	38	55	35	74	39	30	64	48	.7	2.4	2.0
8	58	35	64	34	66	43	30	90	39	.7	1.6	1.8
9	48	36	62	35	68	41	28	110	38	.9	.8	1.8
10	51	34	66	38	70	39	31	141	29	.7	.2	0
11	51	34	58	41	69	36	36	139	17	.7	.1	.1
12	50	39	62	41	68	36	35	139	11	2.4	0	.3
13	48	38	61	45	48	32	35	178	8.8	.3	.3	.6
14	50	41	60	43	50	44	38	187	8.8	2.8	.4	.9
15	40	36	54	44	52	36	40	192	3.8	1.0	.7	1.4
16	38	35	54	45	47	29	41	227	2.6	.4	1.0	2.6
17	40	36	50	44	47	25	45	212	2.2	1.6	5.8	2.8
18	31	38	50	44	52	23	30	176	2.2	1.8	4.2	3.0
19	24	34	51	43	48	21	35	200	1.2	1.6	2.2	3.4
20	23	34	51	41	64	25	29	174	.8	.8	1.8	3.4
21	28	36	50	40	57	19	29	151	1.0	.5	2.8	3.0
22	27	34	51	38	50	15	35	139	1.2	.6	3.0	3.4
23	27	27	54	42	47	12	44	135	1.4	.6	3.0	3.4
24	24	22	44	43	47	25	34	116	1.2	2.2	2.6	2.6
25	26	19	47	46	44	25	23	103	.9	2.6	2.8	5.8
26	28	28	44	50	43	26	23	76	19	8.2	3.0	6.2
27	26	23	45	48	50	26	28	55	44	8.2	3.8	3.4
28	27	32	48	44	47	23	27	45	13	8.8	4.2	3.0
29	25	43	52	46	-	34	21	50	6.2	8.8	6.2	2.8
30	27	39	50	50	-	29	12	75	8.2	7.0	7.0	2.6
31	27	-	45	51	-	30	-	83	-	6.2	7.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,300	72	23	41.9	2,580
November	994	43	19	33.1	1,970
December	1,653	66	44	53.3	3,280
Calendar year 1936	22,210.0	339	.5	60.7	44,050
January	1,332	51	34	43.0	2,640
February	1,583	75	43	56.5	3,140
March	981	47	12	31.6	1,950
April	953	45	12	31.8	1,890
May	3,456	227	11	111	6,850
June	726.5	78	.8	24.2	1,440
July	152.2	45	.3	4.91	302
August	87.8	7.0	0	2.83	174
September	95.5	7.0	0	3.18	189
Water year 1936-37	13,314.0	227	0	36.5	26,400

Grape Creek near Westcliffe, Colo.

Location.- Water-stage recorder and concrete control, lat. 38°11', long. 105°30', in sec. 36, T. 21 S., R. 73 W., 3 miles northwest of Westcliffe.

Drainage area.- 346 square miles.

Records available.- December 1924 to June 1928 and October 1933 to September 1937 in reports of U. S. Geological Survey; December 1924 to June 1928 and March 1930 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 339 second-feet May 30 (gage height, 2.35 feet); minimum daily discharge recorded, 2.6 second-feet July 22, 23.
1924-28, 1930-37: Maximum discharge, about 1,400 second-feet July 22, 1930 (gage height, 4.60 feet), computed by weir formula, with overflow estimated; minimum daily discharge, 0.1 second-foot June 19-22, 1936.

Remarks.- Records good except those estimated for Nov. 10, 11, Apr. 1-7, which are fair. No records Nov. 13 to Mar. 31. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	47					52	46	111	38	12	22
2	71	48					54	44	97	46	9.0	16
3	47	42					50	43	119	50	8.0	12
4	38	46					49	44	103	31	6.5	14
5	32	57					52	45	87	22	5.5	12
6	43	49					54	54	69	17	5.5	10
7	65	42					50	69	54	14	5.5	10
8	57	38					54	72	41	13	5.0	18
9	42	32					91	74	36	11	4.7	9.0
10	36	31					76	82	31	9.5	3.8	8.5
11	31	30					101	85	27	9.5	3.5	8.0
12	28	30					111	81	23	8.0	4.1	7.0
13	26	-					143	77	23	6.5	9.0	6.5
14	47	-					158	91	24	6.0	7.5	6.0
15	45	-					199	102	24	4.7	6.0	6.0
16	36	-					177	114	19	4.4	5.0	6.0
17	33	-					125	127	18	4.1	4.7	7.0
18	29	-					86	142	18	3.8	4.7	7.0
19	27	-					81	148	18	3.2	5.0	7.0
20	29	-					72	152	18	2.9	5.5	6.0
21	31	-					64	132	20	2.9	5.5	5.5
22	33	-					66	110	26	2.6	4.7	5.0
23	39	-					67	100	21	2.6	4.4	5.0
24	46	-					83	106	17	2.9	3.8	5.5
25	38	-					73	103	18	3.8	4.4	6.0
26	37	-					59	97	33	4.4	14	6.0
27	52	-					56	76	98	10	26	6.0
28	64	-					56	62	71	18	17	5.5
29	51	-					53	80	43	20	16	6.0
30	45	-					49	264	35	21	17	7.5
31	47	-					-	138	-	18	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,318	73	26	42.5	2,610
November 1-12	492	57	30	41.0	976
December	-	-	-	-	-
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	2,461	199	49	82.0	4,880
May	2,960	264	43	95.5	5,870
June	1,342	119	17	44.7	2,660
July	410.8	50	2.6	13.3	815
August	253.3	26	3.5	8.17	502
September	256.0	22	5.0	8.53	508
Water year					

Huerfano River at Manzanares Crossing, near Redwing, Colo.

Location.- Water-stage recorder, lat. 37°44', long. 105°20', in sec. 5, T. 27 S., R. 71 W., at Manzanares Crossing, 3½ miles southwest of Redwing. Datum lowered 0.50 foot on Mar. 16, 1937.

Drainage area.- 76 square miles.

Records available.- October 1933 to September 1937 in reports of U. S. Geological Survey; July 1923 to September 1937 in reports of State engineer. No winter records prior to 1936.

Extremes.- Maximum discharge, 428 second-feet Aug. 17 (gage height, 1.90 feet) from rating curve extended above 140 second-feet; minimum daily discharge, 4 second-feet (estimated) Jan. 22.

1923-37: Maximum stage, 4.80 feet (present datum, July 27, 1934 (discharge not determined); minimum not determined.

Remarks.- Records good except those for period of ice effect, Dec. 2 to Mar. 15, which were computed on basis of four discharge measurements and weather records and are fair. Several diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	26	17	7	10	15	15	73	129	143	38	36
2	31	23	17	7	11	15	22	77	143	115	37	28
3	32	20	16	8	12	14	20	82	149	95	40	36
4	29	30	15	9	13	13	18	90	126	84	36	45
5	27	25	14	8	14	12	16	105	120	79	36	36
6	25	26	15	6	13	14	15	126	113	79	51	35
7	26	26	15	5	12	13	14	138	100	77	44	35
8	25	25	14	6	11	14	15	138	97	71	37	31
9	26	27	13	7	10	15	15	138	102	64	31	26
10	21	27	13	8	12	16	18	132	95	57	28	22
11	22	25	14	9	14	14	36	126	107	57	27	22
12	24	24	13	9	13	13	52	132	123	52	26	22
13	29	24	14	9	14	12	95	143	123	48	24	22
14	32	24	14	9	14	11	118	162	123	48	23	23
15	29	23	15	8	13	12	162	192	120	46	20	20
16	25	21	13	8	13	14	140	192	126	42	19	18
17	23	21	12	8	12	13	79	199	132	42	45	19
18	25	23	12	7	11	13	61	199	129	41	28	19
19	28	21	11	7	10	8.6	62	188	120	38	25	18
20	30	20	9	6	10	15	79	178	118	38	26	16
21	33	21	9	5	11	16	88	172	115	40	24	16
22	31	19	10	4	12	17	93	165	113	41	23	18
23	30	17	9	5	12	13	75	165	113	40	20	18
24	32	21	9	7	13	14	62	159	113	38	20	17
25	31	24	9	9	13	11	59	146	120	41	22	18
26	30	22	8	11	13	12	68	129	149	44	23	17
27	31	22	10	12	14	13	75	126	135	42	27	15
28	31	23	9	10	15	14	68	126	105	52	26	16
29	27	22	9	10	-	15	62	159	100	46	23	19
30	30	20	8	11	-	14	66	168	152	44	24	20
31	29	-	8	11	-	12	-	138	-	40	42	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	872	33	21	28.1	1,730
November	692	30	17	23.1	1,370
December	374	17	8	12.1	742
Calendar year					
January	246	12	4	7.9	488
February	345	15	10	12.3	684
March	417.6	17	8.6	13.5	828
April	1,768	162	14	58.9	3,510
May	4,463	199	73	144	8,850
June	3,610	152	95	120	7,160
July	1,784	143	38	57.5	3,540
August	915	51	19	29.5	1,810
September	703	45	15	23.4	1,390
Water year 1936-37	16,189.6	199	4	44.4	32,100

Cucharas River at Boyd ranch, near La Veta, Colo.

Location.- Water-stage recorder, lat. 37°25', long. 105°03', in sec. 24, T. 30 S., R. 69 W., 6 miles south of La Veta.

Drainage area.- 75 square miles.

Records available.- October 1934 to September 1937.

Extremes.- Revised maximum discharge during water year 1935-36, 275 second-feet May 16 (gage height, 2.40 feet).
Maximum discharge during year, 291 second-feet June 3 (gage height, 2.43 feet); minimum daily discharge, 6 second-feet Jan. 7, 8.
1935-37: Maximum discharge, that of June 3, 1937; minimum daily discharge, 2 second-feet on several days during March 1934 to January 1935.

Remarks.- Revised records for water year 1935-36 good, except those estimated for Dec. 19-31 and Mar. 1-5, which are fair. No records for Jan. 1 to Feb. 29, 1936. Records for water year 1936-37 good except those for period of ice effect, Dec. 1 to Mar. 14 which were computed on basis of five discharge measurements and weather records and are fair. Diversions for irrigation above station.

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	9.8	7.8			7.0	8.6	17	52	23	18	14
2	14	10	8.0			7.0	9.5	17	46	22	19	15
3	12	9.8	8.0	*10		7.0	7.3	17	43	23	20	14
4	12	8.9	9.2			7.0	6.2	16	40	22	28	14
5	13	9.5	7.1			7.5	6.2	16	37	21	47	14
6	12	9.8	7.1			7.8	6.7	16	37	19	37	14
7	11	9.5	8.9			8.0	6.0	17	37	18	34	12
8	12	9.2	9.2			7.8	6.0	27	37	18	30	12
9	12	9.5	8.9			7.6	6.0	50	37	18	26	12
10	12	9.2	8.0			7.6	5.4	24	44	18	24	12
11	10	8.3	8.3			8.0	8.3	20	53	18	23	13
12	10	8.3	9.2			8.0	8.0	24	43	18	22	14
13	10	8.6	9.2			7.6	9.2	35	35	14	21	11
14	10	8.3	11			7.3	9.2	60	29	14	19	9.5
15	10	8.3	8.9			7.1	10	138	29	14	18	9.8
16	10	8.9	9.2			7.1	9.8	243	28	12	16	10
17	10	7.8	8.6			6.9	9.2	253	27	13	14	10
18	11	7.8	8.6			7.3	9.5	214	26	12	14	10
19	11	8.6	8.6			7.3	10	168	26	12	16	11
20	11	9.2	8.6			7.1	11	153	26	11	15	10
21	10	8.3	8.6			7.3	14	138	25	11	16	9.5
22	11	8.3	8.6			7.1	14	122	25	12	16	9.8
23	11	8.3	8.6			7.1	15	108	26	12	15	10
24	12	8.6	8.6			7.8	17	104	28	10	14	9.5
25	11	8.3	8.6			8.6	18	93	27	9.8	13	8.9
26	12	8.3	9.0			10	19	86	26	9.8	13	10
27	11	9.2	9.0			11	18	84	26	12	14	14
28	11	9.2	9.0			8.6	17	76	25	16	19	16
29	11	8.3	9.0			8.3	17	70	23	16	20	17
30	11	8.3	9.0			7.8	17	68	23	18	19	17
31	9.5	-	9.0			8.0	-	58	-	17	14	-

*Discharge measurement.

Discharge, in second-feet, of Cucharas River at Boyd ranch, near La Veta, Colo., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	17	11	10	9	11	21	51	155	59	18	9.8
2	17	15	10	9	10	11	20	52	172	56	18	8.6
3	17	18	11	9	9	9	19	59	272	53	18	10
4	16	19	11	9	10	10	23	53	267	47	16	13
5	14	16	11	10	10	11	20	59	232	44	16	11
6	18	15	11	8	10	11	15	75	184	40	16	9.4
7	17	16	12	6	10	10	13	91	155	38	15	11
8	16	14	11	6	9	10	17	128	130	34	15	9.4
9	18	11	10	7	9	12	15	157	119	32	14	7.8
10	17	12	9	8	10	11	21	172	108	32	13	7.8
11	16	12	10	8	10	11	53	184	101	37	13	8.6
12	15	11	10	9	10	10	62	170	94	34	13	7.8
13	15	11	9	9	10	9	71	177	90	31	15	6.7
14	16	12	10	9	10	8	85	184	88	30	13	7.0
15	15	12	13	8	10	8.6	112	206	84	29	12	7.0
16	14	12	12	9	11	8.6	138	211	80	27	11	6.1
17	15	14	11	8	11	9.8	119	216	77	26	12	6.7
18	14	13	10	7	11	12	69	206	80	24	13	7.4
19	14	15	11	8	10	9.4	73	204	77	23	11	7.0
20	16	14	12	9	9	12	71	201	75	22	11	11
21	17	14	11	8	9	9.8	69	179	74	21	11	7.0
22	17	14	11	8	8	11	66	166	71	20	10	7.8
23	16	12	11	8	8	13	64	159	68	20	9.4	8.2
24	17	14	12	8	8	15	54	153	67	19	8.6	7.4
25	18	16	12	8	9	17	46	140	72	18	11	8.6
26	18	14	12	10	10	18	52	123	86	17	11	8.6
27	18	14	10	10	10	20	65	114	76	16	12	7.4
28	18	14	11	10	11	14	71	110	68	24	12	7.4
29	17	14	11	10	-	9.8	80	119	65	23	10	8.2
30	18	11	10	10	-	11	54	136	63	21	11	11
31	18	-	10	9	-	12	-	146	-	19	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1935	347.5	14	9.5	11.2	689
November	264.4	10	7.8	8.81	524
December	269.4	11	7.1	8.69	534
Calendar year					
January 1936	-	-	-	-	-
February	-	-	-	-	-
March	239.6	11	6.9	7.73	475
April	328.1	19	5.4	10.9	651
May	2,532	253	16	81.7	5,020
June	986	53	23	32.9	1,960
July	483.6	23	9.8	15.6	959
August	634	47	13	20.5	1,260
September	363.0	17	8.9	12.1	720
Water year					
October 1936	510	18	14	16.5	1,010
November	416	19	11	13.9	825
December	336	13	9	10.8	666
Calendar year					
January 1937	265	10	6	8.5	526
February	271	11	8	9.7	538
March	355.0	20	8	11.5	704
April	1,638	138	13	54.6	3,250
May	4,401	216	51	142	8,730
June	3,350	272	63	112	6,640
July	938	59	17	30.3	1,860
August	400.0	18	8.6	12.9	793
September	254.7	13	6.1	8.49	505
Water year 1936-37	13,134.7	272	6	36.0	26,050

Note.- Above records for water year 1935-36 supersede those published in Water-Supply Paper 807.

Purgatoire River at Trinidad, Colo.

Location.- Water-stage recorder, lat. 37°10', long. 104°30', in sec. 13, T. 33 S., R. 64 W., at foot of State Street in Trinidad.

Drainage area.- 742 square miles.

Records available.- May 1896 to July 1899, August to December 1905, November 1906 to March 1907, October 1907 to November 1912, and October 1933 to September 1937 in reports of Geological Survey; May 1896 to July 1899, August to December 1905, November 1906 to March 1907, October 1907 to November 1912, and April 1916 to September 1937 in reports of State engineer.

Average discharge.- 25 years (1907-12, 1916-18, 1919-37), 87.3 second-feet.

Extremes.- Maximum discharge during year, 15,000 second-feet Aug. 30 (gage height, 9.48 feet), by slope-area method; minimum daily discharge, 4 second-feet Dec. 10, 12, Jan. 9, 10.

1896-99, 1905, 1906-12, 1916-37: Maximum discharge, 45,400 second-feet Sept. 30, 1904 (gage height, 16.6 feet, from Commercial Street gage); minimum daily discharge, 1.2 second-feet Jan. 1, 1936.

Remarks.- Records good except those for periods of ice effect, Dec. 2-15, 19-25, Dec. 27 to Feb. 5, Feb. 10-12, 17, 26-27, (computed on basis of three discharge measurements and weather records), and those for Sept. 11-30, which are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	37	22	15	25	11	22	78	355	262	92	60
2	46	37	20	10	25	18	36	71	344	327	76	48
3	42	37	15	8	28	18	46	92	490	238	67	37
4	42	24	10	10	30	18	55	100	377	199	80	55
5	49	44	8	14	30	24	41	92	355	177	110	102
6	60	39	5	10	32	27	39	105	333	164	62	83
7	58	37	5	8	51	29	41	127	290	154	55	381
8	53	36	5	5	29	22	41	170	271	151	155	202
9	49	29	5	4	10	30	42	215	266	132	95	44
10	49	26	4	4	8	24	41	234	238	196	85	69
11	53	27	5	5	10	21	55	262	229	144	110	98
12	51	29	4	8	15	22	102	266	234	130	368	92
13	42	24	6	12	48	27	105	290	220	110	113	90
14	41	32	20	8	44	30	124	311	439	98	152	78
15	46	27	25	10	46	26	154	338	243	85	69	53
16	51	27	29	15	26	26	188	355	202	74	136	53
17	51	27	10	13	20	27	181	366	202	64	108	58
18	51	32	18	15	21	29	121	388	206	76	69	58
19	46	30	25	18	34	26	118	377	215	85	64	51
20	41	26	20	30	20	21	127	388	211	105	62	22
21	48	27	25	20	26	22	116	372	206	76	200	20
22	51	26	33	13	29	24	130	333	211	58	71	32
23	49	27	35	14	26	26	157	333	202	53	51	44
24	44	15	30	16	26	15	127	322	202	51	37	22
25	39	14	20	20	34	20	108	300	316	58	46	16
26	46	24	22	25	25	24	88	271	541	55	98	20
27	48	29	20	30	15	29	98	243	594	57	64	20
28	51	27	20	25	18	39	118	234	350	174	58	22
29	44	29	15	27	-	36	108	234	290	169	76	18
30	37	26	15	30	-	22	92	266	276	121	1,180	30
31	36	-	15	35	-	24	-	355	-	110	132	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,469	60	36	47.4	2,910
November	871	44	14	29.0	1,730
December	511	35	4	16.5	1,010
Calendar year 1936	17,570.3	542	1.2	48.0	34,840
January	477	35	4	15.4	946
February	751	51	8	26.8	1,490
March	757	39	11	24.4	1,500
April	2,821	188	22	94.0	5,600
May	7,888	388	71	254	15,650
June	8,908	594	202	297	17,670
July	3,953	327	51	128	7,840
August	4,143	1,180	37	134	8,220
September	1,978	381	16	65.9	3,920
Water year 1936-37	34,527	1,180	4	94.8	68,490

Purgatoire River at Ninemile Dam, near Higbee, Colo.

Location.- Water-stage recorder above diversion dam of Ninemile Ditch, lat. 37°45', long. 103°28', in sec. 32, T. 26 S., R. 54 W., 4 miles southwest of Higbee. Smith Canyon enters 4 miles below station.

Drainage area.- 2,900 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; October 1924 to September 1937 in reports of State engineer.

Average discharge.- 13 years, 98.2 second-feet.

Extremes.- Maximum discharge during year, 10,000 second-feet July 18 (gage height, 8.00 feet), from rating curve extended above 4,400 second-feet; no flow July 31 to Aug. 2, Aug. 7-12.
1924-37: Maximum discharge, 64,500 second-feet Sept. 15, 1934 (gage height, 12.60 feet), by slope-area method; no flow at times during nearly every year.

Remarks.- Records good except those for periods of ice effect, Dec. 2 to Feb. 12, Feb. 26, 27, Mar. 14-16, which were computed on basis of three discharge measurements and weather records and are fair. Discharge for June 18, 19, 24, 25, July 10-17, July 24 to Aug. 12, Aug. 15-20, 22-25, 28, 29, Sept. 17-30 measured through a Parshall flume. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	19	12	10	5	11	9.2	14	2,100	324	0	540
2	44	18	12	8	6	10	6.0	13	429	124	0	218
3	32	15	11	10	8	12	3.0	10	906	110	11	156
4	20	13	11	11	9	18	8.6	9.2	812	93	5.5	634
5	12	15	10	12	10	17	9.2	7.5	343	70	4.2	3,170
6	15	13	10	11	11	16	9.8	8.0	172	38	1.0	1,290
7	38	14	10	8	11	15	12	16	160	27	0	1,210
8	79	17	11	5	12	14	14	14	349	24	0	522
9	46	16	11	3	11	13	14	9.8	349	21	0	429
10	32	16	12	3	14	12	15	7.0	522	15	0	191
11	24	15	12	4	16	10	16	44	211	10	0	114
12	20	14	12	4	17	9.6	18	70	1,230	9.4	0	99
13	19	13	12	4	18	12	14	47	408	7.0	395	69
14	20	12	12	4	24	18	9.8	43	140	5.5	225	50
15	20	12	12	4	22	18	20	47	97	3.2	36	38
16	18	12	11	4	25	20	13	88	318	1.8	22	32
17	15	12	9	4	20	20	11	268	121	.5	26	21
18	13	12	6	3	17	18	3.0	191	55	822	15	17
19	12	11	7	3	16	20	3.5	112	43	459	14	15
20	9.8	11	6	3	15	24	3.0	99	482	204	14	12
21	9.8	12	6	3	13	18	.9	146	163	188	119	9.2
22	18	14	8	3	13	14	.6	89	72	136	21	8.0
23	17	14	10	4	12	11	2.4	104	46	121	6.8	7.2
24	17	11	10	5	12	12	5.5	121	33	18	6.1	6.1
25	23	9.8	11	5	9.8	13	5.5	84	26	10	10	5.9
26	26	9.8	11	6	10	13	4.0	119	50	6.4	267	6.6
27	23	9.8	12	7	11	15	5.0	131	461	21	158	6.6
28	20	9.2	15	7	12	13	12	153	531	12	33	6.4
29	19	10	12	8	-	13	11	75	156	8.1	16	5.5
30	18	11	12	7	-	14	10	54	121	3.7	876	4.9
31	19	-	11	6	-	9.8	-	355	-	0	1,640	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	750.6	79	9.8	24.2	1,490
November	390.6	19	9.2	13.0	775
December	327	15	6	10.5	649
Calendar year 1936	29,775.8	3,290	0	81.4	59,050
January	179	12	3	5.8	355
February	379.8	25	5	13.6	753
March	453.4	24	9.6	14.6	899
April	269.0	20	.6	8.97	534
May	2,548.5	355	7.0	82.2	5,050
June	10,906	2,100	26	364	21,630
July	2,892.6	822	0	93.3	5,740
August	3,921.6	1,640	0	126	7,780
September	8,893.4	3,170	4.9	296	17,640
Water year 1936-37	31,911.5	3,170	0	87.4	63,300

Purgatoire River at Highland Dam, near Las Animas, Colo.

Location.- Water-stage recorder above diversion dam of Highland Ditch, lat. 37°55', long. 103°18', in sec. 1, T. 25 S., R. 53 W., 11 miles southwest of Las Animas.

Drainage area.- 3,320 square miles.

Records available.- October 1933 to September 1937 in reports of Geological Survey; October 1931 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 10,600 second-feet Sept. 6 (gage height, 7.00 feet); no flow on several days.
1931-37: Maximum discharge, 33,000 second-feet Sept. 15, 1934 (gage height, 14.00 feet, from floodmarks), by slope-area method; no flow at times during 1932-37.

Remarks.- Records good except those for period of ice effect, Dec. 28 to Feb. 10, which were computed on basis of two discharge measurements and weather records, and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	16	8.2	6	5	5	6	2.5	2,370	485	3.0	895
2	39	14	9.7	5	6	8	5	2.0	796	259	1.5	259
3	39	13	11	3	7	5	5	.2	274	188	.5	209
4	26	14	11	4	9	5	4	0	1,370	181	.5	342
5	19	17	12	5	12	5.4	5	0	415	164	0	1,680
6	18	15	12	4	13	28	6	0	160	110	0	3,760
7	22	15	15	3	14	41	10	0	103	27	0	1,400
8	36	13	7.0	1	10	35	12	0	311	14	0	2,410
9	68	16	8.2	1	10	20	11	0	382	15	0	761
10	59	16	8.8	2	12	6	10	0	738	13	0	266
11	29	15	11	1	19	6	10	0	334	13	0	118
12	22	15	8.5	1	32	7	6.5	13	828	12	0	123
13	20	13	9.7	1	20	7	7.9	26	658	7	54	70
14	19	13	9.7	1	9.7	10	10	22	155	2	1,000	56
15	20	12	7.9	1	2	12	9.7	18	88	2	554	47
16	18	12	8.8	1	0	16	8.8	13	169	0	28	38
17	18	12	5.4	1	3	14	12	52	126	0	19	36
18	16	12	4.1	1	5	12	10	118	68	0	21	24
19	14	12	6.7	.5	5	12	7.9	52	58	1,520	14	21
20	10	12	8.8	.5	5	13	6.5	40	121	126	8.7	17
21	9.7	10	5.9	.5	5	12	5.4	35	131	118	856	13
22	12	9.4	8.5	1	6	11	4	44	58	70	29	11
23	14	10	14	1	6	13	0	24	22	62	19	9.4
24	16	12	19	2	6	12	0	36	24	32	8.3	7.4
25	18	12	20	2	4	9.7	3	42	31	21	3.5	6.4
26	23	11	16	1	4	6.5	3	33	24	352	177	5.9
27	23	7.6	15	2	4	8.2	0	28	44	303	334	4.1
28	22	7.0	15	3	5	8	0	116	738	59	195	2.6
29	20	7.3	8.0	5	-	6	0	103	382	27	58	2.0
30	18	7.3	8.0	5	-	5	0	27	223	14	761	1.4
31	17	-	8.0	6	-	6	-	142	-	7	1,000	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	732.7	68	9.7	23.6	1,450
November	370.6	17	7.0	12.4	735
December	320.9	20	4.1	10.4	636
Calendar year 1936	33,657.8	5,240	0	92.0	66,760
January	71.5	6	.5	2.31	142
February	238.7	32	0	8.52	473
March	364.8	41	5	11.8	724
April	178.7	12	0	5.96	354
May	988.7	142	0	31.9	1,960
June	11,201	2,370	22	373	22,220
July	4,203	1,520	0	136	8,340
August	5,145.0	1,000	0	166	10,200
September	12,595.2	3,760	1.4	420	24,980
Water year 1936-37	36,410.8	3,760	0	99.8	72,210

Holly Drain near Holly, Colo.

Location.- Water-stage recorder, lat. 38°03', long. 102°03', in sec. 16, T. 23 S., R. 41 W., 100 yards west of Colorado-Kansas State line. Cheyenne Creek enters just above station.

Records available.- January 1924 to September 1927 and October 1933 to September 1937 in reports of U. S. Geological Survey; January 1924 to September 1937 in reports of State engineer.

Extremes.- Maximum discharge during year, 158 second-feet Sept. 4 (gage height, 6.10 feet); minimum daily discharge, 1.0 second-feet Aug. 13, 15, 16.
1924-37: Maximum discharge, 1,420 second-feet Aug. 28, 1935 (gage height, 10.43 feet); minimum, that of Aug. 15, 16, 1937.

Remarks.- Records good except those for periods of ice effect, Jan. 3, Jan. 13 to Feb. 4, Feb. 9-12, which were computed on basis of one discharge measurement and weather records and are fair. After Aug. 28, 1935, because of channel changes due to cloudbursts, records include flow of Wild Horse Creek but not flow of that part of Holly Drain west of Wild Horse Creek.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	18	34	4.3	5.0	3.3	3.5	8.8	1.8	4.1	1.4	2.5
2	32	53	28	5.1	5.0	3.5	3.5	6.6	12	4.2	1.2	2.7
3	32	22	25	5.0	5.0	4.3	3.2	8.7	11	3.4	1.2	2.9
4	34	27	30	6.9	6.0	22	3.0	7.4	39	2.7	1.5	31
5	34	35	19	7.2	7.0	11	3.0	5.0	50	2.3	2.1	12
6	31	20	14	10	8.0	14	3.1	3.6	50	1.8	2.0	24
7	30	18	19	13	8.2	4.5	3.0	3.5	36	1.8	1.4	35
8	32	13	11	8.8	6.4	3.5	2.9	3.5	62	2.4	1.2	14
9	40	9.1	8.4	4.8	6.0	3.5	3.0	2.6	56	3.1	1.3	14
10	37	14	7.2	4.8	6.0	3.6	3.2	3.3	24	2.4	1.1	18
11	44	34	7.2	4.6	6.0	3.4	20	4.5	15	5.1	1.1	25
12	50	33	7.2	4.6	6.0	3.4	18	2.2	23	1.5	1.2	25
13	46	32	6.0	4.6	6.0	3.6	7.0	3.5	22	1.4	1.0	29
14	32	34	6.3	4.6	5.6	4.7	4.5	3.9	26	1.4	1.7	31
15	24	32	7.5	4.6	5.2	3.1	4.8	6.4	62	2.0	1.0	23
16	28	31	7.2	4.6	5.4	3.7	8.4	3.6	55	1.2	1.0	17
17	30	29	7.2	4.6	6.9	3.7	5.9	2.9	28	1.5	1.6	41
18	29	29	7.2	4.6	8.8	3.7	8.2	4.6	12	1.8	1.7	34
19	27	32	12	4.6	6.4	3.5	10	5.4	6.8	2.2	1.6	26
20	24	38	17	4.6	2.2	3.5	9.4	4.3	5.4	2.2	1.4	16
21	18	36	8.1	4.6	4.3	3.4	9.4	3.5	3.6	1.8	1.2	11
22	30	32	9.4	4.6	7.2	3.6	11	4.3	3.2	2.0	1.2	6.6
23	31	28	9.7	4.6	4.6	4.0	14	5.7	3.3	2.0	1.2	5.1
24	18	62	7.8	4.6	3.7	4.1	14	5.7	3.2	2.0	1.2	4.2
25	21	82	5.7	4.6	2.8	6.2	8.8	3.6	4.8	1.4	1.2	5.2
26	22	66	10	4.6	2.0	4.1	6.2	3.1	2.8	2.2	7.5	8.2
27	20	52	16	4.6	2.1	4.0	5.7	4.2	2.7	1.8	1.5	12
28	14	39	7.8	4.6	2.5	3.6	12	2.4	2.7	1.9	1.4	9.6
29	20	39	6.3	4.6	-	3.4	6.2	2.5	2.5	1.7	1.2	8.7
30	24	40	4.8	4.6	-	3.5	6.4	2.4	2.6	1.4	1.2	16
31	12	-	3.9	4.6	-	3.7	-	1.4	-	1.4	1.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	898	50	12	29.0	1,780
November	1,029.1	82	9.1	34.3	2,040
December	369.9	34	3.9	11.9	734
Calendar year 1936	5,894.5	270	1.4	16.1	11,690
January	166.5	13	4.3	5.37	330
February	150.3	8.8	2.0	5.77	298
March	153.1	28	3.1	4.94	304
April	221.3	50	2.9	7.38	439
May	133.1	8.8	1.4	4.29	264
June	628.4	62	1.8	20.9	1,250
July	68.1	5.1	1.2	2.20	135
August	47.7	7.4	1.0	1.54	95
September	509.7	41	2.5	17.0	1,010
Water year 1936-37	4,375.2	82	1.0	12.0	8,680

Amazon Canal near Hartland, Kans.

Location.- Water-stage recorder, lat. 37°53', long. 101°22', in SE¼ sec. 9, T. 25 S., R. 37 W., half a mile west of Hartland and 2½ miles below diversion from Arkansas River.

Records available.- Irrigation seasons 1921-24, October 1930 to September 1937 in reports of Geological Survey; March 1925 to September 1930 in reports of Division of Water Resources of State Board of Agriculture.

Extremes.- Maximum discharge during year, 380 second-feet May 31 (gage height, 8.83 feet), from rating curve extended above 250 second-feet; no flow during long periods. 1921-24, 1930-37: Maximum discharge, 490 second-feet Aug. 28, 1933 (gage height, 8.80 feet); no flow during long periods.

Remarks.- Records fair except those for period of ice effect, Jan. 2 to Feb. 18, which were computed on basis of three discharge measurements, gage-heights, and engineer's notes and are poor. Canal diverts water from left bank of Arkansas River in sec. 12, T. 25 S., R. 38 W. Water used for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		21	87	77		0	66	0	33	0	0	0
2		58	83	9		0	61	0	0	6	0	0
3		35	74			0	47	0	40	2	0	0
4		79	79			0	36	0	204	0	0	0
5		97	83	20	30	0	36	0	204	0	0	0
6		91	83			0	34	0	188	0	0	0
7		87	83			0	42	0	95	0	0	84
8		83	96			0	35	0	8	0	0	290
9		84	123			0	34	0	0	0	0	290
10		76	135			0	32	0	168	0	0	290
11		73	139	10		0	27	0	184	0	0	255
12		73	139			0	26	0	180	0	0	230
13		58	135			0	25	0	176	0	0	131
14		66	135			0	24	0	159	0	0	6
15		64	135		40	0	22	0	115	0	0	0
16		63	135	13		0	19	0	108	0	0	0
17		62	127			0	18	0	127	0	29	0
18		62	108			0	18	0	172	0	2	0
19		58	98		78	0	15	0	127	23	0	0
20		55	98		43	0	17	0	22	0	0	0
21		55	104		58	0	7	0	0	0	0	0
22		56	98		27	0	0	0	0	0	0	0
23		26	99	20	21	0	0	0	0	0	0	0
24		43	100		46	0	0	0	0	0	0	0
25		58	108		0	0	0	0	0	0	0	0
26		79	112		0	0	0	0	0	0	0	0
27		82	108		0	0	0	0	0	0	0	0
28		77	104		0	0	0	0	0	0	0	0
29		76	100		-	0	0	40	0	0	0	0
30		75	94	31	-	0	0	0	0	0	0	0
31		-	89	23	-	37	-	32	-	0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	1,982	97	21	66.1	3,930
December	3,291	139	74	106	6,530
Calendar year 1936	24,660	295	0	67.4	48,920
January	593	77	-	19.1	1,180
February	893	78	0	31.9	1,770
March	37	37	0	1.2	73
April	641	66	0	21.4	1,270
May	72	40	0	2.3	143
June	2,310	204	0	77.0	4,580
July	31	23	0	1.0	61
August	31	29	0	1.0	61
September	1,576	290	0	52.5	3,130
Water year 1936-37	11,457	290	0	31.4	22,730

South Side Ditch near Hartland, Kans.

Location.- Water-stage recorder, lat. 37°52', long. 101°22', in SE¼ sec. 15, T. 25 S., R. 37 W., three-quarters of a mile south of Hartland and 1½ miles below diversion from Arkansas River.

Records available.- 1921-24 (irrigation seasons only) and October 1930 to September 1937 in reports of Geological Survey; October 1924 to September 1930 in reports of Division of Water Resources of State Board of Agriculture.

Extremes.- Maximum discharge during year, 294 second-feet Sept. 9 (gage height, 8.40 feet); no flow during long periods.
1921-24, 1930-37: Maximum discharge, 306 second-feet Sept. 16, 1934 (gage height, 8.15 feet); no flow during long periods.

Remarks.- Records good except those for October 26 to November 3, September 7-12, which were computed by shifting-control method, using shifts that were not well defined, and are fair. Ditch diverts water from Arkansas River, right bank, in sec. 16, T. 25 S., R. 37 W. Water used for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	50							0	109	0	0
2	26	1							44	78	0	0
3	31	1							117	52	0	0
4	28	0							102	31	0	0
5	26	0							39	21	0	0
6	8	0							86	15	0	0
7	25	0							46	10	0	136
8	46	0							53	7	0	189
9	45	0							25	3	0	234
10	37	0							48	1	0	204
11	35	0							69	3	0	144
12	41	0							82	37	0	46
13	43	0							90	34	0	0
14	44	0							30	20	0	0
15	43	0							74	11	0	0
16	40	0							40	7	0	0
17	36	0							16	5	4	0
18	32	0							13	3	0	0
19	32	0							12	2	0	0
20	32	0							95	0	0	0
21	31	0							111	0	0	0
22	34	0							90	39	0	0
23	39	0							67	12	0	0
24	44	0							53	2	0	0
25	53	0							44	0	0	0
26	60	0							34	0	30	0
27	69	0							30	0	2	0
28	76	0							26	0	0	0
29	83	0							28	0	0	0
30	81	0							157	0	0	0
31	79	0							-	0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,325	83	8	42.7	2,630
November	52	50	0	1.7	103
December	0	0	0	0	0
Calendar year 1936	3,307	141	0	9.0	6,560
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	1,721	157	0	57.4	3,410
July	502	109	0	16.2	996
August	36	30	0	1.2	71
September	953	234	0	31.8	1,890
Water year 1936-37	4,589	234	0	12.6	9,100

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Great Eastern Canal at Lakin, Kans.

Location.- Water-stage recorder, lat. 37°56', long. 101°16', in NE¼ sec. 28, T. 24 S., R. 36 W., 20 feet upstream from highway bridge, half a mile west of Lakin and 6 miles northeast of Hartland.

Records available.- 1921-24 (irrigation season only) and October 1930 to September 1937 in reports of Geological Survey; November 1924 to September 1930 in reports of Division of Water Resources of State Board of Agriculture.

Extremes.- Maximum discharge during year (estimated), 1,100 second-feet June 2 (gage height, 9.88 feet affected by backwater from highway bridge); no flow during long periods.

1921-24, 1930-36: Maximum gage height 10.50 feet, May 28, 1936, affected by backwater from highway bridge, (discharge not determined); no flow during long periods.

Remarks.- Records fair except those for June, which are poor, because partially clogged intakes at times prevented correct recording of gage heights. Canal diverts water from Arkansas River, left bank, in sec. 16, T. 25 S., R. 37 W. Water used directly for irrigation or stored in Lake McKinney.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						0		0	469			0
2						0		0	835			0
3						0		0	749			179
4						0		0	526			65
5						0		0	281			0
6						0		0	230			94
7						0		0	281			428
8						0		0	370			879
9						0		0	281			686
10						0		0	451			749
11						0		0	546			488
12						0		0	370			188
13						0		0	321			89
14						12		0	251			65
15						171		0	202			0
16						182		0	195			0
17						95		0	182			0
18						7		0	104			0
19						0		0	16			0
20						0		0	0			0
21						0		0	0			0
22						0		0	0			0
23						0		0	0			0
24						0		0	0			0
25						0		0	0			0
26						0		0	0			0
27						0		0	0			0
28						0		0	0			0
29						20		0	0			0
30						64		15	0			0
31						0		0	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1936	11,677	667	0	31.9	23,160
January	0	0	0	0	0
February	0	0	0	0	0
March	551	182	0	17.8	1,090
April	0	0	0	0	0
May	15	15	0	.5	30
June	6,660	835	0	222	13,210
July	0	0	0	0	0
August	0	0	0	0	0
September	3,910	879	0	130	7,760
Water year 1936-37	11,136	879	0	30.5	22,090

Farmers Ditch near Garden City, Kans.

Location.- Water-stage recorder, lat. 38°00', long. 101°04', in NW¼ sec. 4, T. 24 S., R. 34 W., 4 miles below head gate, 4 miles northwest of Holcomb, and 10 miles west of Garden City.

Records available.- 1921-24 (irrigation seasons only) and October 1930 to September 1937 in reports of Geological Survey; March 1925 to September 1930 in reports of Division of Water Resources of State Board of Agriculture.

Extremes.- Maximum discharge during year, 291 second-feet Sept. 8 (gage height, 8.45 feet); no flow during long periods.
1921-24, 1930-37: Maximum discharge, 317 second-feet Aug. 5, 1933 (gage height, 7.97 feet); no flow during long periods.

Remarks.- Records good except those for Oct. 1 to Mar. 16, July 20-24, Sept. 1-30, which are fair. Ditch diverts water from Arkansas River, left bank, in sec. 12, T. 24 S., R. 35 W. Water used for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	6	0		0	10	40	0	46	12		0
2	0	3	0		0	89	19	0	110	8		0
3	0	3	1		0	122	14	0	174	13		0
4	0	2	1		0	130	13	0	201	5		0
5	0	2	0		0	134	12	0	118	3		0
6	2	2	0		0	138	12	0	58	2		0
7	0	2	0		1	122	12	0	51	1		33
8	0	2	0		2	101	13	0	37	1		228
9	0	2	0		0	88	11	0	18	1		219
10	0	1	0		0	79	10	0	0	1		228
11	0	1	0		0	74	8	0	0	1		219
12	0	1	0		0	66	8	0	0	0		134
13	0	1	0		0	21	8	0	19	0		170
14	0	1	0		0	2	7	0	48	3		170
15	0	1	0		0	1	6	0	41	1		166
16	0	1	0		0	1	6	0	49	0		158
17	0	1	0		0	0	6	0	24	0		142
18	0	1	0		3	32	6	0	18	0		122
19	0	1	0		0	30	6	0	14	0		102
20	0	1	0		5	48	6	0	11			86
21	0	1	0		0	75	3	0	10	2		77
22	0	1	0		0	72	0	0	10			62
23	0	1	0		22	72	0	0	9			49
24	0	1	0		55	34	0	0	8			35
25	4	0	0		28	0	0	0	7	0		42
26	4	0	0		5	26	0	0	4	0		23
27	2	0	0		4	48	0	1	6	0		19
28	0	0	0		3	72	0	0	7	0		15
29	0	0	0		-	68	0	0	5	0		11
30	0	0	0		-	47	0	0	5	0		9
31	-	-	0		-	41	-	0	-	0		-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	4	0	0.4	24
November	39	6	0	1.3	77
December	2	1	0	.1	4
Calendar year 1936	8,594	270	0	23.5	17,050
January	0	0	0	0	0
February	128	55	0	4.6	254
March	1,843	138	0	59.5	3,660
April	226	40	0	7.5	448
May	1	1	0	0	2
June	1,108	201	0	36.9	2,200
July	62	13	0	2.0	123
August	0	0	0	.0	0
September	2,519	228	0	84.0	5,000
Water year 1936-37	5,940	228	0	16.3	11,790

Garden City Canal near Garden City, Kans.

Location.- Water-stage recorder, lat. 38°00', long. 101°02', in SW¼ sec. 3, T. 24 S., R. 34 W., 1½ miles below diversion from Arkansas River, 3 miles west of Holcomb, and 9 miles west of Garden City. Zero of gage is at 2,895.88 feet above mean sea level (general adjustment of 1934).

Records available.- 1921-24 (irrigation seasons only) and October 1930 to September 1937 in reports of Geological Survey; March 1925 to September 1930 in reports of the Division of Water Resources of State Board of Agriculture.

Extremes.- Maximum discharge during year, 87 second-feet Sept. 8 (gage height, 8.90 feet); no flow during long periods.
1921-24, 1930-37: Maximum discharge, that of September 8, 1937; no flow during long periods.

Remarks.- Records poor. Canal diverts water through Farmers Ditch from Arkansas River, left bank, in sec. 2, T. 24 S., R. 35 W. Water used for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	4	3			0	0	11	16			0
2	5	2	3			0	0	12	16			0
3	4	2	3			0	0	12	8			0
4	4	2	3			0		12	4			0
5	3	1				0		12	2			0
6	16	1				1	1	10	1			0
7	24	1				1		9	2			0
8	17	1				1		10	2			52
9	4	1				1		9	2			9
10	7	0				1		10	2			16
11	5	0				1		7	2			6
12	5	0				1		6	2			6
13	3	0				1		6	2			6
14	2	0				0		5	2			5
15	3	0				0	2	5	2			5
16	3	0				0		5	2			5
17	4	0	1			0		2	2			5
18	4	0				0		0	2			5
19	4	0				0		0	2			5
20	4	0				0		0	0			4
21	4	0				0	3	0	0			4
22	4	0				0	7	0	0			3
23	3	0				0	8	0	0			2
24	3	0				0	11	0	0			1
25	7	0				0	12	0	0			0
26	3	0				0	12	0	0			0
27	3	0				0	12	0	0			0
28	3	2				0	11	0	0			0
29	3	3				0	10	0	0			0
30	3	3				0	10	14	0			0
31	3	-				0	-	10	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	170	24	2	5.5	337
November	23	4	0	.8	46
December	39	3	-	1.3	77
Calendar year 1936	1,577	60	0	4.3	3,130
January	0	0	0	0	0
February	0	0	0	0	0
March	8	1	0	.3	16
April	124	12	-	4.1	246
May	167	14	0	5.4	331
June	73	16	0	2.4	145
July	0	0	0	0	0
August	0	0	0	0	0
September	139	52	0	4.6	276
Water year 1936-37	743	52	0	2.0	1,470

Pawnee River near Larned, Kans.

Location.- Water-stage recorder, lat. 38°11', long. 99°19', in NW¼ sec. 33, T. 21 S., R. 18 W., about 300 feet below Moffet Dam and 11½ miles west of Larned.

Drainage area.- 2,300 square miles.

Records available.- November 1924 to September 1937.

Average discharge.- 13 years, 45.8 second-feet.

Extremes.- Maximum discharge during year, 1,080 second-feet July 20 (gage height, 13.93 feet); no flow during long periods.
1924-37: Maximum discharge (estimated), 20,000 second-feet May 28, 1935 (gage height, 31.96 feet); no flow during periods of 1926, 1930, 1931, 1933, 1935, 1936, 1937. Bank-full stage, 24 feet.

Remarks.- Records good except for periods of missing gage heights, Jan. 8-18, Mar. 16 to Apr. 13, which are computed on the basis of one discharge measurement, engineer's notes, and partial gage heights, and are poor.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2	2	2	2	4		1	12	0	1	1
2	0	2	2	2	2	4		1	e	0	0	0
3	0	2	2	2	2	4		1	4	199	0	0
4	0	1	2	2	2	3		1	15	82	0	0
5	0	2	3	2	3	3		1	82	9	0	0
6	0	2	2	2	3	3		1	34	2	0	86
7	0	2	2	2	3	3	2	1	11	0	0	72
8	0	2	2		3	3		1	7	0	0	409
9	0	2	2		3	3		2	6	0	0	199
10	0	2	2		3	2		2	5	0	0	42
11	0	2	2		3	2		2	5	0	0	8
12	0	2	2	2	3	2		2	150	23	0	5
13	0	2	2		3	3		2	78	11	33	3
14	0	2	2		3	3	2	1	35	1	468	1
15	0	2	2		3	3	1	1	18	0	75	1
16	0	2	2		3		1	1	15	0	11	0
17	1	2	2		3		1	1	26	134	3	0
18	1	2	2	3	3		1	1	11	468	34	0
19	1	2	2	3	3		1	1	6	818	13	0
20	2	2	2	3	4		1	1	4	981	3	0
21	2	2	2	2	4		1	1	2	914	1	0
22	2	2	2	2	4		1	1	1	754	15	0
23	2	2	2	3	4		1	1	0	260	3	0
24	2	2	2	2	4	3	1	118	0	57	0	0
25	2	2	2	2	4		1	96	0	25	0	0
26	3	2	3	2	4		1	27	0	11	0	0
27	3	2	2	3	4		1	19	0	4	0	0
28	3	2	2	3	4		1	9	0	2	0	0
29	3	2	2	3	-		1	8	0	2	1	0
30	3	2	3	3	-		1	6	0	2	14	0
31	3	-	2	2	-		-	4	-	2	4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	33	3	0	1.1	65
November	59	2	1	2.0	117
December	65	3	2	2.1	129
Calendar year 1936	14,045	2,040	0	38.4	27,860
January	70	3	-	2.3	139
February	89	4	2	3.2	177
March	93	4	-	3.0	184
April	44	-	1	1.5	87
May	315	118	1	10.2	625
June	535	150	0	17.8	1,060
July	4,761	981	0	154	9,440
August	679	468	0	21.9	1,350
September	827	409	0	27.6	1,640
Water year 1936-37	7,570	981	0	20.7	15,010

Little Arkansas River at Valley Center, Kans.

Location.- Water-stage recorder, lat. 37°50', long. 97°23', in SW¼ sec. 36, T. 25 S., R. 1 W., half a mile west of Valley Center and 16 miles above confluence with Arkansas River.

Drainage area.- 1,316 square miles.

Records available.- February 1935 to September 1937. June 1922 to February 1935 at site 2 miles downstream.

Average discharge.- 15 years, 139 second-feet.

Extremes.- Maximum discharge during year, 3,050 second-feet Oct. 9 (gage height, 12.01 feet); minimum, 17 second-feet July 9, 10, Sept. 3, 4 (gage height, 1.88 feet).
1922-37: Maximum discharge recorded, 10,500 second-feet June 11, 1923 (gage height, 18.02 feet, former site and datum); minimum, 1 second-foot Dec. 27, 1933.

Remarks.- Records good except those for periods of ice effect, Jan. 7-25, Jan. 30 to Feb. 5, (computed from gage heights, weather records, observer's notes, and discharge records of Arkansas River at Wichita), and those integrated, which are poor.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	21	24	27	30	41	38	28	380	23	32	19
2	28	21	25	26	20	42	38	26	310	22	30	18
3	26	21	26	29	20	43	37	25	790	22	27	18
4	24	21	27	25	45	50	35	27	470	21	26	20
5	24	20	28	25	55	74	35	28	440	19	25	21
6	24	20	30	25	*743	72	34	28	157	19	24	20
7	25	20	33	20	850	73	33	27	95	19	24	22
8	*643	21	32	20	*1,420	62	34	30	83	18	23	*218
9	2,360	21	31	20	2,220	54	34	30	96	18	22	*1,480
10	1,300	22	30	20	1,610	50	34	29	*184	18	22	1,750
11	690	24	30	20	1,450	47	34	28	470	18	20	*1,400
12	264	22	30	20	976	42	31	27	370	*145	21	*579
13	138	21	32	20	1,020	47	30	26	182	281	22	256
14	86	21	31	20	892	46	57	25	114	88	25	150
15	62	21	31	20	570	43	420	26	86	48	24	104
16	49	21	31	20	350	45	360	26	70	30	22	78
17	40	21	31	20	199	48	161	25	57	*479	21	62
18	35	22	31	20	143	67	81	24	125	*1,660	20	53
19	31	24	31	20	107	92	55	22	87	1,850	20	46
20	29	23	31	20	82	91	46	21	55	*1,260	33	39
21	27	23	30	20	68	69	45	22	43	510	35	35
22	24	22	30	20	57	56	77	*110	37	248	27	32
23	23	21	30	20	55	52	55	310	31	164	24	30
24	22	21	29	25	55	75	38	690	29	111	23	29
25	21	21	29	30	49	102	31	227	26	84	29	26
26	21	21	28	41	43	64	28	*167	24	62	28	25
27	21	22	27	42	41	48	27	530	24	51	24	24
28	21	22	27	56	41	42	28	164	24	44	23	24
29	21	23	27	61	-	40	28	77	24	40	22	24
30	21	23	28	60	-	40	29	*429	24	37	21	24
31	21	-	28	45	-	39	-	630	-	35	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	6,148	2,360	21	198	12,190
November	647	24	20	21.6	1,280
December	908	33	24	29.3	1,800
Calendar year 1936	13,986	2,360	9	38.2	27,740
January	857	61	20	27.6	1,700
February	13,211	2,220	20	472	26,200
March	1,756	102	39	56.6	3,480
April	2,013	420	27	67.1	3,990
May	3,884	690	21	125	7,700
June	4,907	790	24	164	9,730
July	7,444	1,850	18	240	14,760
August	760	35	20	24.5	1,510
September	6,626	1,750	18	221	13,140
Water year 1936-37	49,161	2,360	18	135	97,480

*Discharge integrated.

Walnut River at Winfield, Kans.

Location.- Water-stage recorder, lat. 37°14', long. 97°00', in NE¼ sec. 33, T. 32 S., R. 4 E., 1 mile south of Winfield and 1 mile above Black Crook Creek.

Drainage area.- 1,894 square miles.

Records available.- November 1921 to September 1937.

Average discharge.- 15 years (1922-37) (revised), 585 second-feet.

Extremes.- Maximum discharge observed during year, 16,200 second-feet July 19 (gage height, 25.2 feet); minimum, 20 second-feet Oct. 6 (gage height, 2.52 feet).
1921-37: Maximum discharge observed, 94,400 second-feet Nov. 18, 1928 (gage height, 40.61 feet) on basis of study by Burns and McDonald Engineering Co.; no flow Nov. 11, 1928, July 27 to Sept. 20, 1936. Bank-full stage, 30 feet.

Remarks.- Records good except those for Jan. 22-29, Feb. 1-3, June 10, July 18, 19 (computed on basis of incomplete recorder graph, observer's notes, and recorded range of stage), and those integrated, which are fair.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-8)

2.5	15	8.0	2,700
2.7	34	10.0	4,000
3.0	88	12.0	5,400
3.5	209	14.0	6,900
4.0	380	17.0	9,200
4.5	625	20.0	11,500
5.0	900	23.0	14,100
6.0	1,500	26.0	17,000
7.0	2,100		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	70	23	332	2,460	80	244	152	389	76	495	63
2	49	78	27	206	1,050	76	235	152	332	64	340	55
3	33	70	34	149	530	76	219	140	*1,180	57	276	45
4	24	64	39	121	480	76	*756	140	2,220	52	238	40
5	20	63	63	104	360	80	2,220	140	1,740	50	209	*439
6	23	61	80	98	326	183	1,200	140	845	44	292	270
7	252	59	84	90	*1,190	200	674	142	434	39	322	132
8	4,890	52	82	84	1,380	140	570	144	*814	37	192	112
9	12,200	52	80	86	1,080	126	398	147	*7,300	33	159	*4,070
10	11,400	48	68	80	845	104	332	142	12,200	30	144	1,110
11	5,050	48	63	68	425	90	283	135	*2,600	32	128	1,290
12	1,260	48	59	68	319	74	260	*206	960	37	126	555
13	608	48	59	76	267	*1,150	257	1,500	669	39	119	389
14	407	48	84	*294	206	*1,110	*547	485	592	61	117	244
15	305	88	74	642	194	389	4,840	225	*3,520	238	110	177
16	254	108	63	448	189	283	1,140	159	1,980	*364	100	162
17	215	66	59	308	162	257	448	132	1,080	*4,470	90	128
18	180	50	54	215	135	260	336	117	581	11,400	88	112
19	157	48	54	194	115	581	270	112	402	15,800	82	104
20	142	48	52	*402	112	735	316	108	319	13,100	*386	94
21	126	47	50	2,160	115	510	461	115	267	*6,120	1,020	90
22	112	40	47	2,220	112	340	283	*1,620	225	1,080	434	86
23	100	32	47	1,260	108	316	254	1,170	197	680	273	80
24	92	28	45	790	108	960	235	872	175	900	170	70
25	90	26	45	636	104	2,100	215	*5,880	154	2,960	126	64
26	86	24	115	416	98	900	192	10,600	137	1,500	108	57
27	84	23	658	299	92	480	177	8,400	121	570	106	52
28	80	23	267	175	84	340	159	3,540	106	380	92	50
29	78	23	140	960	-	283	154	1,800	100	581	86	50
30	74	23	175	1,860	-	263	154	845	94	2,520	84	50
31	70	-	364	3,220	-	254	-	510	-	1,050	72	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	38,541	12,200	20	1,243	76,440
November	1,506	108	23	50.2	2,990
December	3,154	658	23	102	6,260
Calendar year 1936	59,054	12,200	0	161	117,100
January	18,061	3,220	68	583	35,820
February	12,646	2,460	84	452	25,080
March	12,825	2,100	74	414	25,440
April	17,829	4,840	154	594	35,360
May	39,970	10,600	108	1,289	79,280
June	41,733	12,200	94	1,391	82,780
July	64,364	15,800	30	2,076	127,700
August	6,584	1,020	72	212	13,060
September	10,240	4,070	40	341	20,310
Water year 1936-37	267,453	15,800	20	733	530,500

*Discharge integrated.

Salt Fork of Arkansas River at Tonkawa, Okla.

(Formerly published as Arkansas River near Tonkawa, Okla.)

Location.- Wire-weight gage, lat. 36°40', long. 97°19', in NE¼ sec. 4, T. 25 N., R. 1 W., in Tonkawa, 4 miles below Thompson Creek and 8 miles above Chikaskia River.

Drainage area.- 4,480 square miles.

Records available.- September 1903 to October 1905, January 1936 to September 1937.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1936, 11,400 second-feet June 6 (gage height, 15.53 feet); minimum, 0.5 second-foot Aug. 23 (gage height, 4.65 feet).

Maximum discharge observed during water year 1936-37, 14,500 second-feet Sept. 9 (gage height, 16.76 feet); minimum, 5 second-feet Aug. 19 (gage height, 4.89 feet).

1903-5, 1936-37: Maximum discharge observed, that of Sept. 9, 1937; minimum, that of Aug. 23, 1936.

Remarks.- Records poor. Discharge for period of ice effect, Jan. 3, Jan. 18 to Feb. 21, 1936, computed on basis of two discharge measurements, gage heights, and weather records. Discharge Sept. 8, 9, 1937, computed from stage graph based on frequent gage readings. No record Sept. 16-22, 1936. Gage read twice daily.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Jan. 2 to June 9, 1936		June 10 to Sept. 30, 1936		Oct. 1, 1936, to Sept. 30, 1936	
4.6	0	4.6	0	4.6	0
4.8	3	4.8	3	4.8	3
5.0	16	5.0	10	5.0	10
5.3	68	5.3	40	5.3	40
5.6	140	5.6	88	5.6	88
6.0	260	6.0	180	6.0	180
6.5	435	6.5	342	6.5	342
7.0	635	7.0	545	7.0	545
8.0	1,110	8.0	1,040	8.0	1,040
9.0	1,680	9.0	1,680	9.0	1,680
10.0	2,420			10.0	2,420
11.0	3,390			11.0	3,390
12.0	4,640			12.0	4,640
13.0	6,250			13.0	6,250
14.0	8,160			14.0	8,160
15.0	10,300			15.0	10,300
				16.0	12,600
				17.0	15,000

Discharge, in second-feet, 1936-37

1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	65	165	19	19	680	62	8	2.5
2				109	65	146	16	16	495	53	8	3
3				112	65	135	17	15	312	35	7	4
4				243	65	114	22	14	278	33	6	3.5
5				197	65	109	14	16	330	104	5	3
6				191	64	109	16	16	8,570	104	4.5	3
7				212	63	104	22	17	7,370	81	4	3
8				165	62	104	22	37	6,430	67	3	2
9				122	61	104	22	50	2,780	40	3	2.5
10				135	60	86	30	41	1,220	28	2.5	2.5
11				146	60	70	29	148	635	38	3	2.5
12				143	59	72	35	86	522	30	3	2
13				130	58	81	54	52	420	38	2	1
14				140	57	86	41	41	342	38	1.5	2
15				157	56	70	27	90	270	23	1	4.5
16				151	55	83	19	54	223	15	1	-
17				140	54	64	19	41	208	12	1.5	-
18				115	53	64	20	30	180	12	2	-
19				90	53	58	22	26	175	10	2	-
20				75	53	44	13	24	208	10	2	-
21				75	60	52	10	27	208	8	2	-
22				75	95	62	16	26	159	8	1	-
23				75	86	68	14	29	119	9	1	98
24				75	68	32	16	37	90	8	4	67
25				75	86	44	10	24	68	8	3.5	54
26				70	86	24	10	1,380	59	8	3.5	84
27				65	100	22	12	1,160	51	8	4	779
28				65	90	23	16	770	51	8	3	1,610
29				65	104	19	16	635	57	7	2	830
30				65	-	22	19	595	62	8	2	545
31				65	-	22	-	680	-	7	2.5	-

Discharge, in second-feet, of Salt Fork of Arkansas at Tonkawa, Okla.--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	324	48	33	96	41	74	112	13	2,600	104	33	26
2	154	53	43	104	44	77	110	14	1,340	84	30	22
3	121	41	46	77	53	75	94	15	680	88	28	16
4	33	34	51	83	47	70	81	15	780	84	24	18
5	70	47	57	96	57	74	75	15	780	81	18	16
6	64	44	62	104	68	77	51	16	590	60	16	18
7	159	39	79	112	90	70	59	13	361	51	20	27
8	6,610	38	324	110	110	68	62	15	270	39	16	271
9	3,850	38	128	104	361	65	50	15	5,110	34	22	11,700
10	1,820	35	96	38	361	64	50	16	13,500	50	16	7,560
11	730	35	72	35	342	59	39	18	9,200	46	12	5,560
12	780	35	67	38	288	54	38	680	4,230	36	20	7,370
13	930	38	70	46	238	60	36	342	2,780	30	14	2,870
14	324	38	72	51	208	67	36	98	1,100	24	12	1,280
15	254	38	75	46	152	86	36	86	2,510	23	8	730
16	175	35	41	51	119	140	35	81	8,780	32	7	568
17	149	35	44	130	106	121	26	83	3,070	110	7	460
18	123	36	53	130	102	121	22	56	1,680	480	6	420
19	106	38	56	96	94	121	30	39	1,470	680	6	223
20	96	38	56	88	83	108	48	35	1,280	1,540	8	170
21	90	38	56	81	75	112	35	29	830	730	18	154
22	83	38	59	70	72	123	40	27	730	420	680	208
23	72	35	57	67	108	128	30	34	400	361	980	170
24	62	33	56	62	98	128	33	288	305	254	1,040	164
25	59	30	62	57	84	123	26	115	223	123	305	144
26	59	33	68	51	75	128	22	65	208	86	500	144
27	56	30	98	44	77	128	16	115	180	94	288	135
28	54	38	324	44	74	130	20	65	159	59	130	123
29	53	32	167	41	-	142	18	36	137	51	108	112
30	47	30	106	41	-	130	16	1,400	117	40	51	100
31	46	-	110	41	-	123	-	4,360	-	33	32	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January 2-31,1936	3,543	243	65	118	7,030
February	1,968	104	53	67.9	3,900
March	2,258	165	19	72.8	4,480
April	618	54	10	20.6	1,230
May	6,196	1,380	14	200	12,290
June	32,572	8,570	51	1,086	64,610
July	920	104	7	29.7	1,820
August	98.5	8	1	3.18	195
September	-	-	-	-	-
Water year					
October 1936	17,533	6,610	33	566	34,820
November	1,120	53	30	37.3	2,220
December	2,688	324	33	86.7	5,330
Calendar year					
January 1937	2,234	130	35	72.1	4,430
February	3,607	361	41	129	7,150
March	3,046	142	54	98.3	6,040
April	1,352	112	16	45.1	2,680
May	8,199	4,360	13	264	16,260
June	65,400	13,500	117	2,180	129,700
July	5,927	1,540	23	191	11,760
August	4,455	1,040	6	144	8,840
September	40,779	11,700	16	1,359	80,880
Water year 1936-37	156,360	13,500	6	428	310,100

Chikaskia River near Blackwell, Okla.

Location.- Wire-weight gage, lat. 36°50', long. 97°18', in SE¼ sec. 4, T. 27 N., R. 1 W., 2½ miles northwest of Blackwell and 3½ miles above Bitter Creek.

Drainage area.- 1,680 square miles.

Records available.- January 1935 to September 1937.

Extremes.- Maximum discharge observed during water year 1935-36, 10,800 second-feet June 6 (gage height, 24.70 feet); practically no flow July 26 (gage height, 2.12 feet). Maximum discharge observed during water year, 1936-37, 12,900 second-feet May 31 (gage height, 27.09 feet); minimum, 1 second-foot May 24, 25; minimum gage height, 2.27 feet May 25.

Remarks.- Records poor. Gage read twice daily. No records Sept. 16-26, Oct. 11-31, 1936 and May 19-23, 1937.

Rating table, water years 1935-36, 1936-37, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 14-30, 1937)

2.2	0.5
2.4	3
2.6	11
2.9	25
3.2	45
3.6	91
4.0	152
4.5	239
5.0	333
6.0	537
7.0	758
8.0	995
9.0	1,245
10.0	1,495
12.0	2,070
14.0	2,750
16.0	3,760
18.0	5,130
20.0	6,730
22.0	8,330
24.0	10,130
26.0	11,930

Discharge, in second-feet, 1936-37

1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	39	72	39	39	112	71	0.5	1
2				-	38	71	39	35	120	31	.5	1
3				112	37	79	37	37	29	239	.5	1
4				105	36	76	36	78	27	203	.5	1
5				98	35	70	43	68	212	66	1	.5
6				91	35	35	45	24	9,950	49	1	1
7				70	35	57	43	22	9,230	37	.5	1
8				49	35	57	40	30	1,340	29	1	1
9				98	35	57	41	276	624	67	.5	1
10				59	35	57	57	112	392	22	.5	1
11				83	34	53	53	60	276	20	.5	1
12				91	33	50	53	45	212	16	.5	1
13				81	32	49	47	40	178	16	.5	1
14				73	32	49	44	36	78	13	.5	1
15				71	31	49	43	83	128	13	.5	1
16				65	30	47	39	32	105	12	.5	-
17				63	29	47	37	144	90	9	.5	-
18				36	28	45	35	66	77	7	.5	-
19				35	28	45	32	22	65	5	.5	-
20				35	28	55	33	20	62	4	.5	-
21				36	29	35	35	21	71	2	.5	-
22				37	76	39	35	14	63	2	.5	-
23				37	39	42	33	17	48	1	.5	-
24				37	76	40	33	20	43	1	.5	-
25				39	33	40	35	105	39	1	.5	-
26				41	152	40	34	239	83	.5	.5	-
27				41	105	39	39	276	32	.5	.5	186
28				41	88	39	42	186	29	.5	.5	91
29				41	77	39	40	239	25	.5	.5	27
30				40	-	42	41	221	24	.5	.5	20
31				39	-	39	-	152	-	.5	.5	-

Discharge, in second-feet, of Chikaskia River near Blackwell, Okla.--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	27	26	47	65	55	59	7	1,470	49	1	22
2	13	78	76	44	128	65	55	5	921	42	9	13
3	11	30	144	25	91	54	57	5	970	33	20	17
4	13	27	33	31	71	56	56	19	580	36	20	14
5	10	25	56	29	57	51	52	21	495	33	22	15
6	11	26	40	30	67	52	43	22	432	29	20	12
7	204	49	33	31	295	47	46	23	392	23	16	16
8	897	29	40	41	558	46	40	20	376	24	12	2,700
9	376	24	36	22	412	43	40	13	1,700	18	12	8,170
10	432	28	45	22	203	40	39	17	7,690	22	9	995
11	-	24	36	22	144	39	36	18	4,080	27	9	897
12	-	31	29	22	221	39	35	82	995	26	12	602
13	-	32	36	22	136	40	35	81	668	22	12	474
14	-	32	35	33	91	48	29	36	735	18	11	144
15	-	30	35	35	98	91	35	5	4,940	21	7	136
16	-	26	29	42	83	120	52	4	1,020	18	7	112
17	-	33	31	32	78	105	40	2	712	17	7	84
18	-	29	33	15	198	98	39	2	558	3,100	3	71
19	-	33	33	25	66	91	35	-	392	1,020	2	81
20	-	29	30	26	59	81	152	-	392	495	3	72
21	-	33	32	38	57	74	144	-	690	295	1,420	63
22	-	33	33	40	63	66	144	-	558	203	712	52
23	-	29	33	43	60	55	31	-	120	160	314	47
24	-	27	35	39	59	221	32	1	144	91	203	48
25	-	24	35	29	57	226	27	1	120	81	98	39
26	-	33	37	29	55	160	25	20	91	178	105	32
27	-	19	558	16	53	91	22	2,100	83	72	83	33
28	-	32	32	32	41	72	19	6,970	73	67	55	32
29	-	26	38	24	-	68	16	2,820	64	60	35	24
30	-	25	40	36	-	62	16	1,740	55	35	32	26
31	-	-	98	31	-	66	-	11,800	-	7	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January 3-31, 1936	1,744	112	35	60.1	3,460
February	1,340	152	28	46.2	2,660
March	1,554	79	35	50.1	3,080
April	1,203	57	32	40.1	2,390
May	2,759	276	14	89.0	5,470
June	23,764	9,950	24	792	47,140
July	939	239	.5	30.3	1,860
August	17.0	1	.5	.55	34
September	-	-	-	-	-
Water year					
October 1-10, 1936	1,983	897	10	198	3,930
November	923	78	19	30.8	1,830
December	1,817	558	26	58.6	3,600
Calendar year					
January 1937	953	47	15	30.7	1,890
February	3,566	558	41	127	7,070
March	2,422	226	39	78.1	4,800
April	1,451	152	16	48.4	2,880
May	-	-	-	-	-
June	31,516	7,690	55	1,051	62,510
July	6,322	3,100	7	204	12,540
August	3,298	1,420	1	106	6,540
September	15,043	8,170	12	501	29,840

Cimarron River at Oilton, Okla.

Location.- Wire-weight gage, lat. 36°06', long. 96°35', in SW¼ sec. 28 (revised), T. 19 N., R. 7 E., at highway bridge half a mile north of Oilton, 4½ miles above Buckeye Creek, 6 miles above Lagoon Creek, and 35 miles (revised) above confluence with Arkansas River.

Records available.- July 1934 to September 1937.

Extremes.- Maximum discharge during year, 26,500 second-feet June 16 (gage height, 11.63 feet, gage read at flood crest); minimum, 14 second-feet Aug. 16; minimum gage height, 3.53 feet May 19, 20.

1934-37: Maximum discharge observed, 72,300 second-feet June 21, 1935 (gage height,16.8 feet), from rating curve extended above 35,000 second-feet); no flow Sept. 8, 13-16, 1936.

Remarks.- Records good except those for Mar. 11-14, which were estimated from rainfall records and are fair. Discharge June 2-4, 15, 16 computed from stage graph based on observer's frequent readings. Gage read twice daily during low water, oftener during floods.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,330	182	42	217	116	48	55	88	88	343	62	515
2	1,260	700	55	178	81	55	50	84	859	317	65	515
3	920	480	55	140	96	55	55	83	2,350	285	58	370
4	740	245	55	133	87	46	147	84	2,200	257	55	352
5	620	154	78	126	70	62	105	83	1,630	238	50	334
6	550	136	96	119	78	65	870	83	2,660	370	50	550
7	1,610	234	78	112	62	58	655	84	1,380	317	50	970
8	2,980	175	93	78	55	34	378	88	940	253	46	1,920
9	2,410	147	102	28	75	36	245	82	3,880	231	42	1,470
10	6,000	119	99	30	72	34	182	80	4,980	217	34	1,400
11	3,630	99	119	34	55	35	137	80	3,880	210	30	2,780
12	2,780	99	140	28	48	35	125	83	4,380	182	27	1,920
13	1,330	96	147	46	78	100	116	83	4,130	158	26	3,180
14	1,400	90	154	126	60	500	113	80	3,630	154	24	1,540
15	920	81	147	147	58	420	108	76	2,830	161	18	740
16	740	75	140	112	168	395	104	75	16,300	293	14	550
17	620	72	140	87	168	245	96	76	9,800	550	18	1,330
18	480	75	144	70	126	168	94	74	6,800	317	30	550
19	420	68	119	70	112	116	92	74	5,280	231	21	450
20	395	65	116	65	81	90	103	73	3,630	154	36	395
21	1,140	60	105	87	75	87	450	74	2,410	130	420	343
22	780	60	108	70	65	105	500	730	1,760	126	9,800	317
23	317	58	112	50	65	105	690	620	1,260	126	3,880	277
24	289	55	108	75	48	585	770	400	970	96	2,980	253
25	275	48	112	81	38	189	275	170	780	75	2,410	238
26	261	44	119	87	34	119	170	122	660	70	1,920	224
27	234	42	182	119	48	81	129	104	585	60	1,080	182
28	214	42	147	175	48	70	112	110	480	55	700	161
29	203	40	136	217	-	70	100	101	395	50	585	154
30	189	42	147	370	-	75	94	97	370	60	780	147
31	182	-	168	224	-	60	-	92	-	60	550	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	35,217	6,000	182	1,136	69,850
November	3,883	700	40	129	7,700
December	3,563	182	42	115	7,070
Calendar year 1936	211,512	26,300	0	578	419,600
January	3,501	370	28	113	6,940
February	2,167	168	34	77.4	4,300
March	4,143	585	34	134	8,220
April	7,118	870	50	237	14,120
May	4,233	730	73	137	8,400
June	91,297	16,300	88	3,043	181,100
July	6,146	550	50	198	12,190
August	25,861	9,800	14	834	51,290
September	24,127	3,180	147	804	47,860
Water year 1936-37	211,256	16,300	14	579	419,000

Stillwater Creek at Stillwater, Okla.

Location.- Water-stage recorder, lat. 36°06', long. 97°03', on line between secs. 25 and 26, T. 19 N., R. 2 E., a mile southeast of Stillwater. Zero of gage is 833.95 feet above mean sea level (general adjustment of 1912).

Drainage area.- ~~165~~ square miles.

Records available.- October 1934 to December 1937 (discontinued).

Extremes.- Maximum discharge during water year 1936-37, 1,740 second-feet June 9 (gage height 19.58 feet); minimum, 0.01 second-foot Feb. 20 (gage height, 4.08 feet).

Maximum discharge during Oct. 1 to Dec. 31, 1937, 115 second-feet Oct. 9 (gage height, 7.56 feet); minimum, 0.28 second-foot Dec. 24-26 (gage height, 4.16 feet).

1934-37: Maximum discharge, 10,850 second-feet June 21, 1935 (gage height, 26.68 feet); minimum, that of Feb. 20, 1937.

Remarks.- Records good. Discharge determined by series of loop curves. Flow regulated by Farm Securities Administration reservoir construction 10 miles upstream after Aug. 20, 1937. Low flow subject to diurnal fluctuation caused by sewage disposal plant half a mile upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	0.83	0.94	0.63	0.73	0.83	0.73	0.83	0.83	1.0	0.84	1.5
2	1.7	.73	1.2	.63	.83	.83	.73	.83	138	1.2	.94	2.3
3	1.4	.73	.94	.73	.83	.83	2.1	.83	127	1.0	.94	1.7
4	1.2	.73	.94	.83	.83	.73	46	1.0	9.5	.94	.83	1.2
5	.94	.83	1.7	.94	.83	.83	23	.94	2.7	.94	.94	1.0
6	.83	.83	.83	.83	.94	.83	4.3	.83	1.3	.94	.73	1.0
7	55	.83	.73	.83	.94	.83	1.5	1.0	2.4	1.0	.73	1.0
8	136	.83	.73	.83	.94	.94	1.0	1.6	1.0	1.2	.63	17
9	42	.83	.73	.73	.94	.94	.94	.63	864	1.0	.63	24
10	32	.94	.73	.83	.94	.83	.94	.73	542	1.2	.94	14
11	7.1	.83	.73	.83	.83	.83	.94	.73	10	1.2	.94	10
12	2.8	.83	.73	.83	.83	.83	.83	.83	2.9	1.2	.94	4.3
13	1.7	.83	.73	1.0	.83	1.2	.83	.83	1.5	1.3	1.0	2.5
14	1.2	.94	.83	1.7	.83	.83	.83	.94	1.5	1.0	1.2	1.7
15	1.0	.73	.83	.73	.83	.83	.83	.94	26	1.4	1.0	1.7
16	.94	.73	.83	.73	.83	.83	.83	.83	60	1.0	.94	1.3
17	.73	.83	.83	.63	.94	.83	.83	.83	8.7	1.2	1.0	1.2
18	.63	.94	.94	.63	.94	.83	.63	.73	14	1.0	1.2	1.2
19	.73	.94	.83	.73	.28	.73	.83	.73	3.6	1.0	1.3	1.2
20	.63	1.0	.63	.73	1.4	.83	4.3	.83	1.7	1.2	127	1.2
21	1.3	1.0	.63	.63	.83	.83	1.1	2.0	.83	1.3	838	1.3
22	.83	1.0	.63	.63	.83	.83	.83	15	.94	1.3	415	1.2
23	.73	1.0	.63	.63	.94	1.8	.83	2.0	1.0	1.0	75	1.2
24	.73	1.0	.53	.63	.94	.94	.83	4.8	1.0	1.0	25	1.3
25	1.3	.94	.53	.63	.94	.83	.83	1.8	.94	1.0	14	1.2
26	.83	.73	.83	.63	.94	.73	.83	8.6	.94	1.0	6.3	1.0
27	.83	.53	.73	.73	.94	.63	.83	3.1	.83	1.0	3.6	1.0
28	.83	.63	.53	.63	.83	.53	.83	1.3	.94	1.2	3.0	1.2
29	.94	.63	.53	.73	-	.63	.83	.83	.94	1.0	1.8	1.2
30	.94	.83	.63	.83	-	.73	.83	1.2	.94	1.8	1.2	1.2
31	.83	-	.63	.73	-	.73	-	.73	-	.94	1.0	-

Discharge, in second-feet, October to December 1937

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	1.2	0.83	0.94	11	8.8	1.0	.83	21	.94	1.3	.63
2	1.2	.94	.94	12	4.6	1.0	.83	22	.94	1.3	.63
3	1.0	1.0	.94	13	2.9	1.2	1.3	23	.83	1.4	.63
4	1.0	1.0	.94	14	1.8	1.3	2.9	24	.83	1.2	.43
5	1.2	1.2	.83	15	1.4	1.4	.94	25	.83	.63	.43
6	1.3	1.2	.83	16	1.2	1.5	.83	26	.83	.63	.43
7	1.3	1.3	.83	17	2.3	1.2	.73	27	.83	.63	.53
8	4.0	1.4	.83	18	1.2	1.3	.83	28	.83	.73	.63
9	53	2.3	.83	19	1.0	1.3	.63	29	.83	.83	.63
10	30	1.8	.83	20	1.0	1.4	.63	30	.83	.83	.63
								31	.83	-	.73

Discharge, in second-feet, October 1936 to December 1937

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1936	300.42	135	0.63	9.69	596
November	25.00	1.0	.53	.833	50
December	24.21	1.7	.53	.781	48
Calendar year 1936	1,460.22	319	.35	3.99	2,900
January 1937	23.78	1.7	.63	.767	47
February	24.48	1.4	.28	.874	49
March	26.20	1.8	.53	.845	52
April	101.49	46	.63	3.38	201
May	58.80	15	.63	1.90	117
June	1,827.93	864	.83	60.9	3,630
July	34.46	1.8	.94	1.11	68
August	1,526.67	838	.63	49.2	3,030
September	102.8	24	1.0	3.42	204
Water year 1936-37	4,076.15	864	.28	11.2	8,090
October 1937	130.75	53	.83	4.22	259
November	35.05	2.3	.63	1.17	70
December					
Calendar year 1937	3,917.93	864	.28	10.7	7,780

West Fork of Brush Creek near Stillwater, Okla.

Location.- Water-stage recorder and wooden control, lat. 36°08', long. 96°59', in NW¼NW¼ sec. 20, T. 19 N., R. 3 E., 2⅛ miles east of Stillwater. Zero of gage is 847.10 feet above mean sea level (general adjustment of 1912).

Drainage area.- 13.1 square miles.

Records available.- October 1934 to December 1937 (discontinued).

Extremes.- Maximum discharge during water year 1936-37, 477 second-feet June 9 (gage height, 6.61 feet); no flow during some periods of each month.
Maximum discharge during Oct. 1 to Dec. 31, 1937, 40 second-feet Oct. 8 (gage height, 2.61 feet); no flow during some periods of each month.
1934-37: Maximum discharge, 2,050 second-feet June 21, 1935 (gage height, 15.31 feet); no flow during some periods of each year.

Remarks.- Records good. Discharge determined by series of loop curves.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.01							0	0		0	0
2	0							0	42		0	0
3	0							0	9.5		0	0
4	0							0	.31		0	0
5	0							0	.05		0	0
6	0							0	.01		0	0
7	12							0	3.3		0	0
8	12							0	.07		0	1.6
9	7.2							0	194		0	10
10	1.2							0	10		0	.32
11	.23							0	.45		0	.01
12	.05							0	.12		0	0
13	.01							0	.04		0	0
14	0							0	.02		0	0
15	0							0	34		0	0
16	0							0	3.5		0	0
17	0							0	.20		0	0
18	0							0	.04		0	0
19	0							0	.01		0	0
20	0							0	0		0	0
21	0							0	0		1.3	0
22	0							.30	0		.03	0
23	0							.04	0		0	0
24	0							0	0		0	0
25	0							0	0		0	0
26	0							0	0		0	0
27	0							0	0		0	0
28	0							0	0		0	0
29	0							0	0		0	0
30	0							0	0		0	0
31	0							0	-		0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October 1936	32.70	12	0	1.05	0.080	0.09	65
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
Calendar year 1936	151.74	36	0	.415	.032	.43	302
January 1937	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0
May	.34	.30	0	.011	.00084	.001	.67
June	297.62	194	0	9.92	.757	.84	590
July	0	0	0	0	0	0	0
August	1.33	1.3	0	.043	.0033	.004	2.6
September	11.93	10	0	.398	.030	.03	24
Water year 1936-37	343.92	194	0	.942	.072	.96	682
October 1937	7.54	5.1	0	.243	.019	.02	15
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
Calendar year 1937	318.76	194	0	.873	.067	.90	632

Note.- Discharge Oct. 8, 1937, 2.3 second-feet; Oct. 9, 5.1 second-feet; Oct. 10, 0.13 second-foot; Oct. 11, 0.01 second-foot; no flow Oct. 1-7, Oct. 12 to Dec. 31, 1937.

Council Creek near Stillwater, Okla.

Location.- Water-stage recorder and concrete control, lat. 36°07', long. 96°52', in ~~SE¼SW¼~~ sec. 15, T. 19 N., R. 4 E., 10 miles east of Stillwater. Zero of gage is 838.28 feet above mean sea level (general adjustment of 1912).

Drainage area.- ~~30.2~~ square miles.

Records available.- March 1934 to September 1937.

Extremes.- Maximum discharge during year, ~~1,320~~ second-feet Sept. 7 (gage height, 8.79 feet); no flow during some periods.
1934-37: Maximum discharge, 2,900 second-feet June 21, 1935 (gage height, 11.92 feet); no flow during some periods of each year.

Remarks.- Records good.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0		0	0.04	0.04	0.07	0.13	0.04	0		0	0.07
2	0		0	.07	.04	.07	.13	.13	0		0	.02
3	0		0	0	.22	.07	.55	.04	0		0	0
4	0		0	.02	.13	.07	1.2	.22	0		0	0
5	0		0	.04	.13	.07	.38	.22	0		0	0
6	0		0	.07	.22	.07	.22	.07	0		0	0
7	8.3		0	.04	.38	.13	.22	.04	0		0	303
8	4.3		0	.01	.13	.13	.13	.22	14		0	60
9	4.2		0	0	.13	.07	.13	.13	338		0	72
10	.22		0	0	.13	.07	.13	.07	18		0	2.3
11	0		0	0	.38	.07	.07	.04	1.3		0	.78
12	0		0	0	.22	.07	.13	.02	.78		0	.02
13	0		0	.15	.13	.58	.22	0	.22		0	0
14	0		0	1.0	.07	.22	.13	0	8.8		0	0
15	0		0	.38	.04	.13	.07	0	118		0	0
16	0		0	.07	.02	.13	.04	0	13		0	0
17	0		0	.38	.04	.22	.04	0	1.0		0	0
18	0		0	.07	.07	.13	.04	0	.38		0	0
19	0		0	.13	.38	.13	.04	0	.07		0	0
20	0		0	.38	.58	.07	4.0	0	.01		47	0
21	0		0	.04	.38	.04	1.3	0	0		11	0
22	0		0	0	.13	.04	.22	2.9	0		.58	0
23	0		0	0	.13	2.7	.13	.07	0		0	0
24	0		0	.02	.13	1.0	.02	0	0		0	0
25	0		0	.13	.07	.38	.01	0	0		0	0
26	0		.01	.38	.04	.07	.01	0	0		0	0
27	0		.38	.58	.07	.07	.07	0	0		0	0
28	0		.07	.58	.07	.13	.07	0	0		0	0
29	0		.04	.58	-	.38	.07	0	0		0	0
30	0		1.3	.58	-	.38	.04	0	0		0	0
31	0		.13	.13	-	.22	-	0	-		0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	17.02	8.3	0	0.549	0.018	0.02	34
November	0	0	0	0		0	0
December	1.93	1.3	0	.062	.0021	.002	3.8
Calendar year 1936	304.16	90	0	0.831	0.028	0.37	603
January	5.87	1.0	0	.189	.0063	.007	11
February	4.50	.58	.02	.161	.0053	.005	8.9
March	7.98	2.7	.04	.257	.0085	.01	16
April	9.94	4.0	.01	.331	.011	.01	20
May	4.21	2.9	0	.136	.0045	.005	8.4
June	513.56	338	0	17.1	.566	.63	1,020
July	0	0	0	0	0	0	0
August	58.58	47	0	1.89	.063	.07	116
September	438.19	303	0	14.6	.484	.54	869
Water year 1936-37	1,061.78	338	0	2.91	.096	1.30	2,110

Verdigris River at Independence, Kans.

Location.- Water-stage recorder, lat. 37°13', long. 95°41', in NE¼ sec. 32, T. 32 S., R. 16 E., 2 miles east of Independence and 3½ miles below Elk River.

Drainage area.- 2,952 square miles.

Records available.- October 1930 to September 1937. April to September 1904, November 1921 to September 1930 at site three-quarters of a mile upstream.

Average discharge.- 16 years (1921-37), 1,472 second-feet.

Extremes.- Maximum discharge during year, 26,300 second-feet Oct. 10 (gage height, 35.35 feet); minimum, 5 second-feet Aug. 28 (gage height, 0.88 foot).
1904, 1921-37: Maximum discharge (estimated), 124,000 second-feet Oct. 3, 1927 (gage height, 46.04 feet, at former site); no flow during periods in 1932, 1934, and 1936.

Remarks.- Records good except those below 50 second-feet and those integrated, which are fair. Discharge for periods when intake action was faulty, Jan. 21-26, Feb. 1-3, Apr. 11-13, May 30 to June 2, June 7, 8, 11, 12, 18-30, July 19, 20, was computed from graphs constructed on basis of observer's notes and recorded range in stage.

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

Oct. 1 to Feb. 8				Feb. 9 to Sept. 30	
1.5	26	6.0	1,410	0.9	5
1.6	37	7.0	1,890	1.2	17
1.8	60	9.0	3,000	1.6	53
2.0	91	11.0	4,300	2.0	111
2.3	145	16.0	7,700	2.5	210
2.6	212	22.0	12,600	3.0	335
4.0	630	28.0	18,000	4.0	630
5.0	990	34.0	24,300	Note.- Same as preceding table above 3.7 feet.	
		36.0	27,200		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	267	72	30	664	1,410	266	787	273	362	95	787	34
2	156	2,580	33	716	1,030	270	751	260	1,830	77	566	28
3	101	1,940	34	518	877	266	664	250	4,880	57	403	21
4	72	630	34	424	582	258	2,330	253	7,450	48	306	21
5	54	336	56	315	518	253	6,930	346	9,200	45	226	19
6	1,070	198	130	240	454	250	5,470	445	4,500	34	169	21
7	641	153	134	212	934	250	2,460	268	1,370	26	139	376
8	13,500	136	160	217	2,750	250	4,490	224	598	22	130	2,360
9	22,100	121	137	202	1,410	233	4,250	224	15,000	896	111	1,640
10	22,100	101	128	166	2,040	210	1,690	212	23,200	175	90	716
11	4,210	100	101	162	971	190	1,240	188	16,000	82	89	460
12	1,030	88	85	136	681	173	990	301	3,130	72	74	299
13	733	81	75	134	582	208	1,480	592	1,790	113	61	195
14	534	70	72	175	519	2,200	1,860	1,150	3,660	153	53	134
15	424	75	68	614	504	1,690	1,070	460	9,840	1,610	50	98
16	347	88	77	841	474	1,010	933	338	4,880	2,960	49	63
17	281	70	77	630	389	933	716	243	2,410	4,480	42	48
18	237	62	74	439	319	1,070	914	192	1,280	7,210	48	38
19	193	55	63	376	278	1,190	1,110	159	841	13,500	24	33
20	158	50	55	1,000	528	1,240	787	139	598	17,900	60	38
21	145	50	48	2,300	914	952	1,070	125	445	6,790	37	39
22	130	68	48	1,320	582	733	990	969	389	1,190	46	44
23	110	59	48	952	504	903	856	6,300	309	716	67	36
24	93	50	49	877	431	6,580	1,340	4,610	258	504	90	38
25	98	39	55	733	376	6,510	504	2,300	233	376	106	32
26	115	36	54	502	327	2,810	389	3,000	210	306	48	29
27	106	34	197	344	296	1,410	335	6,020	188	238	7	33
28	94	34	4,820	362	278	990	299	2,190	147	210	15	32
29	91	35	1,260	336	-	841	283	3,390	128	1,030	48	29
30	88	34	598	864	-	787	280	1,890	111	8,450	45	33
31	80	-	470	2,240	-	787	-	664	-	4,450	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	69,358	22,100	54	2,237	137,600
November	7,445	2,580	34	248	14,770
December	9,270	4,820	30	299	18,390
Calendar year 1936	137,243	22,100	0	375	272,300
January	19,011	2,300	134	613	37,710
February	20,958	2,750	278	748	41,570
March	35,713	6,580	173	1,152	70,840
April	47,268	6,930	280	1,576	93,750
May	37,975	6,300	125	1,225	75,320
June	115,237	23,200	111	3,841	228,600
July	73,805	17,900	22	2,381	146,400
August	4,035	787	7	130	8,000
September	6,987	2,360	19	233	13,860
Water year 1936-37	447,062	23,200	7	1,225	886,800

Caney River near Collinsville, Okla.

Location.- Wire-weight gage, lat. 36°23'40", long. 95°48'40", in SW¼SW¼ sec. 10, T. 22 N., R. 14 E., five-eighths of a mile above Horsepen Creek, 2½ miles northeast of Collinsville, 4¼ miles below Rabb Creek, and 15 miles above mouth.

Drainage area.- 2,090 square miles.

Records available.- December 1935 to September 1937.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1936, 10,200 second-feet June 8 (gage height, 27.85 feet); no flow Aug. 9 to Sept. 15.
Maximum discharge observed during water year 1936-37, 18,000 second-feet Oct. 13 (gage height, 32.05 feet); minimum, 1 second-foot July 2 (gage height, 6.19 feet).
Maximum stage known, about 39 feet in 1926 and 1927.

Remarks.- Records poor. No record Sept. 16-20, 1936. Gage read twice daily.

Rating table, water years 1935-36 and 1936-37 (gage height, in feet, and discharge, in second-feet)

6.2	1
6.4	10
6.6	36
6.8	72
7.0	112
7.3	176
7.6	243
8.0	325
8.5	445
9.0	566
10.0	816
11.0	1,080
12.0	1,380
14.0	2,120
16.0	2,940
18.0	3,940
20.0	4,940
22.0	6,040
24.0	7,240
26.0	8,640
28.0	10,400
30.0	12,400
32.0	18,00

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	116	66	154	21	30	41	11	1	0
2			-	120	57	133	20	774	39	1,120	1	0
3			-	133	68	104	20	2,760	36	3,140	1	0
4			373	254	43	88	19	1,320	33	541	1	0
5			325	421	64	84	17	421	30	176	1	0
6			941	373	61	78	19	232	956	102	1	0
7			2,890	289	57	76	18	154	7,380	61	1	0
8			4,240	254	51	66	17	120	9,600	48	1	0
9			1,960	220	48	61	17	1,360	5,620	33	0	0
10			866	198	48	57	17	2,520	641	27	0	0
11			591	176	57	57	17	1,410	312	21	0	0
12			469	176	53	50	17	691	198	19	0	0
13			397	187	51	48	17	517	154	14	0	0
14			373	187	43	44	18	373	120	13	0	0
15			325	187	50	43	19	278	102	12	0	0
16			325	176	50	43	21	209	92	10	0	-
17			289	154	50	43	22	154	64	9	0	-
18			254	144	43	43	22	133	62	9	0	-
19			220	129	43	43	22	144	55	7	0	-
20			209	120	43	39	22	110	48	6	0	-
21			198	116	39	36	22	84	41	6	0	2,560
22			176	114	38	33	21	64	36	6	0	1,640
23			176	108	39	27	17	122	30	6	0	966
24			165	86	44	27	14	84	26	6	0	991
25			154	74	46	27	16	86	21	4	0	232
26			154	53	266	27	17	144	17	4	0	312
27			154	102	232	24	14	100	14	3	0	3,900
28			133	72	198	24	28	72	12	3	0	5,390
29			133	86	209	22	21	55	10	2	0	2,940
30			114	66	-	22	27	50	10	2	0	1,020
31			116	68	-	21	-	44	-	2	0	-

Discharge, in second-feet, of Caney River near Collinsville, Okla., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	421	125	57	325	916	209	176	133	198	11	3,740	16
2	289	325	59	289	616	209	198	125	154	1	2,200	14
3	187	4,990	61	312	716	232	278	116	118	4	373	12
4	129	6,400	62	278	397	232	445	108	1,470	17	209	17
5	98	3,790	64	232	421	243	1,110	108	1,530	6	154	14
6	64	517	68	198	591	198	2,940	154	716	12	116	12
7	421	325	254	187	493	154	1,760	243	493	17	92	12
8	11,500	278	373	187	517	144	1,290	232	312	14	74	14
9	12,600	232	325	187	469	133	2,760	176	750	16	61	53
10	14,300	209	243	165	421	127	1,560	144	4,890	17	51	3,240
11	15,700	176	187	154	397	122	716	133	7,240	14	43	3,190
12	16,500	154	154	144	349	116	566	165	8,570	12	39	741
13	18,000	144	133	187	289	198	445	1,760	8,150	12	34	397
14	11,600	131	122	1,710	266	266	397	841	2,300	51	27	154
15	2,160	120	116	3,490	243	209	349	616	641	14	24	110
16	397	108	106	1,840	220	176	325	312	2,520	30	24	100
17	325	104	100	1,410	198	187	266	187	6,160	469	21	96
18	289	96	100	1,320	176	209	254	165	1,500	1,920	19	187
19	254	90	94	1,020	154	176	254	154	469	2,080	17	209
20	243	84	92	1,560	127	154	266	151	349	4,240	133	266
21	232	80	88	1,640	176	133	349	104	209	5,560	72	198
22	220	76	84	1,080	220	120	445	84	220	6,160	24	144
23	209	68	80	1,440	154	112	493	66	209	3,790	100	88
24	187	61	76	891	154	254	469	1,050	154	566	96	61
25	165	57	76	766	176	694	445	566	120	312	68	46
26	176	53	78	421	198	766	445	550	102	232	41	36
27	198	57	125	373	176	566	312	1,290	92	176	27	30
28	165	53	176	421	165	517	198	1,380	76	144	27	24
29	144	50	154	641	-	325	165	991	53	129	19	19
30	133	53	254	3,800	-	187	133	445	46	658	18	17
31	131	-	278	3,590	-	176	-	289	-	2,720	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December 4-31, 1935	16,720	4,240	114	597	33,160
Calendar year					
January 1936	4,959	421	53	160	9,840
February	2,157	266	38	74.4	4,280
March	1,644	154	21	53.0	3,260
April	579	28	14	19.3	1,150
May	14,615	2,760	30	471	28,990
June	25,800	9,600	10	860	51,170
July	5,423	3,140	2	175	10,760
August	8	1	0	.26	16
September	-	-	-	-	-
Water year					
October 1936	107,537	18,000	64	3,469	213,300
November	19,006	6,400	50	634	37,700
December	4,239	373	57	137	8,410
Calendar year					
January 1937	30,258	3,800	144	976	60,020
February	9,395	916	127	336	18,630
March	7,544	766	112	243	14,960
April	19,809	2,940	133	660	39,290
May	12,818	1,760	66	413	25,420
June	49,811	8,570	46	1,660	98,800
July	29,404	6,160	1	948	58,320
August	7,960	3,740	17	257	15,790
September	9,517	3,240	12	317	18,880
Water year 1936-37	307,298	18,000	1	842	609,520

Bird Creek near Owasso, Okla.

Location.- Wire-weight gage, lat. 36°14'50", long. 95°52'00", on line between NE¼ sec.1, T. 20 N., R. 13 E., and NW¼ sec. 6, T. 20 N., R. 14 E., half a mile above Ranch Creek, 1⅛ miles above Mingo Creek, 1½ miles southwest of Owasso, and 14 miles above confluence with Verdigris River.

Drainage area.- 1,030 square miles.

Records available.- December 1935 to September 1937.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1936, 8,490 second-feet Sept. 27 (gage height, 17.14 feet), from rating curve extended above 1,300 second-feet; minimum, 2 second-feet July 31, Aug. 1, and Aug. 12-16 (gage height, 5.13 feet).
Maximum discharge observed during water year 1936-37, 15,500 second-feet Oct. 8 (gage height, 24.76 feet), from rating curve extended above 1,300 second-feet; minimum, 2 second-feet July 5 (gage height, 5.13 feet).
Maximum stages known, 26.3 feet Apr. 15, 1929, and 29.2 feet in June 1935.

Remarks.- Records fair except those below 10 second-feet and those above 1,500 second-feet, which are poor. Gage read twice daily. No record Sept. 16-20, 1936.

Rating table, water years 1935-36 and 1936-37 (gage height, in feet, and discharge, in second-feet)

5.0	1
5.2	4
5.4	19
5.6	41
5.8	77
6.0	132
6.3	251
6.6	401
7.0	635
7.5	980
8.0	1,330
9.0	2,030
10.0	2,800
14.0	6,000
18.0	9,300
22.0	12,900
26.0	16,700

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	61	17	95	7	73	17	6	2	7
2			-	59	17	108	7	57	15	8	2.5	5
3			71	51	18	132	7	195	14	6	2.5	11
4			65	46	19	52	7	120	14	4	2.5	10
5			69	46	17	47	7	82	16	4	2.5	10
6			1,190	44	13	44	6	55	2,530	4	2.5	10
7			1,400	42	9	40	6	44	5,840	4	2.5	9
8			602	44	6	36	6	102	1,540	3.5	2.5	7
9			298	41	9	39	6	1,260	374	3	2.5	5
10			199	37	11	36	6	980	191	3	2.5	4
11			132	44	10	36	6	374	108	3	2.5	2.5
12			97	39	7	34	6	401	77	3	2.5	3
13			77	39	8	31	5	338	57	3	2	3
14			75	37	7	31	5	160	44	3	2	3
15			71	39	7	34	4.5	99	39	3	2	4
16			65	39	11	34	5	73	36	3	2	-
17			54	36	16	34	5	61	41	2.5	2.5	-
18			*54	36	21	34	5	52	36	2.5	2.5	-
19			*55	36	19	31	5	51	30	2.5	2.5	-
20			*55	34	22	21	5	41	25	2.5	2.5	-
21			*56	27	21	14	5	34	21	2.5	2.5	482
22			*56	29	27	13	5	36	17	2.5	2.5	284
23			57	33	30	13	5	29	15	2.5	2.5	840
24			49	34	28	15	5	73	12	2.5	2.5	805
25			42	34	29	17	5	47	9	2.5	2.5	289
26			41	33	35	11	5	39	9	2.5	2.5	126
27			52	30	54	10	11	31	7	2.5	2.5	8,080
28			87	24	71	9	191	25	6	2.5	2.5	4,320
29			61	23	82	9	401	25	5	2.5	17	840
30			59	21	-	8	123	21	5	2.5	14	348
31			61	19	-	7	-	18	-	2	11	-

Discharge, in second-feet, of Bird Creek near Owasso, Okla., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	187	57	31	348	2,320	49	79	67	36	13	20	27
2	102	102	33	67	910	52	77	67	36	5	16	233
3	75	2,800	35	44	298	52	73	67	69	3	14	238
4	57	910	35	42	233	55	700	61	57	3	12	265
5	47	216	39	41	225	57	455	61	57	2	9	318
6	63	120	95	41	220	57	313	57	57	3	8	700
7	374	82	85	49	191	59	492	57	61	3	7	247
8	15,400	73	79	57	187	59	279	55	73	4.5	8	99
9	13,800	69	69	61	167	57	139	54	89	8	8	1,330
10	7,440	63	65	39	153	55	95	54	2,320	11	8	840
11	2,480	57	59	34	146	55	87	57	1,050	10	*8	540
12	2,100	52	55	29	129	52	77	67	233	10	*8	179
13	1,960	51	52	32	114	82	61	1,190	108	10	*8	95
14	1,890	44	47	510	95	510	57	668	97	17	9	52
15	1,120	42	46	1,120	85	216	55	129	2,060	17	9	46
16	980	39	39	1,470	77	114	54	123	1,960	25	10	42
17	700	37	37	1,190	77	71	54	123	323	65	10	72
18	216	36	39	910	69	59	51	123	114	71	10	247
19	61	35	39	840	63	52	49	87	87	1,820	10	179
20	47	35	37	770	61	49	82	79	87	582	44	132
21	33	37	35	735	61	47	401	73	82	203	980	77
22	61	39	36	668	61	47	95	318	71	105	875	54
23	52	37	36	668	61	444	67	428	44	54	195	41
24	47	34	34	635	57	570	126	146	39	42	99	37
25	47	30	34	401	55	510	117	97	37	34	59	34
26	65	27	34	146	54	146	114	87	33	27	41	28
27	61	27	150	111	51	108	95	374	23	22	30	26
28	59	27	139	199	49	114	82	275	20	22	24	25
29	51	27	136	401	-	120	75	108	16	26	22	24
30	37	31	129	5,000	-	99	69	51	14	26	24	22
31	41	-	348	3,120	-	82	-	46	-	25	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December 3-31, 1935	5,250	1,400	41	181	10,410
Calendar year					
January 1936	1,157	61	19	37.3	2,290
February	642	82	6	22.1	1,270
March	1,075	132	7	34.7	2,130
April	873.5	401	4.5	29.1	1,730
May	4,996	1,260	18	161	9,910
June	11,150	5,840	5	372	22,120
July	100.5	8	2	3.24	199
August	109.5	17	2	3.53	217
September	-	-	-	-	-
Water year					
October 1936	49,653	15,400	33	1,602	98,480
November	5,236	2,800	27	175	10,380
December	2,127	348	31	68.6	4,220
Calendar year					
January 1937	19,828	5,000	29	640	39,330
February	6,269	2,320	49	224	12,430
March	4,099	570	47	132	8,130
April	4,560	700	49	152	9,040
May	5,249	1,190	46	169	10,410
June	9,353	2,320	14	312	18,550
July	3,269.5	1,820	2	105	6,480
August	2,611	980	7	84.2	5,180
September	6,249	1,330	22	208	12,390
Water year 1936-37	118,503.5	15,400	.2	325	235,000

*Interpolated.

Neosho River near Iola, Kans.

Location.- Water-stage recorder, lat. 37°53', long. 95°26', in NE¼ sec. 9, T. 25 S., R. 18 E., half a mile below Elm Creek and 3 miles southwest of Iola.

Drainage area.- 3,795 square miles.

Records available.- August 1895 to November 1903, October 1917 to September 1937.

Average discharge.- 20 years (1917-37), 1,135 second-feet.

Extremes.- Maximum discharge during year, 13,000 second-feet June 10 (gage height, 16.04 feet); minimum, 7 second-feet Nov. 24; minimum gage height, 2.61 feet Aug. 9.
1895-1903, 1917-36: Maximum gage height, 33.2 feet Sept. 13, 1926 (discharge not determined, previously published estimate of 46,000 second-feet is too low); no flow for several days in September and October 1897, Aug. 19 to Sept. 15, Sept. 21, 22, 1936. Bank-full stage, 27 feet.

Remarks.- Records good except those for days of rapidly changing stage, Feb. 1-3, 8-12, Mar. 23, 24, which were computed on basis of incomplete recorder graph, observer's notes, and recorded range of stage and are fair.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	496	57	52	288	3,720	265	555	183	677	87	153	35
2	530	384	33	332	4,200	256	525	176	738	32	111	21
3	426	217	24	283	3,090	243	490	169	2,350	64	114	40
4	288	118	19	221	1,700	296	1,620	206	5,300	93	108	56
5	194	106	28	159	1,040	440	3,180	328	2,950	75	78	84
6	399	66	33	118	2,010	2,140	1,920	283	1,470	23	75	472
7	214	55	22	95	3,270	1,520	1,000	176	765	24	75	2,280
8	445	52	24	130	5,300	915	1,140	183	580	28	38	2,460
9	1,180	44	24	86	8,360	710	825	198	5,040	64	18	4,100
10	825	69	49	104	8,000	580	635	256	11,300	93	18	3,880
11	718	49	44	86	7,880	470	585	202	4,300	58	30	1,650
12	1,780	44	31	69	5,700	385	515	1,200	2,140	35	32	1,830
13	1,520	28	36	60	3,360	675	465	977	2,190	156	24	1,600
14	825	17	33	89	2,280	550	415	405	2,910	118	23	1,920
15	495	72	31	63	1,920	520	2,280	350	6,920	140	19	825
16	346	33	33	104	1,700	520	3,540	265	1,780	305	19	412
17	247	38	44	92	1,220	560	1,100	191	672	366	25	257
18	191	26	49	86	915	1,460	682	166	490	203	28	210
19	169	17	31	66	666	1,380	510	146	412	646	24	182
20	156	19	33	529	605	1,140	595	368	337	645	53	159
21	130	63	41	2,060	615	945	795	435	284	526	206	121
22	124	38	49	1,110	555	825	495	7,810	253	1,420	1,270	118
23	104	26	41	610	515	1,470	355	8,710	217	795	1,400	96
24	118	9	33	350	495	8,120	390	2,590	186	407	520	70
25	118	19	36	187	475	4,300	495	4,700	175	242	280	81
26	95	22	52	104	415	3,000	460	10,400	162	172	189	81
27	57	12	2,100	137	355	1,600	342	8,480	127	150	159	70
28	60	19	1,050	152	296	945	283	6,140	134	352	121	75
29	74	10	292	225	-	738	243	2,640	124	672	102	61
30	66	60	191	2,510	-	620	213	1,220	118	349	87	61
31	77	-	256	6,250	-	585	-	885	-	206	72	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	12,467	1,780	57	402	24,730
November	1,789	384	9	59.6	3,550
December	4,814	2,100	19	155	9,550
Calendar year 1936	73,451	3,340	0	214	155,600
January	16,755	6,250	60	540	33,230
February	70,657	8,360	296	2,523	140,100
March	38,173	8,120	243	1,231	75,720
April	26,648	3,540	213	888	52,860
May	60,438	10,400	146	1,950	119,900
June	55,101	11,300	118	1,837	109,300
July	8,546	1,420	23	276	16,950
August	5,471	1,400	18	176	10,850
September	23,307	4,100	21	777	46,230
Water year 1936-37	324,166	11,300	9	888	643,000

Neosho River near Parsons, Kans.

Location.- Water-stage recorder, lat. 37°20', long. 95°06', in NE¼ sec. 21, T. 31 S., R. 21 E., half a mile above mouth of Hickory Creek, three quarters of a mile (revised) above St. Louis-San Francisco Railway bridge, and 8½ miles (revised) east of Parsons.

Drainage area.- 4,828 square miles.

Records available.- October 1921 to September 1937.

Average discharge.- 16 years, 2,012 second-feet.

Extremes.- Maximum discharge during year, 26,500 second-feet June 15 (gage height, 24.45 feet); minimum, 19 second-feet Aug. 21 (gage height, 1.19 feet).
1921-37: Maximum discharge observed, 48,100 second-feet Nov. 24, 1928 (gage height 27.50 feet, at former site); no flow Aug. 28-31, Sept. 1-10, 12, 13, 1934, July 31 to Sept. 17, 1936. Bank-full stage, 24 feet.

Remarks.- Records good except days for which recorder graph was incomplete, Jan. 21-24, Feb. 2, 18-20 (computed from graph drawn on basis of observer's twice-daily gage readings and recorded range in stage), and those for days of rapidly changing stage, which are fair. Backwater may occur during flashy peaks on Hickory Creek.

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

1	14	2.5	297	5.0	1,610	9.0	4,790	16.0	12,900
1.3	27	3.0	495	6.0	2,310	10.0	5,740	18.0	15,500
1.6	65	3.5	715	7.0	3,080	12.0	7,900	20.0	18,100
2.0	142	4.0	975	8.0	3,900	14.0	10,300	22.0	21,000
								25.0	25,300

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	715	91	27	269	5,540	504	919	466	1,120	173	389	98
2	669	3,980	30	290	4,610	491	839	346	1,160	157	252	84
3	581	3,240	30	327	3,650	491	763	330	2,610	144	182	77
4	603	1,270	31	334	3,740	483	1,160	330	4,980	124	150	62
5	474	446	55	308	2,610	470	4,250	763	8,140	96	122	52
6	593	255	98	262	2,020	487	4,520	516	4,880	84	120	45
7	2,100	184	86	212	2,310	1,610	2,850	474	2,310	104	110	70
8	2,740	144	84	196	4,880	1,950	2,020	373	1,150	100	95	1,550
9	3,740	116	89	157	5,540	1,250	2,390	283	11,000	86	82	3,480
10	3,900	98	80	147	7,900	919	1,640	266	18,100	67	77	3,990
11	3,050	89	68	135	8,620	763	1,060	316	14,300	60	62	4,430
12	1,030	80	59	114	8,860	625	919	342	6,780	62	46	2,240
13	1,540	80	54	110	7,000	1,240	1,030	1,500	2,920	86	37	2,020
14	1,810	82	52	518	4,250	4,700	947	2,310	17,300	87	33	1,740
15	1,220	72	55	763	2,770	1,950	839	839	25,900	737	26	2,090
16	739	62	54	581	2,310	1,280	1,680	495	25,700	1,220	24	1,380
17	512	54	51	446	2,020	975	3,900	413	13,900	357	24	692
18	377	44	49	450	1,610	919	2,240	334	2,540	413	24	450
19	290	46	48	381	1,280	1,440	2,460	262	1,280	2,070	22	304
20	231	52	45	1,390	1,540	1,880	1,220	222	919	2,090	20	228
21	187	45	44	3,900	4,250	1,510	2,390	238	739	1,120	20	187
22	162	41	45	3,160	2,020	1,220	1,710	6,870	581	715	31	164
23	150	36	45	1,680	1,250	1,300	1,000	15,500	504	1,310	277	144
24	129	31	42	1,340	975	10,400	1,670	14,100	421	1,280	1,740	133
25	122	27	42	1,000	813	14,100	1,030	6,670	357	715	919	116
26	135	36	49	715	715	6,750	669	6,240	304	487	512	96
27	184	40	57	483	625	3,480	669	11,300	262	312	316	75
28	193	36	490	381	560	2,240	560	9,580	235	215	218	72
29	138	32	1,830	377	-	1,480	487	6,340	206	182	164	70
30	106	28	692	1,840	-	1,150	504	3,160	184	485	140	68
31	89	-	381	3,820	-	1,030	-	1,510	-	625	114	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	28,509	3,900	89	920	56,550
November	10,837	3,980	27	361	21,490
December	4,862	1,830	27	157	9,640
Calendar year 1936	136,161	4,430	0	372	270,100
January	26,086	3,900	110	841	51,740
February	94,268	8,860	560	3,367	187,000
March	69,087	14,100	470	2,229	137,000
April	48,335	4,520	487	1,611	95,870
May	92,688	15,500	222	2,990	183,800
June	170,782	25,900	184	5,693	338,700
July	15,763	2,090	60	508	31,270
August	6,348	1,740	20	205	12,590
September	26,207	4,430	45	874	51,980
Water year 1936-37	593,772	25,900	20	1,627	1,178,000

Neosho River near Grove, Okla.

Location.- Wire-weight gage, lat. 36°33'25", long. 94°44'45", in SE¼ sec. 27, T. 25 N., R. 23 E., 3 miles below Spring Branch and 3½ miles northwest of Grove. Chain gage at same site and datum used prior to Dec. 12, 1935.

Drainage area.- 10,000 square miles (revised).

Records available.- February 1925 to September 1937.

Average discharge.- 12 years, 6,609 second-feet.

Extremes.- Maximum and minimum discharges for water years 1932-33 to 1936-37 are given in the following table:

Water year	Maximum observed			Minimum observed		
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)	Gage height (feet)
1932-33	May 15	89,500	25.9	Oct. 22	345	0.24
1933-34	Sept. 30	21,300	10.4	Aug. 16	~~82~~ 37	-.35
1934-35	June 8	130,000	34.0	Oct. 16	670	.79
1935-36	Sept. 28	~~51,000~~	~~17.95~~ 17.3	Aug. 28	32	-.49
1936-37	June 11	70,100	21.88	Sept. 4	498	.54

1925-37: Maximum discharge observed, 133,000 second-feet Apr. 15, 1927 (gage height, 34.6 feet), from rating curve extended above 85,000 second-feet; minimum, 32 second-feet Aug. 28, 1936 (gage height, -0.49 foot).

Remarks.- Records fair except those for periods of ice effect, Jan. 25 to Feb. 5 and Feb. 16-21, 1936, which were estimated on basis of records for station on Arkansas River at Muskogee and are poor. Regulation at low stages by power plants upstream. Gage read once daily Jan. 1, 1933, to Sept. 30, 1935, Oct. 1, 1936, to July 6, 1937, and twice daily Oct. 1, 1935, to Sept. 30, 1936, July 7 to Sept. 30, 1937.

Discharge, in second-feet, 1932-37

1932-33

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	420	568	448	12,300	3,130	1,220	960	4,140	12,900	880	880	2,860
2	448	568	448	12,000	3,270	1,320	960	3,550	9,300	845	1,040	3,690
3	448	505	505	12,000	3,130	1,530	920	3,550	5,480	810	1,990	15,200
4	535	635	448	10,900	3,130	960	880	3,410	5,130	845	7,260	9,050
5	475	740	475	10,600	1,750	1,320	1,750	3,130	4,300	810	3,690	8,130
6	420	635	448	9,550	1,870	1,420	18,600	2,990	2,990	740	2,230	4,620
7	448	705	420	9,300	1,870	6,640	16,700	2,860	2,730	740	1,220	4,140
8	370	740	448	8,360	1,990	8,820	9,550	2,730	2,230	775	1,320	3,410
9	395	635	448	7,910	2,470	9,300	5,300	2,470	2,110	740	960	2,350
10	395	705	420	7,690	3,840	6,640	4,790	2,470	2,230	4,790	880	1,990
11	395	635	448	7,470	4,140	5,300	3,690	2,350	2,110	2,860	845	1,750
12	395	600	420	7,260	*3,700	3,550	3,270	7,050	1,990	1,530	810	1,530
13	395	505	420	6,040	3,270	3,410	3,270	38,800	1,870	1,320	645	1,220
14	370	505	420	5,850	2,110	2,860	3,130	83,100	1,750	2,110	810	1,180
15	395	448	475	5,660	1,320	2,350	2,860	89,500	1,640	1,750	1,040	1,220
16	370	420	568	5,480	1,640	2,110	5,300	87,000	1,530	1,750	960	1,130
17	370	420	535	5,130	1,870	2,230	15,200	30,400	1,420	810	845	1,040
18	370	420	568	4,140	1,750	2,230	9,550	21,300	1,320	880	845	1,000
19	370	420	600	3,840	1,530	2,230	7,470	12,300	1,220	960	810	1,220
20	370	420	600	3,550	1,530	2,110	10,400	14,300	1,130	960	810	1,530
21	370	448	568	3,410	1,420	2,230	28,200	14,900	1,040	920	880	1,220
22	345	420	448	2,990	1,220	1,750	36,300	13,700	1,000	880	845	1,040
23	370	420	2,110	3,270	1,180	1,420	32,700	13,100	960	810	3,270	1,000
24	370	448	47,200	3,690	1,080	1,320	21,300	12,000	920	705	1,750	920
25	600	475	69,200	5,660	1,130	1,220	12,900	9,820	880	775	960	880
26	1,320	448	33,900	7,690	1,040	1,180	15,200	8,130	960	810	920	810
27	1,130	475	16,700	6,040	1,420	1,130	10,100	7,260	1,040	1,040	1,220	920
28	1,220	475	8,130	5,130	1,990	1,040	7,260	9,300	1,000	960	2,350	1,750
29	1,040	475	5,660	3,690	-	1,040	5,300	11,700	920	810	1,530	4,460
30	1,000	448	5,130	3,410	-	1,000	4,460	18,600	880	775	2,600	4,140
31	920	-	5,130	3,550	-	960	-	17,700	-	810	4,620	-

*Interpolated.

Discharge, in second-feet, Neosho River near Grove, Okla., 1932-37--Continued

1933-34

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,550	1,320	705	1,220	880	775	1,420	960	670	435	138	378
2	2,990	1,320	670	1,040	810	740	1,420	960	635	465	130	435
3	3,130	1,750	635	1,000	740	810	1,530	880	600	378	122	1,270
4	2,990	2,600	600	1,220	670	960	1,750	880	600	334	114	1,220
5	2,860	3,130	670	1,080	705	1,320	1,990	2,350	670	322	106	1,180
6	2,350	2,600	670	1,040	740	2,110	7,690	1,750	600	300	100	1,000
7	1,870	2,860	635	1,990	740	1,870	7,910	4,140	565	290	92	845
8	1,220	2,470	740	4,790	880	1,640	9,820	2,860	530	280	86	775
9	1,040	2,350	670	3,690	1,000	1,320	9,300	2,110	498	260	100	740
10	1,000	2,110	635	3,270	880	1,270	7,470	2,600	530	250	92	635
11	920	1,990	530	2,350	740	1,130	6,240	2,110	635	240	86	530
12	880	1,640	530	2,600	705	960	5,300	1,750	600	230	78	498
13	845	1,320	600	2,600	635	740	3,270	1,530	670	220	72	565
14	775	1,080	565	2,230	600	670	2,990	1,080	880	250	72	5,300
15	845	1,220	530	1,870	600	705	3,690	1,420	1,530	240	68	14,900
16	810	1,130	565	1,750	600	705	4,960	3,840	1,180	250	62	19,300
17	810	1,080	600	2,230	565	670	6,240	13,100	1,640	250	76	9,300
18	810	1,040	2,350	2,230	600	705	4,300	15,800	4,140	240	260	4,790
19	880	1,000	6,640	1,420	635	705	2,990	9,550	2,990	240	240	1,750
20	3,550	960	8,130	1,530	670	740	1,990	2,350	2,730	240	280	1,870
21	2,860	920	7,910	1,320	670	740	1,870	2,230	2,230	230	260	1,870
22	8,360	880	7,260	1,130	705	740	1,640	2,230	1,870	250	250	2,110
23	10,400	845	5,300	1,180	670	810	1,320	1,990	1,530	240	240	1,990
24	6,040	810	5,130	1,220	740	845	1,320	1,750	1,130	230	230	1,640
25	3,690	810	3,690	1,270	810	880	1,220	1,530	1,040	220	240	1,530
26	3,410	810	2,470	1,530	880	920	1,130	1,320	740	210	250	1,420
27	3,270	810	2,230	1,130	810	960	1,040	1,130	565	200	270	1,320
28	2,350	775	1,990	1,080	810	1,000	1,320	960	530	190	334	1,420
29	1,750	740	1,750	1,040	-	1,040	1,180	880	465	182	405	1,990
30	1,530	740	1,530	1,040	-	1,270	1,040	810	435	164	405	21,300
31	1,420	-	1,320	1,000	-	1,420	-	740	-	146	378	-

1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,360	775	6,440	2,470	2,350	1,750	4,960	4,460	62,500	19,900	1,270	1,870
2	3,840	705	6,640	1,750	2,730	1,750	4,790	4,140	63,400	14,800	1,180	1,420
3	1,750	670	5,850	1,640	2,990	1,750	4,460	4,300	80,700	11,800	1,040	1,180
4	1,130	1,180	6,040	1,270	3,130	2,230	3,550	4,460	73,000	8,480	1,040	1,000
5	1,080	3,840	4,790	1,420	2,990	4,460	3,270	5,300	63,900	8,480	2,920	2,240
6	1,080	2,230	4,620	1,530	2,860	6,240	3,130	4,460	80,200	7,350	2,640	7,350
7	1,040	1,750	4,460	1,750	3,840	5,660	7,260	4,790	102,000	6,710	2,500	5,490
8	960	1,270	3,550	5,300	6,240	6,040	7,050	3,270	130,000	5,690	1,320	4,550
9	920	1,130	3,130	14,900	14,900	6,240	5,480	3,270	104,000	5,110	1,270	3,530
10	880	920	2,230	10,100	9,550	12,000	5,660	3,270	70,600	4,730	1,080	3,220
11	845	845	2,110	6,640	5,130	29,700	5,130	3,410	53,200	4,550	1,040	2,500
12	775	775	2,110	5,850	4,140	90,500	4,790	4,140	48,100	4,190	1,040	1,420
13	775	670	2,110	3,990	3,270	52,700	4,460	4,790	45,800	3,690	1,000	1,000
14	705	600	2,110	2,350	4,460	20,600	3,990	3,690	50,000	3,850	1,040	960
15	705	565	1,990	2,110	5,480	15,500	3,690	8,820	60,200	3,220	2,370	845
16	670	600	845	1,990	4,790	10,900	3,690	17,300	51,800	2,920	1,220	880
17	705	635	1,640	4,140	4,140	9,820	3,270	15,200	53,600	2,640	960	740
18	740	670	1,530	6,040	3,130	5,480	3,130	12,000	65,300	2,500	960	1,040
19	18,600	775	1,530	4,140	2,860	4,960	3,270	20,900	57,300	2,780	380	845
20	9,300	1,180	1,420	2,990	2,600	4,460	3,270	38,400	41,800	2,370	920	740
21	4,460	9,550	1,530	3,690	2,470	4,140	2,990	42,700	43,600	2,500	960	740
22	2,730	29,000	1,640	5,660	1,990	3,990	2,730	35,500	61,100	2,500	880	775
23	1,750	35,100	1,750	4,460	1,870	4,140	2,730	38,400	24,800	1,870	845	1,130
24	1,270	27,200	2,350	3,990	1,750	10,400	1,990	37,600	15,600	1,990	775	880
25	920	20,600	1,870	3,410	1,990	27,900	1,750	34,300	10,500	2,110	775	920
26	920	14,600	1,530	3,270	2,470	12,300	2,730	27,500	16,200	1,870	810	1,530
27	920	12,000	1,420	3,270	2,730	8,130	3,270	12,600	37,100	1,870	845	1,220
28	960	10,100	1,420	3,270	1,990	6,240	4,140	7,690	32,300	1,530	2,370	1,130
29	920	7,260	1,640	3,130	-	5,130	4,140	30,400	29,000	1,220	2,110	1,220
30	845	7,050	1,990	2,990	-	4,790	4,140	48,600	35,100	1,530	1,420	1,130
31	810	-	1,640	2,990	-	4,790	-	53,200	-	1,180	920	-

Discharge, in second-feet, of Neosho River near Grove, Okla., 1932-37--Continued

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	810	4,550	21,500	1,750	1,000	2,240	920	2,500	1,750	334	159	130
2	920	4,730	13,900	1,640	1,000	1,750	810	15,900	1,320	10,500	154	122
3	810	5,690	8,480	1,530	1,000	1,640	810	9,210	960	4,730	150	159
4	775	11,000	4,550	2,780	1,100	1,420	810	5,490	880	2,110	159	225
5	775	20,500	4,020	3,850	1,200	1,420	775	4,370	920	1,180	159	177
6	740	25,400	7,350	3,370	1,320	1,420	670	3,370	1,990	960	172	177
7	810	22,800	14,500	2,640	1,320	1,130	705	2,920	4,920	775	177	186
8	880	15,000	11,800	2,780	1,180	1,130	670	3,370	3,690	670	168	177
9	1,040	8,020	9,210	2,110	1,270	1,080	705	2,640	3,370	530	177	172
10	1,270	6,500	7,130	2,110	1,270	1,130	740	2,500	1,750	565	186	96
11	1,080	13,100	6,090	1,990	1,180	1,130	880	2,780	1,220	498	186	118
12	960	16,800	5,300	1,750	1,080	1,040	845	2,500	1,530	465	186	215
13	960	11,500	5,110	1,530	1,320	1,000	775	3,850	1,220	378	177	142
14	1,000	6,500	4,550	1,530	1,270	1,080	670	3,530	1,080	350	103	154
15	3,530	4,730	4,190	1,750	1,080	1,130	740	3,690	880	339	89	154
16	3,220	4,020	3,690	1,420	1,100	1,080	670	3,070	740	306	106	168
17	1,180	3,370	3,370	1,530	1,150	1,040	565	2,500	740	300	126	255
18	1,040	3,220	3,070	1,870	1,200	1,000	600	2,240	600	285	103	565
19	1,530	3,850	2,920	1,990	1,200	810	705	1,320	530	275	68	960
20	4,550	3,070	2,780	1,420	1,200	775	670	1,420	530	260	65	1,220
21	6,500	2,920	2,640	1,420	1,150	775	705	1,530	465	255	62	1,530
22	7,350	2,500	2,500	1,320	1,080	810	670	1,320	465	255	65	670
23	8,020	2,240	2,110	1,320	1,000	880	600	1,270	465	260	70	1,220
24	12,300	2,240	2,110	1,130	1,040	880	670	1,270	405	260	78	4,020
25	15,000	1,750	1,870	1,050	960	1,750	565	1,220	378	255	82	2,920
26	12,600	2,640	1,870	1,000	775	1,420	565	1,530	328	255	70	4,370
27	6,290	5,110	1,750	1,000	3,020	1,180	600	1,220	306	250	44	32,300
28	4,190	15,900	1,750	1,000	4,730	1,130	2,500	1,990	328	220	46	45,800
29	3,070	22,100	1,180	1,000	2,780	1,040	8,720	3,370	317	200	82	43,600
30	3,530	21,800	1,420	1,000	-	1,000	4,920	2,920	317	177	114	20,800
31	3,690	-	1,750	1,000	-	845	-	1,990	-	168	118	-

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,200	1,750	1,080	5,690	42,700	3,370	3,690	6,710	5,110	1,530	1,420	530
2	6,090	5,690	880	5,300	22,800	3,070	3,530	5,490	4,020	1,530	1,420	530
3	5,110	44,900	845	5,490	16,500	3,530	3,370	4,730	2,640	1,220	1,270	600
4	4,370	47,700	880	5,490	15,300	3,850	3,370	3,850	14,500	1,130	1,080	530
5	3,690	19,600	920	4,920	17,100	4,550	2,920	3,370	11,800	1,080	2,110	635
6	4,550	8,480	880	4,730	17,700	3,690	3,220	3,690	11,000	1,320	4,550	775
7	6,090	5,110	845	4,920	14,800	3,220	3,850	3,850	8,960	1,990	2,550	1,180
8	39,200	4,920	920	4,920	12,000	2,640	6,290	4,730	5,300	1,530	1,420	1,530
9	36,700	4,020	1,040	5,690	10,200	4,730	5,110	2,370	9,710	1,320	1,130	7,790
10	23,100	3,370	1,080	8,480	8,960	3,850	4,020	1,530	52,700	1,270	1,080	40,500
11	15,000	3,070	1,080	7,130	10,700	4,370	5,110	1,750	70,100	1,180	960	21,500
12	12,000	2,110	1,040	4,730	12,000	4,550	5,890	1,990	53,600	1,040	810	12,000
13	7,790	1,990	1,000	9,460	15,000	4,730	5,490	3,220	32,000	920	635	7,570
14	5,490	2,240	960	23,400	12,800	6,290	4,550	5,110	10,700	920	845	4,370
15	5,890	2,110	920	52,300	9,960	12,800	6,290	4,920	26,500	920	810	4,190
16	5,110	2,110	880	40,500	7,130	8,480	6,500	4,020	61,100	1,080	775	3,850
17	4,020	1,990	845	32,000	6,290	7,570	5,690	3,690	59,700	1,640	740	3,530
18	3,370	1,750	810	15,600	5,690	6,500	5,110	4,020	41,800	5,490	705	2,500
19	2,500	1,640	810	11,200	5,110	6,290	4,370	3,690	27,900	20,500	775	1,990
20	2,780	1,640	810	10,500	5,890	6,090	5,690	2,240	7,130	22,800	740	1,640
21	2,500	1,320	810	12,000	6,920	5,110	13,100	2,920	4,920	11,500	740	1,420
22	2,370	1,000	740	14,500	16,500	4,370	26,500	5,890	4,730	5,300	600	1,220
23	2,110	1,080	775	20,200	11,000	4,730	14,800	20,800	3,850	3,530	530	1,130
24	2,240	1,000	775	17,700	6,290	4,920	12,600	25,100	3,070	2,370	635	920
25	3,370	960	775	11,500	5,690	23,400	9,960	20,800	3,070	3,220	705	920
26	6,500	960	1,180	8,020	4,730	20,500	7,130	12,600	2,240	2,240	2,370	1,320
27	5,110	880	1,180	5,490	4,370	13,900	5,490	9,960	1,990	1,990	1,320	845
28	3,850	845	5,110	7,790	3,690	9,460	4,730	10,700	1,870	1,530	960	810
29	3,070	845	4,730	10,700	-	6,500	4,370	12,300	1,750	1,420	775	810
30	2,500	880	6,920	15,300	-	5,490	4,920	10,500	1,420	2,500	670	705
31	2,110	-	7,130	53,600	-	4,550	-	8,020	-	1,750	635	-

Discharge, in second-feet, Neosho River near Grove, Okla., 1932-37--continued

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1932	16,839	1,320	345	543	33,400
November	15,761	740	420	525	31,200
December	203,738	69,200	420	6,570	404,000
Calendar year 1932	1,289,386	69,200	345	3,523	2,557,000
January 1933	203,560	12,300	2,990	6,566	403,700
February	59,790	4,140	1,040	2,135	118,600
March	81,840	9,300	960	2,640	162,300
April	298,270	36,300	880	9,942	591,600
May	553,610	89,500	2,350	17,860	1,098,000
June	74,980	12,900	880	2,499	148,700
July	36,200	4,790	705	1,168	71,800
August	51,035	7,260	810	1,646	101,200
September	85,400	15,200	810	2,847	169,400
Water year 1932-33	1,681,023	89,500	345	4,606	3,334,000
October 1933	79,205	10,400	775	2,555	157,100
November	43,110	3,130	740	1,437	85,510
December	68,250	8,130	530	2,202	135,400
Calendar year 1933	1,635,250	89,500	530	4,480	3,243,000
January 1934	54,090	4,790	1,000	1,745	107,300
February	20,490	1,000	565	732	40,640
March	31,170	2,110	670	1,005	61,820
April	105,350	9,820	1,040	3,512	209,000
May	87,590	15,800	740	2,825	173,700
June	33,428	4,140	435	1,114	66,300
July	8,016	465	146	259	15,900
August	5,632	405	62	182	11,170
September	103,871	21,300	378	3,462	206,000
Water year 1933-34	640,202	21,300	62	1,754	1,270,000
October 1934	71,365	18,600	670	2,302	141,600
November	194,245	35,100	565	6,475	385,300
December	83,925	6,640	845	2,707	166,500
Calendar year 1934	799,172	35,100	62	2,190	1,585,000
January 1935	122,500	14,900	1,270	3,952	243,000
February	108,840	14,900	1,750	3,887	215,900
March	384,690	90,500	1,750	12,410	763,000
April	118,910	7,260	1,750	3,964	235,900
May	538,860	53,200	3,270	17,380	1,069,000
June	1,662,700	130,000	10,500	55,420	3,298,000
July	145,930	19,900	1,180	4,707	289,400
August	40,400	2,920	775	1,303	80,100
September	53,495	7,350	740	1,783	106,100
Water year 1934-35	3,525,860	130,000	565	9,660	6,994,000
October 1935	110,420	15,000	740	3,562	219,000
November	273,550	25,400	1,750	9,118	542,600
December	164,460	21,500	1,180	5,305	326,200
Calendar year 1935	3,724,755	130,000	740	10,205	7,388,000
January 1936	53,580	3,850	1,000	1,728	106,300
February	39,975	4,730	775	1,378	79,290
March	36,155	2,240	775	1,166	71,710
April	35,250	8,720	565	1,175	69,920
May	98,800	15,900	1,220	3,187	196,000
June	34,394	4,920	306	1,146	68,220
July	28,365	10,500	168	915	56,260
August	3,701	186	44	119	7,340
September	162,802	45,800	96	5,427	322,900
Water year 1935-36	1,041,452	45,800	44	2,845	2,066,000
October 1936	242,780	39,200	2,110	7,832	481,500
November	175,960	47,700	845	5,865	349,000
December	48,650	7,130	740	1,569	96,500
Calendar year 1936	960,412	47,700	44	2,624	1,905,000
January 1937	439,250	53,600	4,730	14,170	871,200
February	327,820	42,700	3,690	11,710	650,200
March	207,100	23,400	2,640	6,681	410,800
April	197,660	26,500	2,920	6,589	392,100
May	214,560	25,100	1,530	6,921	425,600
June	545,180	70,100	1,420	18,170	1,081,000
July	107,760	22,800	920	3,476	213,700
August	35,715	4,550	530	1,152	70,840
September	127,840	40,500	530	4,261	253,600
Water year 1936-37	2,670,275	70,100	530	7,316	5,296,000

Cottonwood River at Cottonwood Falls, Kans.

Location.- Water-stage recorder, lat. 38°22', long. 96°31', in NE¼ sec. 28, T. 19 S., R. 8 E., 1 mile east of Cottonwood Falls and 3½ miles above mouth of South Fork.

Drainage area.- 1,444 square miles.

Records available.- February 1935 to September 1937. April 1932 to February 1935 at site in Cottonwood Falls.

Extremes.- Maximum discharge during year, 6,570 second-feet Feb. 8 (gage height, 9.58 feet), from rating curve extended above 2,500 second-feet; minimum, 5 second-feet Aug. 19 (gage height, 1.75 feet).
1932-37: Maximum discharge observed, 11,800 second-feet July 6, 1932 (gage height, 20.92 feet, former site and datum); minimum, 1 second-foot Aug. 15 to Sept. 13, 1934, Sept. 19-23, 1936.

Remarks.- Records good except those for days for which recorder graph was incomplete, Feb. 10, 11, and those for period of backwater effect from South Fork of Cottonwood River, Sept. 6-8, which were computed from effective gage-height graph based on auxiliary gage readings at former station, observer's notes, and weather records, and are poor. Backwater sometimes occurs during flashy peaks on South Fork of Cottonwood River.

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

1.7	3	3.0	313	5.0	1,830	8.0	5,070
1.9	12	3.5	600	6.0	2,970	9.0	6,040
2.2	57	4.0	925	7.0	3,970	10.0	6,930
2.5	127						

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	27	21	24	1,030	61	107	61	93	12	55	19
2	51	34	20	27	561	61	102	57	187	12	34	17
3	37	30	18	29	275	75	100	57	217	12	22	15
4	29	27	18	27	266	149	97	57	147	12	20	10
5	24	26	17	26	638	323	90	57	102	11	16	322
6	24	27	16	24	3,640	271	86	57	79	11	18	1,000
7	24	27	17	32	3,530	209	84	57	66	11	16	1,300
8	29	24	18	30	5,590	147	81	66	102	16	11	450
9	1,440	24	20	30	4,190	117	79	66	545	61	10	1,410
10	1,330	22	24	30	2,760	100	77	61	1,380	27	9	1,330
11	743	22	26	29	600	88	75	57	1,100	20	8	1,950
12	280	22	29	26	458	84	70	53	285	16	7	1,380
13	152	22	27	24	475	90	199	49	161	14	7	245
14	110	20	26	20	834	88	434	45	117	16	7	127
15	88	20	24	19	426	84	299	41	107	37	7	90
16	75	21	20	20	323	79	147	43	93	32	6	72
17	66	17	19	19	194	79	102	39	95	43	6	57
18	59	17	20	18	138	93	84	34	79	63	5	47
19	51	21	20	18	120	165	77	37	66	1,310	26	37
20	45	21	20	18	112	266	72	32	53	1,270	806	35
21	39	20	20	19	107	194	81	35	47	285	314	34
22	35	21	20	19	95	147	316	896	45	124	88	29
23	32	24	19	19	84	147	253	902	39	81	72	26
24	29	26	20	17	81	187	127	202	34	59	45	24
25	30	27	20	19	72	329	95	611	24	357	27	19
26	30	26	21	20	70	245	77	1,580	21	1,030	17	17
27	30	24	21	152	66	168	70	266	19	237	16	17
28	29	22	22	678	64	130	68	161	17	100	19	16
29	27	21	22	860	-	114	66	147	14	81	35	16
30	29	22	26	1,500	-	112	64	122	12	53	39	15
31	27	-	26	2,330	-	107	-	95	-	75	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,073	1,440	24	164	10,060
November	704	34	17	23.5	1,400
December	657	29	16	21.2	1,300
Calendar year 1936	24,640	3,200	1	67.3	48,900
January	6,123	2,330	17	198	12,140
February	26,799	5,590	64	957	53,160
March	4,509	329	61	145	8,940
April	3,679	434	64	123	7,300
May	6,043	1,580	32	195	11,990
June	5,346	1,380	12	178	10,600
July	5,488	1,310	11	177	10,890
August	1,794	806	5	57.9	3,560
September	10,126	1,950	10	338	20,080
Water year 1936-37	76,341	5,590	5	209	151,400

Spring River near Waco, Mo.

Location.- Water-stage recorder, lat. 37°14'45", long. 94°33'55", on line between SE¼ sec. 7 and NE¼ sec. 18, T. 29 N., R. 33 W., at county highway bridge, 1½ miles east of Waco. Zero of gage is 833.55 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,160 square miles.

Records available.- April 1924 to September 1937.

Average discharge.- 13 years, 901 second-feet.

Extremes.- Maximum discharge during year, 17,200 second-feet June 10 (gage height, 19.42 feet; minimum, 65 second-feet Sept. 27 (gage height, 1.38 feet).
1924-37: Maximum discharge, 57,400 second-feet Aug. 17, 1927 (gage height, 28.6 feet, from floodmarks); minimum, 11 second-feet July 24, 1934 (gage height, 0.80 foot).

Remarks.- Records good. Discharge for periods of missing gage heights, Oct. 1, July 25 to Aug. 1, computed on basis of weather records and recorded range of stage. Flow slightly regulated by operation of small mills.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,340	442	222	1,030	6,760	642	483	2,400	794	325	186	92
2	794	6,970	204	1,780	4,250	642	462	1,870	442	325	173	93
3	691	12,300	198	1,940	2,080	618	462	964	848	306	187	92
4	594	8,150	201	1,150	1,540	618	442	742	1,280	288	866	92
5	571	3,000	207	691	1,600	618	442	642	1,030	271	2,390	238
6	794	1,030	254	618	2,710	594	422	742	691	306	1,280	195
7	8,250	848	288	594	3,030	548	383	571	504	904	462	139
8	7,910	742	254	742	3,600	548	383	504	422	442	222	167
9	6,650	691	238	1,800	3,350	504	462	462	9,320	306	167	159
10	3,850	618	222	1,600	2,310	462	526	442	16,300	254	164	121
11	1,670	548	198	1,340	1,540	462	442	422	14,500	254	144	134
12	1,030	526	192	964	1,340	442	442	1,020	6,520	254	125	125
13	904	483	175	1,570	1,150	1,210	2,030	2,550	2,010	271	125	106
14	794	462	159	10,200	1,090	2,950	2,870	1,410	4,260	254	119	137
15	691	422	170	12,200	964	1,870	1,600	691	11,600	254	106	116
16	618	402	170	8,530	904	848	642	526	11,900	222	106	90
17	571	383	162	4,720	794	691	462	742	5,380	402	132	92
18	483	344	175	2,390	794	642	402	691	1,600	364	112	112
19	462	325	167	1,670	742	594	402	1,030	1,030	1,710	106	86
20	462	306	164	3,520	1,090	526	867	422	848	2,470	108	81
21	442	306	167	3,350	2,870	504	3,390	402	794	1,410	108	83
22	504	288	173	2,010	2,240	462	3,700	3,600	691	548	104	97
23	571	271	159	1,150	1,280	483	1,600	3,960	618	364	108	97
24	442	271	159	1,090	964	2,390	964	2,070	548	288	114	85
25	548	254	154	964	794	1,940	848	848	504	275	106	80
26	1,670	238	175	848	742	964	691	642	462	262	95	68
27	1,340	238	1,670	794	691	642	618	642	422	250	93	66
28	848	238	1,410	794	642	548	642	526	402	237	97	93
29	618	207	794	848	-	526	1,030	462	383	224	102	90
30	571	207	1,220	5,940	-	504	4,960	442	364	211	80	85
31	483	-	1,670	10,800	-	483	-	504	-	198	93	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	47,166	8,250	442	1,521	1.31	1.51	93,550
November	41,610	12,300	207	1,384	1.19	1.33	82,330
December	11,771	1,670	154	380	.328	.38	23,350
Calendar year 1936	167,943	12,300	16	459	.397	5.39	333,100
January	87,637	12,200	594	2,827	2.44	2.81	173,800
February	51,861	6,760	642	1,852	1.60	1.67	102,900
March	25,475	2,950	442	822	.708	.82	50,530
April	33,069	4,960	383	1,102	.950	1.06	65,590
May	32,941	3,960	402	1,063	.916	1.06	65,340
June	96,467	16,300	364	3,216	2.77	3.09	191,300
July	14,449	2,470	198	466	.402	.46	28,660
August	8,380	2,390	80	270	.233	.27	16,620
September	3,311	238	66	110	.095	.11	6,570
Water year 1936-37	454,037	16,300	66	1,244	1.07	14.57	900,500

Turkey Creek at Joplin, Mo.

Location.- Water-stage recorder, lat. 37°06'50", long. 94°31'35", in NW¼NW¼ sec. 34, T. 28 N., R. 33 W., 80 feet below bridge on Lone Elm Road, a quarter of a mile below Joplin Creek and about 1 mile northwest of Joplin. Zero of gage is 903.98 feet above mean sea level (general adjustment of 1929).

Drainage area.- 33 square miles.

Records available.- July 1932 to September 1937.

Extremes.- Maximum discharge during year, 1,980 second-feet Oct. 6 (gage height, 9.86 feet) from rating curve extended above 700 second-feet; minimum discharge, 0.6 second-foot Sept. 30; minimum gage height, 0.31 foot Dec. 25.
1932-37: Maximum discharge, that of Oct. 6, 1936; no flow for several days during July and August 1934, July to September 1936.

Remarks.- Records good. Joplin storm sewers divert considerable flow around gage.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	21	7.7	18	69	15	15	13	18	14	3.4	1.9
2	5.2	181	11	25	48	15	14	13	19	13	2.9	1.1
3	3.9	50	8.1	15	43	16	14	12	21	14	2.9	1.4
4	3.2	32	7.4	13	36	15	15	12	35	13	41	6.4
5	2.9	26	19	13	34	14	14	12	20	13	6.4	5.3
6	397	24	11	12	34	14	13	11	18	18	4.7	2.4
7	460	22	7.9	12	32	13	17	10	17	13	4.2	2.2
8	397	20	7.4	49	30	13	17	11	17	13	3.7	5.3
9	142	19	7.4	29	23	12	15	10	110	12	3.2	9.6
10	177	18	7.0	22	21	12	14	9.8	133	13	2.9	2.7
11	71	17	6.2	21	20	12	14	9.8	40	13	3.2	1.9
12	52	15	5.8	23	19	11	13	32	31	12	2.7	1.4
13	41	15	5.6	147	18	40	13	15	24	12	2.4	1.3
14	32	14	5.8	434	17	19	13	12	26	15	2.4	1.3
15	29	14	5.8	122	16	17	12	12	55	11	1.9	1.3
16	26	13	6.0	73	16	16	12	12	32	10	1.8	1.0
17	24	13	5.8	65	16	16	12	73	26	13	3.2	1.0
18	22	12	7.2	47	14	15	12	24	23	19	2.1	1.1
19	20	11	6.4	39	15	14	11	21	22	66	2.4	1.0
20	18	11	5.6	46	36	13	39	19	20	9.5	2.4	.8
21	44	10	5.6	32	22	12	23	26	19	6.7	3.4	.8
22	26	9.5	5.8	27	19	11	15	85	19	5.6	2.7	.8
23	18	9.8	6.0	25	18	20	15	34	17	5.0	2.7	.8
24	17	8.6	5.6	24	17	32	14	26	16	5.6	2.2	1.4
25	92	9.0	5.4	22	16	18	13	24	15	22	2.1	1.6
26	55	9.0	16	21	15	17	13	24	15	6.1	1.6	1.0
27	34	8.1	31	24	16	16	13	21	14	5.3	1.6	1.0
28	30	8.6	14	30	16	16	13	20	14	4.7	1.9	.8
29	27	8.6	13	55	-	16	19	19	14	4.5	1.6	.8
30	23	7.9	27	446	-	16	15	19	14	4.5	1.4	.7
31	21	-	14	132	-	15	-	19	-	4.2	1.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	2,318.6	460	2.9	74.8	2.27	2.62	4,600
November	637.1	181	7.9	21.2	.642	.72	1,260
December	297.5	31	5.4	9.60	.291	.34	590
Calendar year 1936	5,464.6	460	0	14.9	.452	6.17	10,830
January	2,063	446	12	66.5	2.02	2.33	4,090
February	696	69	14	24.9	.755	.79	1,380
March	501	40	11	16.2	.491	.57	994
April	452	39	11	15.1	.458	.51	897
May	660.6	85	9.8	21.3	.645	.74	1,310
June	867	133	14	28.9	.876	.98	1,720
July	390.7	66	4.2	12.6	.382	.44	775
August	122.8	41	1.4	3.96	.120	.14	244
September	60.1	9.6	.7	2.00	.061	.07	119
Water year 1936-37	9,066.4	460	.7	24.8	.752	10.25	17,980

Shoal Creek near Joplin, Mo.

Location.- Water-stage recorder, lat. 37°02'05", long. 94°32'30", in NE¼SW¼ sec. 28, T. 27 N., R. 33 W., at Grand Falls hydroelectric plant of Empire District Electric Co., 4 miles south of Joplin. Zero of gage is 857.28 feet above mean sea level (general adjustment of 1929).

Drainage area.- 458 square miles.

Records available.- April 1924 to September 1937.

Average discharge.- 13 years, 427 second-feet.

Extremes.- Maximum discharge during year, 5,330 second-feet June 10 (gage height, 8.92 feet), from rating curve extended above 2,000 second-feet; minimum, 10 second-feet Dec. 25 (gage height, 0.83 foot); minimum daily discharge, 89 second-feet Sept. 4. 1924-37: Maximum discharge, about 26,900 second-feet Mar. 12, 1935 (gage height, 18.25 feet), from rating curve extended above 9,000 second-feet; minimum, 2.8 second-feet Dec. 15, 1934, during repair of turbines; minimum gage height, 0.60 foot Aug. 4, 1936; minimum daily discharge, 16 second-feet Aug. 6, 1934.

Remarks.- Records good. Discharge for Oct. 10 estimated. Flow regulated by Grand Falls hydroelectric plant.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	602	331	182	348	2,080	397	342	449	441	252	173	111
2	498	787	186	587	1,430	427	330	427	301	239	176	105
3	457	232	176	499	1,170	396	322	404	291	230	163	108
4	414	880	165	437	1,020	413	312	395	302	223	372	89
5	352	670	175	400	964	391	307	428	303	218	990	191
6	1,590	586	194	342	1,085	380	270	442	346	228	383	163
7	3,020	521	183	338	961	363	295	357	293	205	257	144
8	3,090	480	167	362	945	356	294	340	271	205	220	124
9	1,400	443	167	554	1,340	346	297	325	650	209	199	1,400
10	1,200	399	170	615	893	336	306	295	3,510	212	174	3,870
11	812	380	160	549	806	332	280	298	2,000	207	158	2,140
12	698	347	149	512	758	326	282	346	790	204	162	747
13	610	332	146	567	713	355	268	542	644	184	151	559
14	553	305	154	1,820	663	379	275	376	578	186	134	491
15	502	295	152	3,340	628	411	273	307	539	182	140	426
16	476	283	138	1,650	588	370	253	303	861	170	135	347
17	426	252	135	1,200	565	360	238	284	783	165	157	307
18	373	262	150	1,020	545	357	278	279	557	229	152	272
19	354	257	142	880	523	360	235	270	494	596	129	271
20	339	245	146	799	535	349	341	251	451	656	141	246
21	329	229	112	772	572	332	3,290	250	415	347	158	217
22	316	221	141	716	553	308	1,490	310	357	265	129	206
23	282	224	135	636	507	316	920	661	366	236	136	195
24	280	222	119	612	491	387	777	475	340	209	131	186
25	311	293	134	558	467	530	701	319	316	270	125	176
26	359	201	137	528	467	441	615	313	302	240	119	167
27	397	297	195	498	451	404	564	284	283	208	111	159
28	330	289	330	496	436	381	521	263	269	181	111	154
29	281	186	254	507	-	348	491	262	275	223	104	158
30	333	176	268	1,360	-	338	460	255	247	208	114	142
31	224	-	379	3,490	-	357	-	460	-	187	111	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October	21,208	3,090	224	684	1.49	1.72	42,070
November	10,625	880	176	354	.773	.88	21,070
December	5,444	379	112	176	.384	.44	10,800
Calendar year 1936	79,149	3,090	23	216	.472	6.41	157,000
January	26,992	3,490	338	871	1.90	2.19	53,540
February	22,156	2,080	436	791	1.73	1.80	43,950
March	11,546	530	308	372	.812	.94	22,900
April	15,627	3,290	235	521	1.14	1.27	31,000
May	10,970	661	250	354	.773	.89	21,760
June	17,575	3,510	247	586	1.28	1.43	34,860
July	7,574	656	165	244	.533	.61	15,020
August	5,915	990	104	191	.417	.48	11,730
September	13,871	3,870	89	462	1.01	1.13	27,510
Water year 1936-37	169,503	3,870	89	464	1.01	13.76	336,200

Illinois River near Tahlequah, Okla.

Location.- Wire-weight gage, lat. 35°55', long. 94°55', in SE¼ sec. 26, T. 17 N., R. 22 E., 2¾ miles northeast of Tahlequah and 5 miles above Barren Fork.

Drainage area.- 933 square miles.

Records available.- December 1935 to September 1937.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1936, 2,480 second-feet Sept. 29 (gage height, 8.82 feet); minimum, 5 second-feet Aug. 31 (gage height, 5.67 feet).

Maximum discharge observed during water year 1936-37, 14,500 second-feet Jan. 16 (gage height, 13.65 feet), from rating curve extended above 3,700 second-feet; minimum, 83 second-feet Aug. 18, 19 (gage height, 6.08 feet).

Maximum stages known, 26 feet on unknown date, 22.3 feet in 1927.

Remarks.- Records good except those for Sept. 16-21, 1936 (estimated from rainfall records), and those above 4,000 second-feet, which are poor. Gage read twice daily.

Rating tables, 1935-37 (gage height, in feet, and discharge, in second-feet)

Dec.14,1935, to Jan.16,1937		Jan.17,1937, to Sept.30,1937	
5.6	0	6.0	65
5.8	19	6.3	145
6.0	54	6.6	260
6.3	128	7.0	480
6.6	236	7.5	870
7.0	455	8.0	1,380
7.5	855	9.0	2,800
8.0	1,380	10.0	4,690
9.0	2,800	11.0	6,950
10.0	4,690	12.0	9,580
11.0	6,950		
12.0	9,580		
13.0	12,560		

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	455	259	455	241	182	117	50	17	7
2			-	455	259	448	232	189	117	54	14	6
3			-	455	263	429	228	189	128	56	14	12
4			-	455	277	429	245	196	111	54	14	12
5			-	436	287	429	328	204	95	56	12	12
6			-	429	277	416	323	204	95	58	12	19
7			-	410	273	396	403	174	100	58	13	50
8			-	396	259	379	403	182	100	58	13	54
9			-	384	250	362	367	185	86	56	11	52
10			-	367	241	344	333	174	93	50	12	46
11			-	362	236	350	302	189	95	50	12	43
12			-	350	232	333	292	282	90	46	12	35
13			-	350	228	292	268	264	81	43	13	32
14			1,380	339	224	302	254	297	86	43	12	29
15			1,220	333	224	297	245	323	83	39	14	27
16			1,110	323	224	287	245	292	81	35	13	26
17			1,000	313	224	282	228	259	78	32	11	40
18			902	308	200	292	216	254	76	29	9	400
19			855	302	224	273	212	308	72	29	9	700
20			765	297	208	264	216	245	67	29	7	580
21			722	292	208	264	208	182	67	29	7	410
22			680	287	208	282	204	141	63	32	9	268
23			640	282	216	264	196	117	61	32	7	379
24			600	273	232	273	200	103	58	25	9	302
25			562	273	228	264	204	100	54	22	9	264
26			562	273	273	273	200	95	54	22	9	525
27			525	264	323	282	189	103	50	19	8	436
28			490	259	436	282	196	100	50	19	7	525
29			455	259	490	302	192	100	50	17	6	1,630
30			455	254	-	259	182	106	46	18	6	1,500
31			455	254	-	245	-	122	-	15	6	-

Discharge, in second-feet, of Illinois River near Tahlequah, Okla., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,050	455	220	1,220	4,900	618	738	780	613	214	401	120
2	680	490	228	1,160	3,500	546	618	780	449	207	293	159
3	525	1,270	228	1,160	2,640	349	546	695	389	199	247	188
4	429	2,800	232	1,160	2,180	449	582	695	339	184	214	188
5	367	1,630	236	1,000	1,890	480	546	401	344	173	184	176
6	313	1,270	264	855	1,630	546	480	480	328	170	383	207
7	356	1,000	264	810	1,440	582	449	513	302	207	344	480
8	755	855	277	1,270	1,380	546	618	480	284	334	274	412
9	1,270	722	302	4,280	1,270	513	618	480	366	256	222	582
10	1,050	640	292	8,220	1,320	480	1,010	449	1,010	231	184	3,880
11	902	562	282	2,970	1,060	480	870	401	2,030	298	162	6,000
12	722	490	268	2,180	965	449	695	401	1,440	265	152	1,760
13	600	448	264	2,030	965	449	656	377	918	222	133	1,060
14	490	410	254	4,690	825	480	582	344	780	199	126	780
15	403	379	254	11,900	825	480	582	334	655	191	111	618
16	356	350	245	11,000	738	513	513	334	1,060	173	103	513
17	313	323	241	4,280	656	449	418	293	1,440	148	103	480
18	273	302	236	3,140	656	480	480	288	1,220	139	87	449
19	254	287	236	2,480	695	395	449	307	918	176	87	389
20	245	282	232	2,030	695	449	546	265	695	231	98	334
21	228	273	232	1,760	780	418	2,480	247	656	1,630	114	298
22	228	264	228	1,630	780	395	7,700	284	546	780	126	274
23	196	245	228	1,500	825	412	3,690	269	480	513	618	247
24	204	245	236	1,320	825	656	2,480	269	418	389	480	239
25	245	232	245	1,220	870	1,890	1,890	243	366	334	323	256
26	344	228	254	1,270	825	1,760	1,500	235	318	284	252	312
27	902	220	455	1,270	780	1,380	1,270	235	293	243	207	513
28	902	220	1,320	1,220	656	1,220	1,110	231	274	218	180	401
29	722	220	1,760	1,440	-	1,060	965	218	247	207	159	328
30	600	220	1,440	2,970	-	918	870	222	231	395	139	274
31	525	-	1,320	6,950	-	780	-	323	-	449	130	-
October						-	-	-	-	-	-	-
November						-	-	-	-	-	-	-
December 14-31, 1935						13,378	1,380	455	743			26,530
Calendar year												
January 1936						10,489	455	254	338			20,800
February						7,488	490	200	258			14,850
March						10,049	455	245	324			19,930
April						7,552	403	182	252			14,980
May						5,861	323	95	189			11,630
June						2,404	128	46	80.1			4,770
July						1,175	58	15	37.9			2,330
August						326	17	6	10.5			647
September						8,421	1,630	6	281			16,700
The period												133,200
October 1936						16,459	1,270	196	531			32,650
November						17,332	2,800	220	578			34,380
December						12,773	1,760	220	412			25,330
Calendar year 1936						100,329	2,800	6	274			199,000
January 1937						90.385	11,900	810	2,916			179,300
February						36,571	4,900	656	1,306			72,540
March						20,622	1,890	349	665			40,900
April						35,951	7,700	418	1,198			71,310
May						11,873	780	218	383			23,559
June						19,415	2,030	231	647			38,510
July						9,659	1,630	139	312			19,160
August						6,636	618	87	214			13,160
September						21,917	6,000	120	731			43,470
Water year 1936-37						299,593	11,900	87	821			594,300

Canadian River near Bell Ranch, N. Mex.

Location.- Water-stage recorder, lat. about 35°32', long. about 104°15', in Pablo Montoya grant, 1 mile above mouth of Perra Creek and about 9 miles west of Bell Ranch.

Records available.- October 1930 to September 1937 in reports of Geological Survey; July 1915 to July 1917, August 1927 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, about 47,800 second-feet June 3 (gage height, 15.8 feet, from floodmarks), by slope-area method; no flow at times.
1930-37: Maximum discharge, that of June 3, 1937 (gage height, 15.8 feet, from floodmarks); no flow at times. Peak discharge of June 27, 1935, previously published as maximum, has been revised from about 49,300 to 26,100 second-feet.

Remarks.- Records fair except those for period of ice effect, Dec. 9-15, 17-23, 27-31, Jan. 1-31, Feb. 1-4, 8-11, 19-21, 27, 28, Mar. 13, 14 (computed on basis of two discharge measurements and gage-height and weather records), and those for May 30, 31, June 1-6, (computed on basis of incomplete gage graphs, weather records, observer's notes, and information supplied by Corps of Engineers, U.S.Army), which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	1	6	11	10	8	0	22	2,000	289	250	58
2	50	0	6	9	12	9	0	18	5,000	165	110	75
3	55	0	9	8	15	7	0	12	14,000	769	68	102
4	48	0	13	9	13	4	0	10	20,000	397	51	84
5	41	1	14	12	22	7	0	6	4,000	332	73	719
6	33	1	13	10	30	16	0	3	1,250	332	120	745
7	30	1	12	8	26	16	0	2	875	301	77	685
8	24	1	17	5	16	24	0	1	831	206	139	3,770
9	25	1	13	6	11	24	0	4	675	132	135	2,510
10	22	1	9	7	10	22	2	7	567	485	202	1,170
11	20	2	10	8	13	18	5	154	549	640	84	516
12	22	2	10	10	12	16	8	370	476	377	71	301
13	17	2	10	13	11	15	5	240	390	301	104	194
14	11	2	11	14	14	13	2	161	500	161	282	189
15	8	3	12	13	17	18	0	120	390	194	260	123
16	6	4	13	15	28	16	0	99	358	123	120	86
17	5	4	11	14	26	13	0	89	319	82	73	71
18	4	5	10	13	30	12	0	120	245	71	48	64
19	3	5	12	15	22	8	0	154	202	43	44	126
20	2	5	14	11	16	7	64	135	165	143	69	84
21	1	4	13	8	17	6	92	104	139	338	40	58
22	1	5	14	8	19	6	99	79	154	489	33	46
23	1	4	16	9	18	5	94	75	157	313	31	37
24	2	6	18	10	12	4	84	528	120	150	23	28
25	2	5	22	10	11	2	68	512	99	96	17	26
26	2	5	19	11	7	1	68	332	760	75	60	27
27	2	6	14	12	6	0	71	181	5,950	62	71	23
28	2	4	14	12	7	0	53	1,280	6,790	134	55	18
29	1	4	16	13	-	1	41	3,360	1,530	283	33	18
30	1	4	10	13	-	1	33	1,100	612	439	23	16
31	2	-	11	15	-	1	-	600	-	370	41	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	489	55	1	15.8	970
November	88	6	0	2.9	175
December	392	22	6	12.6	778
Calendar year 1936	20,202	2,020	0	55.2	40,080
January	332	15	5	10.7	659
February	451	30	6	16.1	895
March	300	24	0	9.7	595
April	789	99	0	26.3	1,560
May	9,778	3,360	1	315	19,390
June	69,003	20,000	99	2,300	136,900
July	8,292	769	43	267	16,450
August	2,807	282	17	90.5	5,570
September	11,969	3,770	16*	399	23,740
Water year 1936-37	104,690	20,000	0	287	207,700

T1686(1)—38——9

Canadian River at Logan, N. Mex.

Location.- Water-stage recorder, lat. 35°21', long. 103°26', in sec. 15, T. 13 N., R. 33 E., half a mile south of Logan, three-quarters of a mile above Chicago, Rock Island & Pacific Railway bridge, 5 miles below Ute Creek, and 5 miles above Tucumcari Creek.

Records available.- June 1904 to February 1905, December 1908 to May 1914, and October 1930 to September 1937 in reports of Geological Survey; June 1904 to February 1905, December 1908 to May 1914, and October 1922 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 110,000 second-feet June 3 (gage height, 18.91 feet); no flow at times.
1930-37: Maximum discharge, that of June 3, 1937; no flow during several periods. Maximum stage known, approximately 36.55 feet at site 1 mile below present station (zero of that gage was 3,651.0 feet above mean sea level).

Remarks.- Records poor. Records for Jan. 7, 8, May 9-12, June 1-28, 30, Aug. 4, 7, 11-14, 16, 17, 23-27 computed on basis of gage heights, weather records and flow for station below Conchas Dam operated by Corps of Engineers, U.S. Army. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	2	0	0		0	2	14	15,800	448	760	19
2	44	2	1	0		0	1	14	56,400	391	384	18
3	35	1	1	0		0	1	12	51,100	334	300	16
4	27	1	0	0		0	1	10	45,900	840	130	95
5	20	1	2	0		0	2	8	9,500	680	490	3,110
6	22	1	1	0		2	2	6	2,470	384	255	1,400
7	24	1	1	0		3	0	4	4,040	316	170	3,200
8	22	1	1	0		5	0	3	1,590	352	230	6,140
9	20	1	1	0		8	0	1,580	2,080	391	550	7,220
10	16	1	1	0		6	0	80	830	340	322	1,800
11	14	1	0	0		4	0	50	920	500	170	1,170
12	12	1	0	0		2	0	30	560	1,680	310	732
13	11	1	0	1		2	0	46	380	504	230	660
14	9	0	0	0		2	0	128	500	370	90	1,780
15	7	0	0	0		2	0	89	340	230	62	1,500
16	6	0	0	0		1	0	80	1,360	186	60	426
17	5	0	1	0		1	0	71	300	155	240	215
18	4	0	1	0		1	0	59	160	146	174	285
19	3	0	1	0		0	494	55	100	113	170	579
20	3	0	1	0		0	2,670	40	110	446	134	174
21	2	0	1	0		0	630	31	60	427	2,300	108
22	2	0	1	0		1	70	33	50	932	440	100
23	2	0	1	0		0	40	45	50	583	210	80
24	2	0	1	0		0	40	102	30	352	110	55
25	2	0	0	0		0	40	861	20	225	70	34
26	2	0	0	0		0	28	1,430	20	174	40	23
27	2	0	0	0		0	25	16,500	14,700	249	20	16
28	2	0	0	0		0	27	36,400	8,600	225	16	11
29	2	0	0	0		1	19	57,500	3,530	250	12	9
30	2	0	0	0		2	16	9,950	710	346	12	7
31	2	-	0	0		2	-	2,500	-	352	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	378	52	2	12.2	750
November	15	2	0	.5	30
December	17	2	0	.5	34
Calendar year 1936	48,247	12,000	0	132	95,700
January	1	1	0	0	2.0
February	0	0	0	0	0
March	45	8	0	1.5	89
April	4,108	2,670	0	137	8,150
May	127,371	57,500	3	4,109	252,600
June	222,210	56,400	20	7,407	440,700
July	12,921	1,680	113	417	25,630
August	8,475	2,300	12	273	16,810
September	30,982	7,220	7	1,033	61,450
Water year 1936-37	406,523	57,500	0	1,114	806,200

Vermejo River near Dawson, N. Mex.

Location.- Water-stage recorder, lat. 36°42', long. 104°47', in Maxwell grant, about T. 28 N., R. 20 E., 2¼ miles north of Dawson, Colfax County.

Drainage area.- 250 square miles.

Records available.- October 1930 to September 1937 in reports of Geological Survey; October 1915 to May 1923 and February 1927 to December 1931 in reports of State engineer.

Discharge.- Maximum discharge during year, about 3,070 second-feet Aug. 4 (gage height, 6.89 feet); minimum daily discharge, 0.4 second-foot Feb. 4.
1930-37: Maximum discharge, about 4,630 second-feet Aug. 7, 1936 (gage height, 7.99 feet); no flow at times.

Remarks.- Records fair for October to February and May to July; others poor. Those for periods of ice effect, Feb. 27, 28, Mar. 1-5, 7, 9-11, 14-16, and those for periods of incomplete gage height record, Oct. 4-6, Feb. 3, Mar. 29 to May 1, Aug. 5-11, 13-26, Aug. 28 to Sept. 30 were computed on basis of records for Rayado River, partial gage-height record and weather records. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	7.2	1.4	2.6	1.3	6.4		50	71	89	16	
2	14	7.2	1.4	2.6	1.3	7.7		48	68	58	14	
3	14	4.5	.9	2.0	.e	5.0		58	102	47	17	8
4	12	2.9	2.9	1.1	.4	4.4		60	79	32	270	
5	11	2.3	2.1	1.6	.8	6.2		59	69	25		
6	10	6.7	.5	1.6	2.0	6.7	15	65	63	22		
7	8.0	5.4	1.4	1.3	9.8	6.0		63	58	21		
8	6.7	6.7	1.4	1.3	7.2	5.8		69	56	41	50	15
9	7.2	4.2	1.4	1.4	3.8	5.0		72	52	41		
10	7.2	3.2	1.3	1.4	4.2	4.0		69	51	38		
11	6.7	2.9	1.3	1.1	3.5	4.7		71	47	36		
12	6.3	3.8	1.1	.9	4.2	7.2		71	46	34	25	
13	6.3	4.5	1.8	1.3	5.4	8.5	120	68	45	31		12
14	7.6	5.1	1.6	1.3	6.7	7.6		69	44	30		
15	6.7	8.0	2.6	1.1	18	5.7		69	44	28		
16	6.3	6.3	4.5	.9	13	5.1		74	41	26	10	
17	6.3	8.9	4.5	1.3	9.4	8.5		71	39	25		
18	5.8	9.4	3.5	1.3	9.8	9.8	100	68	38	22		10
19	5.4	7.2	3.8	1.3	10	8.9		65	37	20		
20	5.4	4.8	2.9	1.3	8.9	6.3		63	36	31		
21	5.8	7.6	2.9	1.3	4.8	6.3		59	35	22		
22	7.2	5.8	2.3	1.3	5.8	7.2		53	36	13		
23	7.6	7.6	2.3	1.1	8.0	7.2	60	48	35	11		9
24	7.2	2.3	6.3	1.1	4.8	5.4		48	34	8.0	15	
25	7.6	1.3	5.4	1.1	11	4.5		48	61	8.0		
26	7.2	1.3	7.6	1.1	5.1	4.5		47	76	14		
27	7.2	1.3	4.8	1.1	2.7	4.8		45	89	16	13	
28	6.7	2.0	3.8	1.1	5.6	7.6		55	62	31		10
29	6.7	2.9	3.8	1.3	-	8.0	50	60	50	65		
30	7.2	2.0	2.3	1.3	-	8.0		68	53	76	8	
31	6.7	-	2.6	1.3	-	8.0		69	-	26		-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	245.0	15	5.4	7.90	486
November	145.3	9.4	1.3	4.84	288
December	86.4	7.6	.5	2.79	171
Calendar year 1936	4,120.9	270	.4	11.3	8,170
January	41.8	2.6	.9	1.35	83
February	168.3	18	.4	6.01	334
March	201.0	9.8	4.0	6.48	399
April	1,800	-	-	60.0	3,570
May	1,902	74	45	61.4	3,770
June	1,617	102	34	53.9	3,210
July	985.0	89	8.0	31.8	1,950
August	907	270	-	29.3	1,800
September	320	-	-	10.7	635
Water year 1936-37	8,418.8	270	.4	23.1	16,700

Cieneguilla Creek near Eagle Nest, N. Mex.

Location.- Water-stage recorder, lat. 36°30', long. 105°14', in Maxwell grant, a quarter of a mile below Schoolhouse Draw, about 3,500 feet upstream from high-water line of Eagle Nest Reservoir, and 6 miles south of Eagle Nest, Colfax County.

Records available.- October 1930 to September 1937 in reports of Geological Survey; April 1923 to December 1931 in reports of State engineer. No records during winter periods.

Extremes.- Maximum discharge recorded during year, 196 second-feet Apr. 16 (gage height, 3.88 feet); minimum daily discharge, 1.0 second-feet Aug. 24, 25.
1930-37: Maximum discharge, about 310 second-feet Aug. 23, 1935 (gage height, 4.65 feet); no flow June 15, 16, 18-23, July 14-27, 1936.

Remarks.- Records fair except those for periods of ice effect, Nov. 2-10, 24-30, and of incomplete gage-height record, Apr. 17-21, Sept. 19-23, which were computed on basis of records of Moreno and Sixmile Creeks, and weather records and available gage heights and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	3.5					-	78	50	11	3.5	3.3
2	2.2	2.4					-	75	87	12	3.3	2.2
3	1.9	2.0					-	77	82	11	3.3	2.1
4	1.9	2.0					-	82	44	8.4	3.3	2.4
5	1.9	2.2					-	75	35	7.2	2.8	2.6
6	2.4	2.4					-	75	29	11	2.4	3.3
7	2.7	2.6					-	74	25	6.6	2.1	3.3
8	2.4	2.8					-	75	22	6.3	3.3	2.8
9	2.4	3.0					-	78	20	5.5	3.0	2.6
10	1.9	3.2				*4.9	-	79	17	6.9	1.7	2.4
11	1.9	3.5					-	77	15	8.4	1.5	3.1
12	1.6	3.2					-	69	13	6.6	1.6	3.1
13	2.2	3.5					-	63	11	5.2	1.7	2.6
14	1.9	4.3		*1.0			-	60	11	4.5	1.6	3.1
15	1.9	4.0					-	54	11	4.0	1.2	2.6
16	2.4	4.0					196	51	9.0	3.3	1.4	2.6
17	2.4	3.8					180	44	8.1	3.3	1.9	2.4
18	2.4	3.5					170	37	7.2	3.3	1.9	2.6
19	2.2	3.5					150	32	6.6	3.5	3.1	2.3
20	3.5	3.5					160	29	6.9	14	2.1	2.0
21	4.3	3.2					170	25	6.3	8.4	1.7	1.8
22	4.0	3.2					182	22	5.2	5.2	1.4	2.0
23	3.8	3.5					160	21	5.0	4.2	1.3	2.3
24	3.5	3.0					128	25	5.0	3.5	1.0	1.6
25	3.2	3.0					117	23	8.4	5.2	1.0	1.7
26	3.5	3.0					120	18	15	4.2	1.4	1.7
27	3.5	3.0					123	15	39	5.0	4.0	1.6
28	3.2	2.9					109	16	22	5.5	1.9	1.5
29	3.0	2.8					98	26	13	9.8	1.7	1.6
30	3.2	2.8					87	57	11	5.2	3.1	3.0
31	4.3	-					-	26	-	4.0	9.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	84.3	4.3	1.6	2.72	167
November	93.3	4.3	2.0	3.11	185
December	-	-	-	-	-
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 16-30	2,150	196	87	143	4,260
May	1,556	82	15	50.3	3,090
June	639.7	87	5.0	21.3	1,270
July	202.2	14	3.3	6.52	401
August	74.2	9.0	1.0	2.39	147
September	72.2	3.3	1.6	2.41	143
Water year					

*Discharge measurements.

Cimarron River at Ute Park, N. Mex.

Location.- Water-stage recorder, lat. 36°34', long. 105°04', in Maxwell grant, half a mile below mouth of Ute Creek and about 1 mile east of post office at Ute Park, Colfax County.

Drainage area.- 235 square miles.

Records available.- July 1907 to December 1914, October 1930 to September 1937 in reports of Geological Survey; July 1907 to December 1931 to reports of State engineer.

Extremes.- Maximum discharge during year, 162 second-feet July 21 (gage height, 2.76 feet); minimum daily discharge (estimated), 2.5 second-feet Jan. 8.
1930-37: Maximum discharge, 175 second-feet July 4, 1934 (gage height, 2.92 feet); minimum daily discharge, 1.5 second-feet Jan. 18-20, 1936.

Remarks.- Records good except those for periods of ice effect, Nov. 3, 4, 10, 13, 24-28, 30, Dec. 2-4, 6-15, 18-21, 23, Dec. 27 to Feb. 3, Feb. 8-14, 17-20, Feb. 22 to Mar.1, Mar. 4-5, 7-8, 14-15, which were computed on basis of gage heights and weather records and are poor. Flow regulated by storage in Eagle Nest Reservoir. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	9.1	6	3.5	4	14	10	69	115	73	29	24
2	13	8.4	5.5	3.5	4	15	23	64	68	66	29	24
3	14	6.3	6	3	4	15	26	68	72	48	30	24
4	14	7.0	6	4	4.3	14	27	72	69	26	29	22
5	9.1	8.0	6.7	4.5	3.9	13	1e	69	65	41	28	20
6	10	7.0	7	4	3.7	15	19	92	60	69	27	32
7	9.9	7.4	6.5	3	4.3	14	20	95	57	69	26	31
8	9.9	7.0	7	2.5	5	13	19	90	54	69	26	30
9	9.4	7.4	7	3	4	12	21	100	49	72	28	29
10	9.9	6.7	6.5	3.5	3.6	12	21	107	44	57	34	27
11	9.4	7.4	6	4.5	3.5	12	26	90	42	57	35	22
12	9.1	7.0	6	4.5	3.5	12	32	90	35	83	36	16
13	9.1	6.3	6.5	4	4	12	42	92	40	64	36	22
14	8.4	6.3	6.5	4	3.5	11	56	107	53	95	34	23
15	8.0	6.7	6.5	4.5	3.3	10	72	102	62	98	33	23
16	7.7	6.7	6.7	4.5	3.1	11	90	98	77	98	44	23
17	7.7	6.7	5.8	4	3	11	92	107	80	65	44	24
18	7.4	6.7	5.5	4	3.5	12	76	106	84	62	42	19
19	7.7	7.4	5	4	4	11	75	101	64	119	42	13
20	7.0	6.7	5	3.5	3.5	11	69	90	63	127	42	17
21	7.0	6.7	5	3	7.4	9.4	69	84	101	153	33	18
22	15	6.0	5.0	3	8	9.9	79	76	101	141	30	24
23	15	6.3	5	3	9	11	83	72	108	141	38	21
24	16	6.0	5.0	3	8	11	70	77	121	94	38	24
25	16	6.5	4.7	3	12	11	60	76	129	69	38	19
26	16	6.3	4.5	3.5	11	10	59	70	108	101	31	16
27	17	5.6	4.5	3.5	10	9.9	64	77	70	100	31	27
28	17	5.6	4.5	3.5	12	8.0	69	95	61	100	24	24
29	17	8.0	4	3.5	-	8.4	66	82	94	83	18	16
30	16	6.3	3	3.5	-	9.1	70	80	89	36	24	16
31	10	-	3.5	3.5	-	7.7	-	110	-	31	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	355.7	17	7.0	11.5	706
November	205.5	9.1	5.6	6.85	408
December	172.4	7	3	5.56	342
Calendar year 1936	11,257.0	129	1.5	30.8	22,340
January	112.0	4.5	2.5	3.61	222
February	163.0	12	3	5.46	303
March	355.4	15	7.7	11.5	705
April	1,523	92	10	50.8	3,020
May	2,708	110	64	87.4	5,370
June	2,235	129	35	74.5	4,430
July	2,526	153	26	81.5	5,010
August	1,005	44	18	32.4	1,990
September	670	32	13	22.3	1,330
Water year 1936-37	12,021.0	153	2.5	32.9	23,840

Cimarron River at Springer, N. Mex.

Location.- Water-stage recorder, lat. 36°22', long. 104°37', in sec. 33, T. 25 N., R. 22 E., 300 feet below highway bridge, one-eighth of a mile west of Springer, 6 miles below mouth of Rayado River, and 6 miles above confluence with Canadian River.

Records available.- July 1907 to December 1909 and October 1930 to September 1937 in reports of U. S. Geological Survey; August 1907 to December 1909 and January 1921 to December 1931 in reports of State engineer.

Extremes.- Maximum discharges for the following water years have been revised as indicated:
1933-34: 590 second-feet July 25 (gage height, 4.55 feet).
1934-35: about 3,420 second-feet Aug. 27 (gage height, 8.70 feet), from rating curve extended above 1,300 second-feet.
1935-36: 920 second-feet June 9 (gage height, 5.12 feet).
Maximum discharge during year ending Sept. 30, 1937, about 3,690 second-feet June 3 (gage height, 9.15 feet)from rating curve extended above 1,300 second-feet; minimum daily, 0.7 second-foot Oct. 13-16.
1930-37: Maximum discharge and stage, those of June 3, 1937; minimum daily discharge, 0.1 second-foot Apr. 11, 1933.

Remarks.- Records fair except those for periods of ice effect, Dec. 31 to Jan. 3, Jan. 6 to Feb. 4, Feb. 9-11, and of incomplete gage-height record, May 5-26, June 2, 3, 16-20, June 28 to July 22, Aug. 21-25, Sept. 17-24, which were computed on basis of records for stations on Rayado River and Mora River near Golondrinas, available gage heights, and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	1.3	2.0	1.5	2.3	1.9	1.6	4.2	429	9	8.9	1.5
2	.9	1.3	2.0	1.5	2.3	1.7	1.5	4.7	331	8	7.5	1.5
3	.9	1.3	2.0	1.5	2.3	1.9	1.3	6.2	1,610	6	6.2	1.3
4	.8	1.5	2.0	1.9	2.5	1.9	2.3	5.9	315	5	6.9	1.2
5	.8	1.5	1.9	2.0	3.0	1.9	3.0	6	209	5	7.2	1.2
6	.8	1.6	1.7	1.8	3.7	2.2	2.8	6	157	5	6.9	2.8
7	.8	1.5	1.7	1.6	4.0	1.9	2.3	8	90	5	8.5	121
8	.8	1.6	1.6	1.5	3.0	1.7	1.9	10	56	5	7.2	23
9	.8	1.6	1.6	1.6	3.5	1.7	1.9	11	45	4	5.3	12
10	.8	1.6	1.6	1.8	3.5	1.7	1.9	12	31	4	4.7	4.5
11	.8	1.6	1.7	1.9	3.0	1.7	1.9	10	32	4	5.6	3.0
12	.8	1.6	1.7	2.0	3.0	1.6	1.5	9	27	4	10	2.5
13	.7	1.6	1.7	2.2	3.0	1.9	5.7	9	22	4	7.2	2.0
14	.7	1.6	1.7	2.0	3.5	2.2	5.3	10	20	4	5.3	1.9
15	.7	1.7	1.7	2.0	3.0	2.5	3.7	9	16	4	4.0	1.7
16	.7	1.7	1.7	1.9	2.8	2.3	10	9	14	3	3.5	1.5
17	.8	1.7	1.7	1.8	2.5	2.5	10	9	12	3	3.0	1.4
18	.8	1.7	1.7	1.7	2.3	2.3	6.2	9	10	3	2.5	1.3
19	.9	1.9	1.7	1.6	2.2	2.0	3.3	8	8	3	3.0	1.2
20	.9	1.9	1.7	1.5	2.0	1.7	3.7	8	6	3	3.7	1.1
21	1.0	1.9	2.0	1.5	2.2	1.9	2.3	7	5.3	3	3.5	1.0
22	1.0	1.9	1.7	1.6	1.7	1.9	2.0	6	4.7	3	3.0	.9
23	1.2	1.9	1.9	1.7	2.0	1.6	3.0	5	4.2	4.0	3.0	.8
24	1.3	1.7	2.0	1.8	1.9	1.3	2.5	4	3.7	4.7	2.5	.8
25	1.5	1.7	1.9	1.9	1.9	1.3	2.0	4	3.5	5.0	2.5	.8
26	1.3	1.9	2.0	2.0	1.7	1.6	2.0	4	4.0	5.3	2.2	.8
27	1.3	1.9	1.9	2.1	1.9	1.7	1.9	4.5	5.0	4.7	1.9	.9
28	1.3	1.9	1.9	2.2	1.9	1.9	4.0	5.3	50	8.5	1.7	.8
29	1.5	1.9	1.7	2.3	-	1.9	5.9	8.2	12	69	1.5	.8
30	1.5	2.0	1.6	2.4	-	1.9	5.6	14	9	12	1.5	.9
31	1.3	-	1.5	2.2	-	1.7	-	38	-	9.3	1.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	30.3	1.5	0.7	0.98	60
November	50.5	2.0	1.3	1.68	100
December	55.2	2.0	1.5	1.78	109
Calendar year 1936	1,035.1	105	.3	2.83	2,050
January	57.0	2.4	1.5	1.84	113
February	72.6	4.0	1.7	2.59	144
March	57.9	2.5	1.3	1.87	115
April	103.0	10	1.3	3.43	204
May	264.0	38	4	8.52	524
June	3,541.4	1,610	3.5	118	7,020
July	219.5	69	3	7.08	435
August	142.0	10	1.5	4.58	282
September	196.1	121	.8	6.54	389
Water year 1936-37	4,789.5	1,610	.7	13.1	9,500

Sixmile Creek near Eagle Nest, N. Mex.

Location.- Water-stage recorder, lat. 36°32', long. 105°16', in Maxwell grant, at highway bridge, a quarter of a mile above high-water line of Eagle Nest Reservoir and 3 miles southwest of Eagle Nest, Colfax County.

Records available.- October 1930 to September 1937 in reports of U. S. Geological Survey; April 1928 to December 1931 in reports of State engineer. No records during winter periods.

Extremes.- Maximum discharge during year, 230 second-feet Apr. 11, from rating curve extended above 35 second-feet; maximum gage height recorded, 3.38 feet Apr. 2, during ice jam; minimum daily discharge, 0.3 second-foot July 22, Aug. 9.
1930-37: Maximum discharge, that of Apr. 11, 1937; maximum recorded gage height, that of Apr. 2, 1937; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 2-5, 10-13, Apr. 1-4, and of missing gage heights Aug. 11-12, which were computed on basis of available gage heights, weather records, and records for Cieneguilla and Moreno Creeks and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	3.1					9	18	10	2.6	0.6	2.8
2	2.3	2.0					10	18	11	2.2	.5	2.4
3	2.3	1.7					10	20	15	2.0	.5	2.2
4	2.3	1.8					10	21	13	1.8	1.0	2.0
5	2.5	2.0					9.4	22	13	1.6	1.0	2.0
6	2.5	2.2					9.0	25	11	1.6	.8	2.0
7	2.7	2.5					9.0	25	11	1.4	.7	2.0
8	2.5	2.3					9.9	27	9.4	1.3	.5	2.0
9	2.5	1.7					14	33	9.0	1.3	.3	2.0
10	2.5	1.5				*3.7	27	35	8.5	1.4	.5	2.0
11	2.3	1.6					64	36	8.0	2.2	1.0	2.2
12	2.3	1.8					70	38	8.0	1.8	1.5	2.4
13	2.3	2.0					56	36	7.5	1.3	2.2	2.2
14	2.3	2.1		*1.5			40	34	6.6	1.0	2.2	2.0
15	2.3	2.3					43	33	5.9	.8	1.6	1.8
16	2.3	2.5					40	33	5.9	.7	1.2	1.8
17	2.3	2.5					30	31	5.5	.7	1.3	1.8
18	2.3	2.5					23	26	5.5	.7	1.8	1.8
19	2.5	2.5					25	22	4.8	.7	2.4	1.8
20	2.5	2.7					23	19	3.9	.9	2.2	1.8
21	2.5	2.7					24	17	3.1	.5	2.0	2.0
22	2.5	2.1					29	16	2.6	.3	1.8	2.2
23	2.5	2.1					32	15	2.6	.4	1.6	2.6
24	2.3	2.1					21	15	2.6	.6	1.6	2.4
25	2.3	2.1					17	13	2.6	1.6	1.6	2.4
26	2.3	2.3					18	10	3.1	1.6	1.8	2.4
27	2.5	2.1					18	9.4	3.6	1.2	2.0	2.4
28	2.5	1.2					18	9.0	3.1	1.0	2.0	2.4
29	2.5	1.4					18	10	2.6	1.0	1.6	2.4
30	2.7	1.4					18	13	3.1	.8	2.4	2.8
31	3.8	-					-	10	-	.7	4.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	76.2	3.8	2.3	2.46	151
November	62.8	3.1	1.2	2.09	125
December	-	-	-	-	-
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	744.3	70	9.0	24.8	1,480
May	689.4	38	9.0	22.2	1,370
June	201.5	15	2.6	6.72	400
July	37.7	2.6	.3	1.22	75
August	46.4	4.2	.3	1.50	92
September	65.0	2.8	1.8	2.17	129
Water year					

*Discharge measurement.

Moreno Creek at Eagle Nest, N. Mex.

Location.- Water-stage recorder, lat. 36°34', long. 105°15', in Maxwell grant, at highway bridge, 1,000 feet west of Eagle Nest, Colfax County, and half a mile above high-water line of Eagle Nest Reservoir.

Records available.- October 1930 to September 1937 in reports of Geological Survey; April 1928 to December 1931 in reports of State engineer. No records during winter periods.

Extremes.- Maximum discharge during year, 146 second-feet Apr. 15; maximum gage height recorded, 3.54 feet Mar. 10, during ice jam; minimum daily discharge recorded, 0.6 second-foot Aug. 18.
1930-37: Maximum discharge, that of Apr. 15, 1937; maximum stage. that of Mar. 10, 1937; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 1-30, Apr. 1-5, which were computed on basis of available gage heights and weather records and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	3.0					40	50	29	8.3	3.4	7.9
2	1.1	3.0					45	47	31	15	2.9	5.6
3	1.1	2.5					50	48	46	12	2.9	4.4
4	1.3	2.5					55	48	31	7.2	3.2	5.3
5	1.5	2.5					55	45	25	6.2	3.6	6.0
6	1.3	3.0					50	50	24	5.6	2.9	11
7	1.7	3.0					40	49	22	6.2	2.5	10
8	1.7	2.5					40	52	18	6.2	2.1	5.9
9	1.5	2.5					41	57	14	5.3	1.7	4.7
10	1.5	2.0				*2.1	60	62	12	5.9	1.5	3.8
11	1.1	2.0					84	61	12	7.9	1.3	3.4
12	1.0	2.0					94	59	10	6.5	1.1	3.2
13	1.0	2.5					103	56	7.9	5.6	1.1	2.9
14	1.0	2.5		*1.5			105	54	8.3	4.7	1.3	2.7
15	1.0	2.5					107	53	7.9	4.1	.7	2.5
16	1.0	3.0					113	53	5.0	3.6	.7	3.4
17	1.1	3.0					100	50	4.7	2.9	.7	3.4
18	1.1	3.0					87	46	4.4	2.5	.6	3.2
19	1.1	3.0					87	45	4.7	2.1	2.5	2.7
20	1.9	3.0					80	43	4.1	19	2.7	2.5
21	2.3	2.5					73	37	3.2	15	2.1	2.3
22	2.3	2.5					74	31	2.7	5.0	1.5	2.1
23	2.3	2.5					73	27	2.5	3.6	1.5	2.7
24	2.3	2.5					64	25	2.5	2.9	1.1	2.3
25	2.1	2.5					56	24	2.9	6.6	1.5	1.9
26	2.3	2.0					54	20	4.4	6.5	14	1,9
27	2.5	2.0					56	16	13	5.0	16	1.9
28	2.3	2.0					58	16	11	9.1	7.9	1.7
29	2.3	2.0					56	27	7.2	9.5	12	1.5
30	2.3	2.0					54	34	7.2	5.6	14	2.9
31	3.8	-					-	21	-	4.7	27	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	52.7	3.8	1.0	1.70	105
November	75.5	3.0	2.0	2.52	150
December	-	-	-	-	-
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	2,054	113	40	68.5	4,070
May	1,306	62	16	42.1	2,590
June	377.6	46	2.5	12.6	749
July	210.3	19	2.1	6.78	417
August	138.0	27	.6	4.45	274
September	115.7	11	1.5	3.86	229
Water year					

*Discharge measurement.

Rayado River at Sauble ranch, near Cimarron, N. Mex.

Location.- Water-stage recorder, lat. 36°22', long. 104°58', in Maxwell grant, in T. 25 N., R. 19 E., 10 miles southwest of Cimarron.

Records available.- October 1930 to September 1937 and May 1911 to December 1914 (at site 3 miles upstream) in reports of Geological Survey; 1915-31 in reports of State engineer.

Extremes.- Maximum discharge during year, about 543 second-feet Apr. 13 by rating curve extended above 140 second-feet (gage height, 3.56 feet); minimum daily, 2 second-feet (estimated), Jan. 7-9.

1930-37: Maximum discharge and stage, those of Apr. 13, 1937; minimum daily discharge, 0.5 second-foot Dec. 8, 1932 and Nov. 22, 1934.

Remarks.- Records for October, April, June , and July are good; others are poor. Those for periods of ice effect, Nov. 3-14, 16, 18-22, Nov. to Dec. 15, Dec. 18-23, 25, Dec. 27 to Feb. 7, Feb. 9-13, 20-23, Feb. 26 to Mar. 1, Mar. 2, 4, 5, 15, 19, 20, 24, 25, 27-31, May 3-25, July 21, July 29 to Aug. 26, Aug. 28 to Sept. 7, Sept. 9-30, were computed on basis of four discharge measurements, gage heights, weather records, and records for stations on Vermejo River near Dawson, Cimarron River at Springer, and Mora River near Golondrinas. No diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	6.8	4	3	2.5	4.0	13	58	40	13		
2	5.8	6.1	3.5	3	2.5	4.2	20	57	50	15		
3	5.4	2.9	3.5	2.5	3	4.4	23	60	60	14		6
4	4.8	3.5	4	3.5	3.5	4.2	18	70	43	11		
5	4.6	4	4	3.5	4	3.6	23	90	38	10	7	
6	5.4	4	4	3	4	4.2	20	100	34	10		40
7	5.6	3.5	4.5	2	5	4.0	20	110	32	9.5		
8	6.6	3.5	4.5	2	5.1	4.4	20	100	29	9.5		17
9	7.1	4	4	2	4.5	4.6	24	130	25	8.8		
10	6.4	4	3.5	2.5	4	5.4	28	160	24	9.8	8	
11	6.1	4	3.5	3	4.5	7.4	62	200	23	11		
12	6.1	4.5	3.5	3	5	8.1	158	190	20	9.8		10
13	5.8	4.5	3.5	3.5	5.5	7.4	238	170	18	9.1		
14	6.1	5	4	3.5	5.8	6.0	245	150	18	7.8	7	
15	5.8	5.4	4.5	3.5	5.6	8.0	258	130	18	7.4		
16	5.8	5	3.6	3	5.4	6.4	246	140	16	6.8		
17	5.8	5.4	3.8	3	6.6	6.1	204	120	15	6.6	6	
18	5.6	5	4	3	8.1	7.4	150	110	14	6.6		8
19	5.6	4	4	3	5.6	7.0	141	90	14	6.6		
20	7.1	4.5	4	3	4.5	8.0	117	70	13	13		
21	7.4	4.5	4	2.5	4.5	8.0	108	60	12	13	10	
22	8.1	4	4	2.5	5	10	120	50	11	9.5		
23	7.4	4.6	4	2.5	5	11	114	45	11	9.8		
24	7.4	3.8	3.8	2.5	5.1	12	85	45	10	7.8		
25	7.4	3.5	3.8	2.5	4.4	10	72	40	14	8.1		
26	7.4	4	3.8	3	3.5	11	70	36	24	9.5	7	6
27	7.8	4	4	3	4	9.5	76	34	40	11	6.8	
28	7.1	4.5	4	3	4	9.0	78	32	24	21		
29	6.1	4	3.5	3	-	8.5	74	38	16	20	6	
30	6.1	4	2.5	3	-	8.5	66	55	14	10		
31	8.8	-	3	3	-	9.0	-	34	-	8		-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	199.6	8.8	4.6	6.44	396
November	130.5	6.8	2.9	4.35	259
December	118.3	4.5	2.5	3.82	235
Calendar year 1936	2,404.9	27	1.5	6.57	4,770
January	89.0	3.5	2	2.87	177
February	130.2	8.1	2.5	4.65	258
March	221.3	12	3.6	7.14	439
April	2,891	258	13	96.4	5,730
May	2,774	200	32	89.5	5,500
June	720	60	10	24.0	1,430
July	323.0	21	6.6	10.4	641
August	233.8	-	-	7.54	464
September	331	-	-	11.0	657
Water year 1936-37	8,161.7	258	2	22.4	16,190

Colmor Intake Canal near Ocate, N. Mex.

Location.- Water-stage recorder, lat. 36°09', long. 104°53', in SW¼ sec. 12, T. 22 N., R. 10 E., 130 feet below headgate, 5 miles southwest of Lake Charette, and 10 miles south of Ocate.

Records available.- May 1933 to September 1937.

Extremes.- Maximum discharge during year, about 695 second-feet June 1 (gage height, 5.17 feet); no flow for long periods.
1933-37: Maximum discharge, that of Aug. 26, 1933, and June 1, 1937, (gage height, 5.14 feet); no flow for long periods.

Remarks.- Records fair. Those for Nov. 23-30, Dec. 1-3, Jan. 9-11, July 21, 22 were computed on basis of gage heights and knowledge of local conditions. Diversions for irrigation above station. Canal delivers water to Lake Charette, which is utilized as a storage reservoir by the Colmor Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									179	24	0.3	0
2									46	4.4	1.5	0
3									207	2.2	.3	0
4									24	1.3	.1	0
5									5.1	.6	.9	0
6									2.5	.3	.2	0
7									.9	.2	.1	11
8									.7	.1	0	10
9									.2	0	0	4.0
10									.1	0	0	.2
11									.4	0	0	0
12									1.1	0	0	0
13									.9	0	0	0
14									5.5	0	0	0
15									10	0	0	0
16									1.6	0	0	0
17									.4	0	0	0
18									174	0	0	0
19									44	6.4	0	0
20									4.2	18	0	0
21									1.3	11	0	0
22									.5	5	0	0
23									.3	.6	0	0
24									.2	.3	0	0
25									.1	.2	0	0
26									.3	.1	0	0
27									33	0	0	0
28									20	44	0	0
29									6.5	5.1	0	0
30									45	4.7	0	0
31									-	1.8	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Calendar year 1936	149.6	69	0	.41	297
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	814.8	207	.1	27.2	1,620
July	130.3	44	0	4.20	258
August	3.4	1.5	0	.11	6.7
September	25.2	11	0	.84	50
Water year 1936-37	973.7	207	0	2.67	1,930

Mora River at La Cueva, N. Mex.

Location.- Water-stage recorder, lat. 35°56', long. 105°14', in Mora grant, at highway bridge at La Cueva, Mora County, below wasteway from La Cueva Canal, a quarter of a mile below Las Vegas-Mora highway bridge and half a mile below site of La Cueva Dam.

Records available.- August 1903 to July 1911, April 1931 to September 1937.

Extremes.- Maximum discharge during year, about 710 second-feet June 1 (gage height, 4.95 feet), from rating curve extended above 400 second-feet; minimum daily discharge, 2.5 second-feet Mar. 4-13.

1931-37: Maximum discharge, about 1,000 second-feet Sept. 19, 1936 (gage height, 6.31 feet), from rating curve extended above 400 second-feet; no flow at times.

Remarks.- Records fair except those for periods of ice effect Nov. 23, Dec. 1, 2, 5-14, 17, 18, 20-22, Dec. 30 to Feb. 20, and of incomplete gage-height record, Feb. 21 to Mar. 19, July 31, Aug. 5-8, 10-15, 17-22, Sept. 9-12, 14-30, which were computed on basis of three discharge measurements, available gage heights, weather records, and records for Mora River near Golondrinas and Coyote Creek near Golondrinas and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	9.7	6	5.5	7.5	4	5.8	46	225	84	16	7.4
2	18	10	7	5	8.5	3.5	9.2	49	169	92	14	6.4
3	17	9.7	7.4	6	9	3	17	53	188	99	13	5.4
4	17	9.2	8.3	7	9.5	2.5	17	64	169	85	12	5.4
5	16	9.2	6.5	9	10	2.5	18	62	145	66	10	8.8
6	16	8.8	6.5	10	10	2.5	16	66	129	44	8	7.1
7	16	9.2	7	7.5	8	2.5	14	58	119	29	6	12
8	14	9.2	7	6.5	6	2.5	14	62	108	24	7	12
9	12	8.3	7	7	5	2.5	16	74	95	20	5.8	11
10	12	7.9	6	8	6.5	2.5	17	94	94	30	5	10
11	10	7.9	6	9	7	2.5	26	103	87	68	5	12
12	9.7	7.4	6.5	10	8	2.5	54	103	82	56	5	10
13	12	7.4	6.5	12	9	2.5	73	95	77	38	4	8.8
14	14	7.4	6.5	11	8	3	74	96	73	25	4	8
15	14	7.1	6.7	10	7	3.5	84	109	42	17	4	8
16	13	7.4	5.1	9	7	4	116	116	19	11	6.1	8
17	12	7.9	4.5	8.5	7	3.5	108	101	17	8.3	6	8
18	11	8.3	4.5	8.5	7.5	3.5	105	88	14	11	5	8
19	11	7.9	6.1	9	6	4	109	88	13	11	5	7
20	10	7.4	5.5	7.5	6	4.1	88	85	14	11	5	7
21	10	6.7	5.5	6.5	6	4.1	77	75	14	12	5	8
22	10	7.1	5.5	6.5	6	4.4	77	66	13	12	5	8
23	11	6.5	5.8	7.5	5	5.4	88	75	12	12	5.1	8
24	10	7.1	5.8	7.5	4	6.4	73	91	12	10	5.1	9
25	9.2	7.1	6.1	6.5	3	6.1	64	89	16	12	5.8	8
26	8.8	7.1	5.4	5.5	4	6.7	61	78	40	13	7.9	8
27	8.8	7.1	5.4	6	5	6.4	61	69	117	13	7.1	9
28	9.2	7.1	7.4	7.5	5	7.9	56	75	110	13	5.4	9
29	9.2	7.4	6.1	8	-	7.1	54	102	87	14	4.4	9
30	9.7	7.4	5.5	7.5	-	6.1	52	123	73	16	5.4	9
31	10	-	5.5	7	-	7.4	-	138	-	19	6.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	380.6	20	8.8	12.3	755
November	237.9	10	6.5	7.93	472
December	190.6	8.3	4.5	6.15	378
Calendar year 1936	4,800.1	75	2.8	13.1	9,530
January	242.0	12	5	7.81	480
February	190.5	10	3	6.80	378
March	129.1	7.9	2.5	4.16	256
April	1,644.0	116	5.8	54.8	3,260
May	2,593	138	46	83.6	5,140
June	2,373	225	12	79.1	4,710
July	975.3	99	8.3	31.5	1,930
August	208.5	16	4	6.73	414
September	255.3	12	5.4	8.51	506
Water year 1936-37	9,419.8	225	2.5	25.8	18,680

Mora River near Golondrinas, N. Mex.

Location.- Water-stage recorder, lat. 35°53', long. 105°07', in Mora grant, half a mile above mouth of Coyote Creek, 2 miles east of Golondrinas, Mora County.

Records available.- August 1903 to September 1904 gage heights only, at former site at Weber, N. Mex.) and October 1930 to September 1937 in reports of Geological Survey; March 1915 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, about 1,250 second-feet June 1 by rating curve extended above 450 second-feet (gage height, 8.10 feet); minimum daily, 2.0 second-feet Aug. 19, 22 and 25.
1930-37: Maximum discharge that of June 1, 1937; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 23-27, Dec. 2-4, 6-25, Dec. 27 to Feb. 13, Feb. 16-18, 20-22, which were computed on basis of records for Mora River at La Cueva and Coyote Creek near Golondrinas, two discharge measurements, gage heights, and weather records, and are poor. Diversion for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	12	12	8	9	5.4	5.6	58	368	98	8.8	9.4
2	24	9.8	11	7	10	4.3	5.1	56	324	111	8.1	5.9
3	24	9.3	10	8	10	3.6	7.0	59	331	150	7.8	4.5
4	26	11	10	9	11	3.2	15	80	227	117	8.1	5.4
5	22	9.3	11	11	12	2.4	12	80	196	91	5.4	8.1
6	21	9.3	10	12	12	2.8	16	80	177	55	4.5	6.2
7	21	8.9	9	9	10	2.8	13	77	156	34	4.0	14
8	20	9.3	10	8	7	2.7	13	78	131	23	7.5	13
9	15	8.5	10	9	7	2.8	12	94	100	16	7.5	13
10	12	10	9	10	8	2.8	13	133	93	20	4.5	11
11	8.9	8.9	9	12	9	2.7	16	158	79	131	3.6	14
12	6.8	8.9	9	13	10	2.4	34	156	71	80	3.0	14
13	7.4	11	10	14	10	2.6	64	146	63	55	2.8	12
14	11	9.3	10	12	10	4.5	78	140	60	32	2.4	11
15	11	8.9	10	11	9.1	4.9	86	158	38	22	2.2	10
16	11	8.5	10	11	8	3.6	127	187	17	13	4.0	8.8
17	8.9	10	9	10	8	4.0	143	169	13	9.1	3.0	7.0
18	9.8	8.5	8	10	9	4.7	144	126	10	6.2	2.1	7.0
19	9.8	8.9	8	11	8.4	4.0	154	122	7.0	5.4	2.0	3.7
20	9.3	7.7	8	9	7	4.3	138	111	5.4	6.2	2.2	6.4
21	7.1	6.0	8	8	7	3.6	116	93	5.1	7.5	2.1	6.7
22	8.1	7.7	8	8	7	3.0	116	66	4.9	7.5	2.0	6.2
23	12	6	9	9	6.4	2.6	126	66	4.9	7.3	2.1	6.4
24	13	6	10	9	5.4	3.6	113	94	4.7	6.2	2.1	6.7
25	14	7	10	8	3.6	4.0	96	98	5.9	5.1	2.0	7.5
26	11	7	9.8	7	5.1	4.9	85	80	11	8.1	2.6	5.9
27	12	7	9	8	6.7	4.7	79	65	144	14	5.4	4.7
28	11	7.1	9	9	6.4	4.9	68	64	162	12	2.8	5.9
29	13	8.5	9	9	-	5.9	66	111	125	11	3.8	6.7
30	11	13	8	9	-	5.1	61	165	79	10	5.9	7.5
31	13	-	8	8	-	4.7	-	173	-	17	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	430.1	29	6.8	13.9	853
November	263.3	13	6.0	8.78	522
December	290.8	12	8	9.38	577
Calendar year 1936	5,290.1	112	.5	14.5	10,490
January	296	14	7	9.5	587
February	232.1	12	3.6	8.29	460
March	117.5	5.9	2.4	3.79	233
April	2,021.7	154	5.1	67.4	4,010
May	3,343	187	56	108	6,630
June	3,012.9	368	4.7	100	5,980
July	1,180.6	150	5.1	38.1	2,340
August	136.1	12	2.0	4.39	270
September	251.6	14	4.5	8.39	499
Water year 1936-37	11,575.7	368	2.0	31.7	22,960

Mora River near Shoemaker, N. Mex.

Location.- Water-stage recorder, lat. 35°48', long. 104°48', in sec. 10, T. 18 N., R. 20 E., 5½ miles east of Shoemaker and about 23 miles above confluence with Canadian River.

Drainage area.- 1,160 square miles.

Records available.- October to December 1914 and October 1930 to September 1937 in reports of Geological Survey; October 1914 to December 1931 in reports of State engineer.

Extremes.- Maximum stage during year, 10.41 feet June 3 (discharge not determined); minimum daily discharge (estimated), 2 second-feet Mar. 25-29.
1930-37: Maximum stage, that of June 3, 1937; no flow at times.

Remarks.- Records fair except those for periods of ice effect, Nov. 25, 27-29, Dec. 6, 7, 9-23, Dec. 31 to Feb. 6, Feb. 8, 9, Mar. 13, 14, 25-31, which were computed on basis of two discharge measurements, gage heights, weather records, and records for Mora River near Golondrinas and Coyote Creek near Golondrinas and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	4.7	6.6	8.5	11	2.3	2.6	14	312	103	14	2.6
2	22	4.1	9.6	8	12	2.1	2.5	10	866	125	9.2	2.6
3	19	5.2	8.7	10	12	2.1	2.8	9.6	4,140	147	5.8	2.6
4	18	5.8	9.6	12	14	2.5	4.1	9.6	743	147	8.7	2.6
5	19	6.2	9.2	15	15	2.8	3.3	19	452	129	5.8	2.6
6	18	5.5	9	13	17	3.0	2.8	22	358	89	5.8	2.6
7	18	4.7	9	11	13	2.5	2.3	24	312	53	5.2	18
8	18	5.0	8.3	9	10	2.1	2.5	22	264	39	5.0	7.9
9	11	5.0	8	11	8	2.5	2.6	22	218	28	4.7	5.8
10	10	5.2	8	11	9.2	2.3	2.6	36	180	56	4.7	12
11	9.2	4.7	9	14	12	2.5	2.5	71	154	311	5.0	14
12	9.2	3.8	9	15	17	2.5	2.5	74	132	119	11	7.1
13	7.5	4.4	10	14	11	2.5	2.5	72	112	86	6.2	7.9
14	5.5	4.1	11	13	7.9	3.0	5.2	66	97	63	4.4	6.2
15	5.0	5.0	13	12	9.2	3.6	22	68	93	46	12	5.2
16	5.2	5.0	12	13	7.5	3.6	36	63	74	36	11	4.1
17	7.5	5.2	10	13	5.0	3.0	74	98	54	29	5.8	4.1
18	5.5	4.1	10	12	3.6	2.8	83	72	44	26	4.1	4.1
19	3.6	5.0	11	12	2.8	2.6	79	58	40	22	3.8	3.3
20	2.8	5.8	11	11	2.8	2.3	92	54	33	142	3.6	3.0
21	2.6	4.1	11	9	3.0	2.8	87	46	30	188	3.6	2.6
22	2.5	3.6	12	9	3.8	2.8	67	39	28	48	3.3	2.6
23	2.5	3.3	13	10	3.6	2.6	58	27	25	36	3.3	2.6
24	2.5	3.8	13	9	2.5	2.5	61	47	21	26	3.0	2.6
25	2.6	5	12	10	2.3	2	59	80	18	20	3.0	2.6
26	3.0	5.8	10	11	2.8	2	47	84	17	24	3.0	2.6
27	3.6	6	10	11	2.5	2	38	76	279	29	3.0	2.6
28	3.8	6.5	12	13	2.3	2	30	77	240	20	3.0	2.5
29	3.6	6.5	8.3	13	-	2	21	171	182	22	3.0	2.5
30	3.6	7.1	9.6	14	-	2.5	18	165	138	19	2.8	2.5
31	4.4	-	9	11	-	2.5	-	228	-	16	2.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	274.7	26	2.5	8.86	545
November	150.2	7.1	3.3	5.01	298
December	311.9	13	6.6	10.1	619
Calendar year 1936	4,111.6	219	.1	11.2	8,150
January	357.5	15	8	11.5	709
February	222.8	17	2.3	7.96	442
March	78.3	3.6	2	2.53	155
April	912.8	92	2.3	30.4	1,810
May	1,964.2	228	9.6	63.4	3,900
June	9,656	4,140	17	322	19,150
July	2,244	311	16	72.4	4,450
August	169.6	14	2.8	5.47	336
September	144.0	18	2.5	4.80	286
Water year 1936-37	16,486.0	4,140	2	45.2	32,700

Coyote Creek near Golondrinas, N. Mex.

Location.- Water-stage recorder, lat. about 35°54', long. about 105°07'. in Mora grant, three-quarters of a mile below Coyote Creek dam site, 1¼ miles above confluence with Mora River, and 1¾ miles northeast of Golondrinas, Mora County.

Records available.- October 1930 to September 1937 in reports of Geological Survey; April 1928 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, about 1,840 second-feet June 26 (gage height, 7.19 feet), from rating curve extended above 250 second feet; minimum daily, 2.1 second-feet Aug. 29.

1930-37: Maximum discharge, about 3,020 second-feet Aug. 30, 1936 (gage height, 10.1 feet), from rating curve extended above 250 second-feet; minimum daily, 0.3 second-foot June 14, 15, July 5, 1934.

Remarks.- Records fair except those for periods of ice effect, Nov. 9-14, 18-21, 25, Dec. 2, 5-28, Jan. 2-13, Jan. 15 to Feb. 5, Feb. 9-11, 20, 23, 24, 26, 27, Mar. 12-16 and of incomplete gage-height record, Nov. 27, June 8-13, 18-26, June 28 to July 21, which were computed on basis of three discharge measurements, available gage heights, weather records, and records for Mora River at La Cueva and Mora River near Golondrinas and are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	8.7	5.4	4.3	4	5.0	4.3	7.7	192	20	7.7	2.9
2	9.2	8.7	4.5	4	4.5	4.5	4.1	9.2	84	20	7.4	4.1
3	8.7	8.7	5.2	3.5	4.5	4.7	4.1	10	268	20	7.0	3.6
4	8.7	9.2	5.0	4.5	5	5.2	5.0	13	63	20	7.4	4.3
5	8.4	9.6	5	5	5.5	5.2	13	16	52	15	6.7	6.7
6	7.7	11	5	4	6.1	7.0	17	24	38	15	5.7	4.7
7	7.0	9.6	4.5	3	5.7	6.1	15	23	32	10	4.3	5.0
8	7.0	9.6	4.5	3	4.1	5.7	12	17	27	10	4.5	4.3
9	6.7	9	4.5	3.5	3.5	5.2	8.7	16	23	5	6.4	5.7
10	6.4	8.5	4	3.5	4	5.0	7.0	36	20	20	5.2	4.7
11	6.7	8	4	4	5	5.2	6.7	31	18	20	4.3	4.5
12	6.4	8.5	4	3.5	6.4	4.5	6.4	30	15	15	4.7	4.3
13	6.4	9	4.5	3.5	8.4	4	7.4	30	10	15	4.5	4.1
14	6.4	10	4.5	3.2	6.1	4	15	22	8.4	10	4.5	4.1
15	6.7	11	5	3.5	5.4	4.5	15	26	7.4	8	4.3	3.9
16	6.7	11	4.5		4.7	5	13	32	5.4	6	4.3	3.9
17	6.7	11	4		5.2	5.4	11	39	4.3	5	4.3	3.9
18	7.0	10	4	3.5	5.2	4.7	11	20	4	5	4.1	3.9
19	7.0	9	4.5		4.3	3.6	11	18	4	5	3.9	3.9
20	6.7	9	4		4	4.1	10	17	3.5	6	3.9	3.9
21	7.0	8	4		4.3	4.1	11	11	3.5	10	3.4	4.1
22	7.7	6.7	4		3.9	3.9	8.4	13	3	9.2	2.9	4.1
23	7.7	5.7	4.5	3	4.5	3.9	7.7	12	3	8.4	2.6	4.3
24	7.7	6.1	5		4.5	3.4	7.4	15	3	8.0	2.6	3.6
25	7.4	5.5	5		3.9	4.3	8.4	13	4	18	2.5	3.9
26	8.0	5.0	4.5		4.2	4.7	8.4	12	120	9.6	2.4	3.6
27	8.4	5	4	3.5	4.4	4.5	5.0	8.0	108	7.4	2.9	3.9
28	8.7	4.7	5		4.5	4.1	8.0	11	30	6.1	2.4	3.9
29	8.4	4.7	5.7		-	4.3	10	16	20	14	2.1	3.9
30	8.7	5.0	5.2	4	-	4.3	8.7	22	20	7.0	4.7	4.3
31	9.2	-	5.2		-	3.9	-	66	-	6.7	3.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	236.4	11	6.4	7.63	469
November	245.5	11	4.7	8.18	487
December	142.7	5.7	4.0	4.60	283
Calendar year 1936	2,602.8	279	1.0	7.11	5,160
January	111.0	5.0	-	3.58	220
February	135.8	8.4	3.5	4.85	269
March	144.0	7.0	3.4	4.65	286
April	279.7	17	4.1	9.32	555
May	635.9	66	7.7	20.5	1,260
June	1,193.5	268	3	39.8	2,370
July	354.4	20	5	11.4	703
August	136.8	7.7	2.1	4.41	271
September	126.0	6.7	2.9	4.20	250
Water year 1936-37	3,741.7	268	2.1	10.3	7,420

Lee Creek near Van Buren, Ark.

Location.- Staff gage, lat. 30°29', long. 94°27', in SW¼ sec. 31, T 10 N., R. 32 W., at Arkansas - Oklahoma State line, 6 3/4 miles northwest of Van Buren.

Drainage area.- 430 square miles.

Records available.- September 1930 to June 1937 (discontinued).

Extremes.- Maximum discharge during period, 12,800 second-feet Jan. 14 (gage height, 13.2 feet, from floodmark); minimum discharge observed, 29 second-feet June 30 (gage height, 1.35 feet).

1930-37: Maximum discharge observed, 37,900 second-feet June 17, 1935 (gage height, 25.0 feet), from rating curve extended above 10,000 second-feet; no flow Sept. 1-24, 1930, Sept. 8-21, 1932, July 23 to Sept. 1, 1934, July 7 to Sept.23,1936.

Remarks.- Records fair. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	347	261	42	1,250	1,890	245	365	490	250			
2	250	225	44	1,090	1,330	230	341	1,010	272			
3	176	4,220	40	970	1,170	220	294	1,010	300			
4	128	1,410	39	930	970	395	278	695	272			
5	102	930	51	770	850	890	341	770	300			
6	82	732	458	695	770	695	490	522	210			
7	65	590	625	1,250	660	1,090	458	490	164			
8	970	458	490	3,240	660	1,250	732	395	132			
9	1,090	353	395	3,630	625	930	1,250	365	176			
10	625	278	329	2,130	555	810	890	329	1,410			
11	395	220	272	1,650	458	660	770	288	732			
12	266	188	220	1,490	425	590	590	288	555			
13	192	164	184	1,810	395	522	522	522	329			
14	160	140	168	7,020	341	490	458	458	250			
15	117	124	152	5,290	347	458	425	359	196			
16	99	105	132	2,640	288	395	395	266	395			
17	82	96	128	1,970	256	353	341	240	278			
18	68	88	120	1,490	240	335	305	220	215			
19	59	80	114	1,090	283	329	317	176	176			
20	51	75	105	1,010	283	329	294	152	156			
21	47	68	90	1,550	770	288	6,520	128	128			
22	42	61	80	2,370	555	261	2,370	128	102			
23	44	57	75	1,490	490	245	1,570	117	90			
24	42	53	75	1,410	425	1,090	1,090	102	70			
25	921	49	70	1,490	395	1,090	770	99	61			
26	2,370	45	65	1,490	323	770	695	90	53			
27	1,090	42	5,930	1,570	283	660	590	82	49			
28	695	39	6,000	1,650	266	522	490	68	39			
29	490	36	2,130	2,820	-	490	458	61	34			
30	365	40	1,570	3,540	-	425	555	55	30			
31	329	-	1,490	2,820	-	425	-	132	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	11,759	2,370	42	379	23,320
November	11,227	4,220	36	374	22,270
December	21,683	6,000	39	699	43,010
Calendar year 1936	78,747	6,940	0	215	156,200
January	63,615	7,020	695	2,052	126,200
February	16,303	1,890	240	582	32,340
March	17,482	1,250	220	564	34,680
April	24,964	6,520	278	832	49,520
May	10,107	1,010	55	326	20,050
June	7,424	1,410	30	247	14,730
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period					366,100

Frog Bayou near Mountainburg, Ark.

Location.- Staff gage above concrete weir in spillway of Fort Smith Dam, lat. 35°39'40", long. 94°09'10", in NW¼NE¼ sec. 2, T. 11 N., R. 30 W., three-quarters of a mile above Warloop Creek, 1¼ miles above Howard Fork, 2½ miles northeast of Mountainburg, and 3 miles below Jones Fork. Zero of gage is 800.00 feet above mean sea level (unadjusted).

Drainage area.- 65 square miles.

Records available.- July 1936 to September 1937.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1936, 2,160 second-feet Sept. 28 (gage height, 26.5 feet); no flow July 1 to Sept. 26.
Maximum discharge observed during year ending Sept. 30, 1937, 2,400 second-feet Jan. 14 (gage height, 26.6 feet); no flow June 27 to Sept. 30.

Remarks.- Records fair. Discharge represents spillway flow from Lake Fort Smith. Gage-height record furnished by City of Fort Smith Water Department.

Discharge, in second-feet, July 1 to Sept. 30, 1936

(No flow, July 1 to Sept. 26)

Sept. 27	1,090
28	1,530
29	368
30	355

Note.- Mean discharge, Sept. 1-30, 111 second-feet (run-off, 6,630 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	78	26	310	310	78	78	78	2			
2	52	146	26	492	215	78	78	638	1			
3	26	725	26	310	215	52	78	310	26			
4	26	310	26	262	140	78	78	310	26			
5	26	215	52	215	140	78	78	262	26			
6	26	140	310	140	140	78	78	215	26			
7	178	140	215	552	78	78	78	140	20			
8	262	78	215	715	78	78	178	140	12			
9	262	78	140	560	78	78	215	140	83			
10	178	78	140	425	78	78	140	78	109			
11	140	78	140	368	78	78	140	78	78			
12	78	78	109	262	78	78	140	109	26			
13	78	26	78	215	78	78	109	140	26			
14	78	26	78	1,480	26	78	78	109	26			
15	26	26	78	1,090	26	78	78	78	23			
16	26	26	78	492	26	78	78	78	109			
17	26	26	78	310	26	78	78	78	90			
18	26	26	78	215	26	78	78	78	73			
19	26	26	52	215	52	78	78	26	57			
20	26	26	26	140	78	78	78	26	36			
21	26	26	26	178	140	78	898	26	23			
22	26	26	26	368	78	78	492	26	12			
23	26	26	26	215	78	78	310	26	8			
24	26	26	26	215	78	178	310	26	5			
25	458	26	26	215	78	140	215	26	2			
26	492	23	26	215	78	140	140	26	1			
27	262	12	985	215	78	78	140	26	0			
28	140	12	492	215	78	78	140	20	0			
29	140	12	310	310	-	78	140	12	0			
30	78	23	752	425	-	78	109	5	0			
31	78	-	638	425	-	78	-	3	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,427	492	26	111	6,800
November	2,564	725	12	85.5	5,090
December	5,304	985	26	171	10,520
Calendar year					
January	11,764	1,480	140	379	23,330
February	2,652	310	26	94.7	5,260
March	2,616	178	52	84.4	5,190
April	4,908	898	78	164	9,730
May	3,333	638	3	108	6,610
June	926	109	0	30.9	1,840
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1936-37	37,494	1,480	0	103	74,370

Bayou Meto near Stuttgart, Ark.

Location.- Wire-weight gage, lat. 34°27'15", long. 91°37'00" (revised), in SE¼ sec. 11, T. 3 S., R. 6 W., at highway bridge, 5⅝ miles southwest of Stuttgart. Prior to July 22, 1937, staff gage at same site and datum. Gage datum lowered 5.00 feet Oct. 1, 1936. Zero of gage is 169.94 feet above mean sea level (general adjustment of 1929).

Records available.- October 1935 to September 1937.

Extremes.- Maximum discharge observed during year, 5,480 second-feet Jan. 26, 27 (gage height, 25.50 feet); no flow at times.
1935-37: Maximum discharge observed, that of Jan. 26, 27, 1937; no flow at times.

Remarks.- Records fair. Discharge determined by slope method; slope obtained from auxiliary gage 5.4 miles (revised) downstream. Flow affected by diversions for irrigation. Gages read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	28	411	5,010	1,690	393	179	26	3	0	0
2		3	34	745	4,930	1,600	369	193	30	8	0	0
3		34	36	795	4,900	1,560	352	201	56	7	0	1
4		95	38	824	4,730	1,110	320	172	74	5	0	1
5		137	41	874	4,770	1,260	280	172	102	4	0	2
6		165	224	929	4,710	1,160	229	179	130	2	0	5
7		179	475	948	4,790	938	229	172	158	1	0	10
8		209	668	987	4,720	1,090	209	165	165	0	0	13
9		241	776	1,070	4,580	1,060	211	165	165	0	0	24
10		273	893	1,200	4,440	1,060	215	165	165	0	0	50
11		265	891	1,310	4,460	999	210	151	158	0	0	65
12		233	945	1,490	4,320	921	210	144	151	0	0	62
13		179	946	1,580	4,180	903	234	289	137	0	0	59
14		158	902	1,640	3,840	910	234	359	116	0	0	53
15		130	884	1,750	3,520	874	234	393	95	0	0	56
16		102	808	2,030	3,400	785	228	403	74	0	0	56
17		83	761	2,050	3,280	725	210	458	65	0	0	71
18		68	703	2,500	3,060	630	195	469	53	0	0	89
19		44	690	2,810	3,050	606	172	470	44	0	0	74
20		12	636	3,490	2,880	470	158	451	41	0	0	65
21		6	582	4,060	2,770	425	151	431	36	0	0	62
22		6	446	4,470	2,660	374	151	413	13	0	0	53
23		9	330	4,580	2,480	305	137	335	0	0	0	44
24		16	279	5,000	2,320	267	95	321	0	0	2	36
25		18	215	5,410	2,190	281	83	278	0	0	2	27
26		19	133	5,480	2,060	303	77	201	0	0	1	30
27		19	103	5,480	1,900	342	95	130	1	0	0	28
28		21	116	5,260	1,840	393	116	95	1	0	0	24
29		22	134	5,350	-	420	144	68	1	0	0	20
30		23	156	5,410	-	422	158	44	1	0	0	17
31		-	275	5,240	-	411	-	31	-	0	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	0	0	0	0	0
November	2,769	273	0	92.3	5,490
December	14,148	946	28	456	28,060
Calendar year 1936	37,212	946	0	102	73,810
January	85,173	5,480	411	2,748	168,900
February	101,790	5,010	1,840	3,635	201,900
March	24,294	1,690	267	784	48,190
April	6,099	393	77	203	12,100
May	7,697	470	31	248	15,270
June	2,058	165	0	68.6	4,080
July	30	8	0	1.0	60
August	5	2	0	.2	9.9
September	1,097	89	0	36.6	2,180
Water year 1936-37	245,160	5,480	0	672	486,200

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Red River near Colbert, Okla.

Location.- Water-stage recorder, lat. 33°49', long. 96°32', in SW¼ sec. 25, T. 8 S., R. 7 E., at Missouri-Kansas-Texas Railroad bridge, 2 miles south of Colbert and 10 miles below mouth of Washita River. Zero of gage is 507.36 feet above mean sea level (general adjustment of 1929).

Drainage area.- 38,700 square miles.

Records available.- October 1923 to September 1937

Average discharge.- 14 years (1923-37), 4,956 second-feet.

Extremes.- Maximum discharge during year, 57,200 second-feet June 11 (gage height, 13.25 feet); minimum, 405 second-feet Aug. 17 (gage height, 0.97 foot).
1923-37: Maximum discharge, 201,000 second-feet May 21, 1935 (gage height, 23.95 feet); minimum, 75 second-feet Aug. 21, 1934 (gage height, 0.05 foot, present datum).
Maximum stage known, 35.5 feet May 26, 1908.

Remarks.- Records fair. Gage-height record collected in cooperation with U. S. Weather Bureau. Discharge June 16-19, Aug. 28 to Sept. 4 computed from graph based on once daily readings of gage by U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35,900	2,620	670	1,250	3,830	809	1,580	2,190	9,370	2,700	1,370	3,460
2	21,400	2,400	692	1,150	2,860	809	1,470	2,060	17,700	2,620	1,250	3,460
3	14,700	2,260	715	1,100	2,330	809	1,420	1,870	11,000	2,540	1,150	2,620
4	11,300	2,000	722	1,050	2,060	1,060	2,780	1,750	9,200	2,120	982	2,120
5	9,200	1,870	777	1,010	1,930	1,470	3,280	1,580	7,500	1,930	841	1,870
6	7,770	1,690	769	990	1,810	1,580	2,120	1,470	7,770	1,690	761	1,640
7	7,240	1,580	761	1,120	1,810	2,260	1,930	1,370	8,040	1,520	730	1,580
8	6,220	1,470	769	1,130	1,750	2,470	2,260	1,270	10,200	1,470	685	1,690
9	4,420	1,420	761	1,170	1,690	2,000	2,190	1,230	21,800	1,320	642	1,580
10	3,280	1,320	730	1,160	1,580	1,810	2,000	1,190	44,700	1,370	594	2,000
11	2,860	1,270	730	1,040	1,520	2,120	1,870	1,180	55,000	1,270	568	4,570
12	2,620	1,210	745	939	1,470	2,230	1,580	1,190	26,600	1,190	542	10,400
13	3,110	1,140	761	2,270	1,320	5,900	1,420	1,520	11,000	1,140	505	10,700
14	3,830	1,120	777	8,900	1,260	10,100	1,270	1,470	7,770	1,080	475	7,770
15	3,020	1,040	793	7,770	1,130	8,100	1,180	3,550	6,220	956	470	6,470
16	2,700	965	801	4,120	1,070	3,920	1,120	2,400	5,060	905	453	4,840
17	2,700	931	809	2,260	1,020	3,740	1,080	1,870	4,220	897	426	3,830
18	2,620	889	825	1,750	990	3,740	982	1,690	4,020	881	670	3,280
19	2,330	865	825	1,580	973	3,830	948	2,120	5,060	889	793	2,620
20	2,060	849	833	1,470	948	3,740	3,660	2,400	8,040	930	656	2,190
21	1,930	801	841	1,420	939	3,460	15,100	2,190	10,700	1,200	628	1,930
22	1,930	777	841	1,370	905	2,700	14,700	1,930	7,770	1,270	2,460	1,750
23	3,700	753	841	1,270	873	2,500	12,300	1,930	6,720	1,190	19,400	1,520
24	5,620	738	841	1,230	841	5,740	8,600	1,870	5,860	922	25,400	1,370
25	17,000	708	841	1,580	809	4,020	10,400	1,690	4,630	914	26,500	1,230
26	18,700	692	857	2,940	809	3,920	8,600	1,640	3,740	817	12,800	1,100
27	11,000	678	10,600	4,740	809	2,700	5,980	1,420	3,280	833	8,320	1,010
28	7,240	678	6,920	4,520	825	2,120	4,320	1,200	2,860	1,170	6,470	914
29	4,740	685	2,780	4,740	-	1,870	3,370	1,320	2,620	2,120	5,980	841
30	3,640	678	1,810	5,980	-	1,810	2,780	1,220	2,540	1,870	5,280	793
31	3,020	-	1,420	5,510	-	1,690	-	1,400	-	1,580	4,220	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	227,800	35,900	1,930	7,348	451,800
November	36,097	2,620	678	1,203	71,600
December	43,857	10,600	670	1,415	86,990
Calendar year 1936	1,453,273	79,400	324	3,971	2,883,000
January	78,529	8,900	939	2,533	155,800
February	40,161	3,830	809	1,434	79,660
March	93,027	10,100	809	3,001	184,500
April	122,290	15,100	948	4,076	242,600
May	53,180	3,550	1,180	1,715	105,500
June	330,990	55,000	2,540	11,030	656,500
July	43,304	2,700	817	1,397	85,890
August	132,021	26,500	426	4,259	261,900
September	91,148	10,700	793	3,038	180,800
Water year 1936-37	1,292,404	55,000	426	3,541	2,564,000

Red River at Garland, Ark.

Location.- Water-stage recorder, lat. 33°21', long. 93°42', in SE¼ sec. 17, T. 16 S. R. 25 W., at Garland. Zero of gage is 203.08 feet above mean sea level (general adjustment of 1929).
Drainage area.- 51,500 square miles.
Records available.- October 1927 to December 1931, June 1934 to September 1937.
Extremes.- Maximum discharge during year, 74,200 second-feet Oct. 2 (gage height, 22.95 feet); minimum, 1,760 second-feet Aug. 17, 19 (gage height, 2.42 feet).
1927-31, 1934-37: Maximum discharge, 143,000 second-feet June 25, 1935 (gage height, 34.37 feet); minimum, 400 second-feet Oct. 8-19, 1931.
Maximum stage known, 35.4 feet, present datum, in April 1927.
Remarks.- Records fair. Discharge Nov. 12 to Dec. 3, June 30 to July 9, and Sept. 7-16 computed from graph based on observer's daily readings.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69,900	30,400	2,630	34,700	48,200	8,130	15,300	24,200	4,010	7,710	2,340	12,900
2	73,700	22,700	2,630	33,000	45,500	8,130	12,600	18,600	3,880	6,730	2,250	11,500
3	72,000	15,600	2,730	32,500	42,800	7,710	10,700	15,900	3,630	6,180	2,250	12,600
4	61,900	11,800	2,830	31,200	39,200	7,310	9,710	17,200	3,510	5,330	2,160	13,800
5	48,700	11,800	3,160	29,100	33,400	8,340	9,010	17,900	6,790	5,170	2,250	13,400
6	36,500	17,200	4,420	27,500	28,300	13,200	9,950	16,200	16,900	5,010	2,530	11,500
7	28,600	21,200	7,110	24,600	23,400	19,300	17,600	13,800	15,900	4,710	2,630	9,470
8	20,400	19,300	14,700	21,200	19,300	22,700	22,700	11,800	12,900	4,420	2,530	8,130
9	16,200	14,700	23,100	23,400	15,600	25,000	21,500	9,950	11,000	4,280	2,340	7,710
10	14,000	11,000	27,500	32,100	13,800	26,200	20,400	8,560	9,470	4,010	2,250	7,510
11	13,200	8,560	28,300	45,500	12,300	25,000	21,500	7,510	9,470	3,750	2,160	7,310
12	12,300	7,110	26,200	50,100	11,200	23,100	23,100	6,920	24,800	3,630	2,070	7,710
13	10,400	6,000	22,700	49,200	10,400	19,700	21,900	6,540	49,200	3,510	1,990	6,920
14	9,010	5,330	18,300	45,900	9,470	16,900	17,900	7,310	57,100	3,390	1,910	5,660
15	7,710	4,860	12,900	45,900	8,780	20,400	15,000	12,000	51,000	3,270	1,910	5,830
16	6,540	4,710	9,010	56,200	8,130	28,700	15,300	17,900	41,400	3,160	1,830	6,920
17	5,830	4,560	6,920	62,400	7,710	32,500	15,600	22,700	34,300	3,050	1,760	10,200
18	5,490	4,280	5,830	63,800	7,310	31,200	14,000	22,700	30,400	3,050	1,830	10,700
19	5,490	4,010	5,170	60,900	7,110	26,200	11,500	17,900	29,100	2,940	1,760	9,240
20	5,490	3,880	4,710	57,100	8,130	21,200	9,710	12,900	25,800	2,830	1,830	8,130
21	5,170	3,750	4,420	56,200	10,400	17,600	8,560	10,200	20,400	2,830	1,910	7,110
22	4,860	3,510	4,140	57,100	12,600	15,000	9,010	8,340	16,200	2,830	1,830	6,180
23	4,710	3,270	3,880	58,500	12,900	13,200	26,800	7,110	12,900	2,730	2,250	5,490
24	4,560	3,160	3,750	58,000	11,800	13,800	49,600	6,540	12,000	2,730	2,940	4,860
25	4,560	3,160	3,630	57,100	10,200	20,800	53,300	6,920	13,800	2,630	7,920	4,560
26	5,170	3,050	3,510	57,100	9,010	28,700	50,100	7,710	13,400	2,530	31,200	4,010
27	15,200	2,940	3,510	58,000	8,560	31,200	45,900	7,310	11,500	2,430	44,100	4,010
28	42,300	2,830	3,630	58,500	8,130	33,000	42,800	6,360	10,200	2,430	41,400	6,730
29	47,800	2,730	4,560	57,100	-	31,200	39,200	5,660	9,010	2,530	34,300	7,310
30	44,600	2,630	17,500	54,800	-	25,800	31,700	5,010	8,130	2,630	25,400	5,660
31	37,800	-	33,400	51,000	-	20,100	-	4,420	-	2,530	17,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	738,090	73,700	4,560	23,810	1,464,000
November	260,030	30,400	2,630	8,668	515,800
December	316,780	33,400	2,630	10,220	628,300
Calendar year 1936	2,873,770	73,700	980	7,852	5,700,000
January	1,449,700	63,800	21,200	46,760	2,875,000
February	483,640	48,200	7,110	17,270	959,300
March	641,320	33,000	7,710	20,690	1,272,000
April	671,950	53,300	8,560	22,400	1,333,000
May	364,070	24,200	4,420	11,740	722,100
June	568,100	57,100	3,510	18,940	1,127,000
July	114,960	7,710	2,430	3,708	228,000
August	253,430	44,100	1,760	8,175	502,700
September	243,060	13,800	4,010	8,102	482,100
Water year 1936-37	6,105,130	73,700	1,760	16,726	12,110,000

Pease River near Crowell, Tex.

Location.- Chain gage, lat. 34°06', long. 99°41', at Quanah-Crowell highway bridge, 7 miles above Kansas City, Mexico and Orient Railway bridge and 8 miles north of Crowell, Foard County. Zero of gage is 1,330.44 feet above mean sea level (Texas State Highway Department datum).
Drainage area.- 2,937 square miles, of which about 533 square miles is probably non-contributing.
Records available.- January 1924 to September 1937.
Average discharge.- 12 years (1924-26, 1927-37), 189 second-feet.
Extremes.- Maximum discharge during year, about 26,300 second-feet Aug. 22 (gage height, 9.00 feet, from graph based on gage readings); no flow at times.
1924-37: Maximum discharge, about 86,000 second-feet Sept. 18, 1936 (gage height, 13.0 feet, from graph based on gage readings), from rating curve extended above 24,000 second-feet; no flow at times.
Maximum stage known, 19.6 feet June 4, 1891.
Remarks.- Yearly records fair. Daily and monthly records not sufficiently accurate for publication. No diversions. Total run-off for calendar year ending Dec. 31, 1936, 207,200 acre-feet. Total run-off for water year ending Sept. 30, 1937, 125,000 acre-feet.

Little Wichita River near Archer City, Tex.

Location.- Water-stage recorder, lat. 33°40', long. 98°36', at Archer City-Wichita Falls highway bridge, 1.5 miles below confluence of North and Middle Forks of Little Wichita River and 4.8 miles north of Archer City, Archer County. Zero of gage is 934.75 feet above mean sea level.

Drainage area.- 496 square miles.

Records available.- May 1932 to September 1937.

Extremes.- Maximum discharges for water years 1932-33 to 1934-35 have been revised as shown in the following table:

Water year	Date	Maximum		Minimum
		Discharge (sec. feet)	Gage height (feet)	
1931-32	July 7	2,380	21.88	No flow for several periods
1932-33	May 26	7,840	25.01	Do.
1933-34	Mar. 3	2,510	22.50	Do.
1934-35	May 6	5,940	24.81	Do.
1935-36	Sept. 17	-	25.67	Do.
1936-37	Mar. 14 or 15	1,470	*17.1	Do.

*From floodmark.

Remarks.- Records good below 60 second-feet and between 900 and 3,000 second-feet; others fair except those estimated or partly estimated on basis of fragmentary gage-height and weather records, which are poor. No diversions above station.

Revisions.- Records for May 1932 to September 1935 supersede those published in previous water-supply papers.

Discharge, in second-feet, 1932-37

1932

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	6.1	42	0.1	44
2								-	2.0	20	0	751
3								-	.8	114	0	1,030
4								-	.6	165	0	899
5								-	.4	28	0	27
6								-	*20	389	0	49
7								-	55	2,120	2.9	484
8								-	26	1,860	7.0	347
9								-	117	276	.9	65
10								-	132	21	.2	19
11								-	138	7.7	.1	8.6
12								-	76	5.7	.1	4.3
13								-	20	4.6	.1	2.3
14								-	8.6	2.7	0	1.4
15								-	66	1.8	0	.4
16								-	41	1.2	.1	.2
17								-	22	.8	10	.1
18								-	7.7	.4	15	.1
19								-	3.3	.2	7.3	.1
20								-	1.5	.1	3.3	.1
21								-	6.9	167	1.8	0
22								-	48	538	.8	0
23								-	24	514	.2	0
24								-	88	82	.1	0
25								-	172	22	0	.1
26								-	22	20	0	.1
27								-	77	10	0	.1
28								-	312	1.1	0	0
29								-	734	.2	0	0
30								20	176	.1	0	0
31								16	-	.1	0	-

*Partly estimated.

Discharge, in second-feet, of Little Wichita River near Archer City, Tex., 1932-37--Continued

1932-33

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0		0	25	0.1	3.1	52	0.2	5.7	0.1	75	2.7
2	0		0	12	.1	2.1	17	.1	3.3	.1	270	1.5
3	0		0	7.3	.1	1.8	7.3	.1	2.3	.1	74	.8
4	0		0	5.3	.1	2.1	3.3	.2	1.5	.1	164	.4
5	6.3		0	3.6	.1	356	1.8	.1	1.1	.1	986	.2
6	4.6		0	2.3	.1	895	.8	.1	.7	11	307	.1
7	1.7		0	2.0	.1	266	.3	.1	.4	113	35	.1
8	.8		0	1.4	.1	49	.2	.1	.3	53	9.5	.1
9	.6		0	.9	.1	21	.2	.2	.4	6.9	3.3	.1
10	.2		0	.9	.1	12	.1	.2	.6	2.7	1.8	.1
11	.1		0	.8	0	6.9	.1	.2	.4	1.7	.8	301
12	.1		0	.4	0	3.9	.1	.4	.6	1.1	.2	709
13	.1		0	.2	0	2.5	0	293	.6	.4	.1	690
14	0		0	.2	0	1.4	0	692	.4	.3	.1	492
15	0		0	.2	0	.7	0	1,230	.1	.2	29	288
16	0		0	.1	0	.3	0	1,370	.1	.1	104	54
17	0		0	.1	0	.2	0	336	.1	.1	26	19
18	0		0	.1	0	.2	0	38	.1	.1	6.9	8.6
19	0		0	.1	0	.1	.1	17	.1	.1	19	3.3
20	0		0	.1	0	.1	267	8.2	.1	.1	119	1.8
21	0		0	.1	0	.1	713	206	.2	0	45	.9
22	0		0	.1	0	.1	248	899	.1	0	5.0	.6
23	0		1,130	.1	0	.1	*37	416	.1	0	1.5	.3
24	0		2,940	.1	0	.1	*16	873	.1	0	.7	.2
25	0		5,040	.1	0	.1	*8.2	4,770	.1	0	.4	.2
26	0		2,740	.1	0	.1	4.3	7,280	.1	0	62	.2
27	0		783	.1	0	.1	2.1	4,280	.1	0	415	.1
28	0		30	.1	2.7	.1	1.8	1,890	.1	0	85	.1
29	0		16	.1	-	239	1.2	115	.1	0	19	.1
30	0		22	.1	-	578	.4	22	.1	0	15	.1
31	0		49	.1	-	331	-	10	-	0	7.7	-

*Partly estimated.

1933-34

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	69	0.1	512	2.7	1.1	0		0	0.2
2	0	0	.1	22	.1	1,700	2.3	.6	0		0	.2
3	0	5.4	6.1	15	.1	2,410	1.7	.3	0		0	1.4
4	0	126	5.7	95	.1	1,530	1.5	.2	0		0	54
5	0	36	*3.3	32	.1	74	1.1	10	0		0	22
6	0	17	*2.3	12	.1	20	.8	17	0		0	5.3
7	0	6.9	*1.5	4.9	.1	11	.6	6.1	0		0	1.5
8	0	3.1	*.8	2.7	180	6.9	.4	3.9	0		0	.6
9	0	2.1	*.2	2.0	776	3.6	.3	2.1	0		0	1.3
10	0	1.2	*.1	1.2	453	3.3	.3	1.1	0		0	23
11	0	.7	*0	.8	30	1.7	.2	.6	0		0	7.7
12	0	.2	*0	.6	13	1.2	.1	.2	0		0	1.8
13	0	.2	*0	.2	6.1	1.1	.1	.1	0		0	.8
14	0	.1	*0	.2	3.3	.9	.1	.1	0		0	578
15	0	0	*0	.2	2.0	.8	.1	.1	0		0	1,410
16	.5	0	*0	.1	1.5	.6	36	.1	0		0	939
17	2.7	0	*0	.1	.9	.3	18	0	6.5		0	38
18	.9	0	*0	.1	249	.2	335	0	209		0	15
19	.2	0	*0	.1	656	.2	567	0	30		0	6.5
20	0	0	†129	.1	133	.2	80	0	9.0		0	3.6
21	0	4.1	49	.1	24	.3	18	0	2.7		0	5.7
22	0	30	15	.1	11	.4	9.0	0	1.2		0	72
23	0	20	6.9	.1	6.5	.3	4.3	0	.7		0	30
24	0	6.9	3.1	.1	3.3	.2	11	0	.4		0	15
25	0	2.9	2.1	0	2.3	5.4	72	0	.2		0	7.3
26	0	2.1	1.5	0	1.5	298	20	0	.1		26	3.3
27	0	1.4	.9	0	1.1	134	11	0	0		28	2.0
28	0	.9	.7	.1	.8	41	6.1	0	0		8.6	1.1
29	0	.4	15	.1	-	15	2.9	0	0		3.3	.7
30	0	.1	133	.1	-	7.7	1.8	0	0		1.1	.2
31	0	-	263	.1	-	3.6	-	0	-		.4	-

*Estimated
†Partly estimated.

Discharge, in second-feet, of Little Wichita River near Archer City, Tex., 1932-37--Continued

1934-35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0	12	0.1	0	0.2	0.9	7.7		1,120	0.7	8.2
2	.1	0	7.3	0	0	.2	.6	3.1		944	.3	52
3	.1	0	5.3	0	0	.2	.2	1.8		54	.2	722
4	.1	0	5.7	0	0	33	.4	642		17	.2	897
5	0	0	3.3	0	0	26	47	2,520	*1,220	9.0	.1	223
6	0	0	2.3	0	0	11	99	4,790		4.9	.1	18
7	0	0	1.5	0	0	4.6	34	2,830		2.7	.1	52
8	0	0	1.4	0	0	2.1	12	936		1.5	0	38
9	0	0	1.2	0	0	1.8	5.7	35		.7	0	252
10	0	0	.8	0	0	97	2.9	14	*14	.4	0	572
11	0	0	.7	0	0	584	1.5	7.3		.3	0	85
12	0	0	.6	0	0	568	.8	5.3		.2	0	21
13	0	0	.3	0	0	65	.4	4.9	*1,150	4.3	.2	10
14	0	0	.2	0	0	24	.4	18		5.2	.9	4.9
15	0	0	.2	0	.1	14	.2	338		7.7	5.3	2.5
16	0	0	.2	0	.1	6.5	.2	1,180		2.5	2.5	1.7
17	.3	5.0	.2	0	3.1	3.1	.2	1,180	*16	1.2	1.1	.9
18	133	16	.2	0	4.3	1.8	.2	1,320		1.4	.2	.6
19	90	66	.2	0	2.3	1.2	.1	1,770		1.8	.2	.4
20	30	870	.2	0	1.4	.9	.1	2,260		12	.1	.2
21	11	1,250	.1	0	1.2	142	.1	737	6.5	42	.1	.2
22	4.3	2,760	.1	0	1.4	1,290	.1	37	3.6	24	.1	.1
23	1.7	4,390	.1	0	1.1	2,340	.9	23	2.0	96	.1	.1
24	.7	2,650	.1	0	1.5	1,950	246	62	1.4	360	0	.1
25	.2	655	.1	0	1.4	151	120	14	.8	824	0	.1
26	.1	20	.1	0	1.1	22	81	5.3	19	458	0	6.0
27	.1	11	.1	0	.9	11	28		15	26	0	12
28	.1	6.5	.1	0	.6	5.7	15		10	11	2.1	11
29	0	4.6	.1	0	-	3.3	16	*2.0	68	4.3	8.6	4.6
30	0	7.7	.1	0	-	2.1	30		929	2.3	15	2.1
31	0	-	.1	0	-	1.5	-		-	1.4	22	-

*Estimated.

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	3.9	3.3	0.1			0	7.7	12	0		0
2	.9	2.5	2.1	.1			0	3.1	5.7	0		0
3	.4	2.0	1.4	0			0	358	2.9	0		0
4	.3	1.7	.8	0			0	866	1.7	0		0
5	.4	1.4	.8	0			0	529	1.1	0		0
6	.1	1.4	4.2	0			0	26	1.1	348		0
7	.1	1.1	15	0			0	10	258	571		0
8	.1	.8	16	0			0	95	613	80		0
9	.1	8.8	8.6	0			0	572	95	15		0
10	.1	120	4.6	0			0	158	24	6.1		0
11	55	54	3.3	0			0	41	11	2.7		0
12	24	18	2.1	0			0	22	10	1.4		0
13	9.5	8.6	1.4	0			0	14	174	.8		0
14	4.6	4.6	.9	0			0	7.3	89	.4		0
15	2.5	2.5	.6	0			0	3.9	20	.2		0
16	1.8	1.8	.4	0			0	2.7	10	27		102
17	1.2	1.4	.2	0			0	2.1	4.9	9.0		3,840
18	.8	.9	.2	0			0	1.7	2.3	2.5		8,270
19	.6	.7	.2	0			0	1.2	1.4	1.1		4,150
20	.6	.6	.1	0			0	1.1	.8	.2		2,890
21	.2	.2	.1	0			0	.7	.3	.1		1,520
22	.1	.2	.1	0			0	.6	.2	.1		1,190
23	.2	.2	.1	0			0	.8	.1	.1		1,220
24	.8	.2	.1	0			0	149	.1	0		1,230
25	407	.2	.1	0			0	72	0	0		1,450
26	908	.3	.1	0			0	26	0	0		3,040
27	453	.7	.1	0			0	261	0	0		7,280
28	65	.7	.1	0			0	905	0	0		6,990
29	24	.8	.1	0			0	1,110	0	0		4,470
30	13	1.5	.1	0			10	705	0	0		2,130
31	7.3	-	.1	0			-	28	-	0		-

Discharge, in second-feet, of Little Wichita River near Archer City, Tex., 1932-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	242	2.5	0.4	0.1	0.1	*0.1	*1.2	1.1	12	0	0.2	0.2
2	24	2.0	.6	.2	.1	*.1	*.6	5.7	4.6	0	.1	.1
3	17	1.2	.6	.2	.1		*.2	13	2.5	0	0	.1
4	10	.9	.4	.1	.1		*.2	6.9	353	0	0	.1
5	6.1	.6	.4	.1	.1		*.1	3.9	400	0	8.6	.1
6	4.3	.3	.4	.1	.1		.1	2.1	34	0	8.6	.1
7	2.7	.2	.6	.1	.1		.1	1.5	14	0	2.0	.1
8	1.7	.1	.4	.1	.1		.1	.9	6.9	0	1.4	38
9	1.4	.2	.3	0	.1		.1	.6	3.9	0	.6	20
10	1.2	.1	.2	0	.1	*328	.1	.4	2.3	0	.2	4.6
11	.9	.1	.2	.1	.1		.1	.3	1.4	0	.2	1.8
12	.7	.1	.2	.1	.1		.1	.6	.6	0	.1	1.1
13	.6	.2	.2	.1	.1		.2	18	.2	0	0	.7
14	.8	.2	.2	.1	.1		.2	403	.2	0	0	.4
15	.8	.2	.2	.1	*.1		.2	68	.2	0	0	.8
16	.8	.2	.2	.1	*.1		.2	15	24	0	0	1.4
17	.7	.2	.2	.1	*.1		.2	6.9	242	0	0	.9
18	.6	.2	.2	.1	*.1	*22	.2	2.9	52	0	0	.9
19	.3	.3	.2	.1	*.1	*18	3.8	2.0	20	0	0	.9
20	.2	.3	.1	.1	*.1	*15	272	1.2	7.7	0	281	.8
21	.2	.2	.1	.1	*.1	*13	871	.7	3.6	0	364	.4
22	25	.2	.1	.1	*.1	*11	702	.2	1.8	0	576	.2
23	480	.2	.1	.1	*.1	*8.6	104	.2	1.1	0	92	.1
24	384	.2	.1	.1	*.1	*6.9	32	.1	.6	0	46	.1
25	114	.2	.1	.1	*.1	*6.1	15	.1	.2	0	44	.1
26	62	.2	.1	.1	*.1	*4.9	8.2	.1	.2	0	35	0
27	45	.2	.2	.1	*.1	*3.9	4.3	.1	.1	3.6	17	0
28	22	.2	.1	.1	*.1	*3.1	2.7	0	.1	3.9	5.3	0
29	12	.3	.1	.1	-	*2.3	1.8	.1	.1	1.7	2.0	0
30	6.9	.3	.1	.1	-	*2.0	1.1	.1	.1	.9	.9	0
31	3.9	-	.1	.1	-	*1.5	-	24	-	.4	.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar year					
January 1932					
February					
March					
April					
May					
June	2,403.9	734	0.4	80.1	4,770
July	6,414.7	2,120	.1	207	12,720
August	50.0	15	0	1.61	99
September	3,732.9	1,030	0	124	7,400
The period					24,990
October 1932	14.5	6.3	0	.47	29
November	0	0	0	0	0
December	12,750	5,040	0	411	25,290
Calendar year					
January 1933	64.1	25	.1	2.07	127
February	3.7	2.7	0	.13	7.3
March	2,773.2	895	.1	89.5	5,500
April	1,382.3	713	0	46.1	2,740
May	24,747.2	7,280	.1	798	49,090
June	20.0	5.7	.1	.67	40
July	191.3	113	0	6.17	379
August	2,887.0	986	.1	93.1	5,730
September	2,575.6	709	.1	85.9	5,110
Water year 1932-33	47,408.9	7,280	0	130	94,040
October 1933	4.3	2.7	0	.14	8.5
November	267.7	126	0	8.92	531
December	639.3	263	0	20.6	1,270
Calendar year 1933	35,555.7	7,280	0	97.4	70,530
January 1934	259.1	95	0	8.36	514
February	2,555.0	776	.1	91.2	5,070
March	6,783.9	2,410	.2	219	13,460
April	1,204.4	567	.1	40.1	2,390
May	43.6	17	0	1.41	86
June	259.8	209	0	8.66	515
July	0	0	0	0	0
August	67.4	28	0	2.17	134
September	3,247.2	1,410	.2	108	6,440
Water year 1933-34	15,331.7	2,410	0	42.0	30,420

*Estimated.

Discharge, in second-feet, of Little Wichita River near Archer City, Tex., 1932-37--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1934	271.9	133	0	8.77	539
November	12,711.8	4,390	0	424	25,210
December	44.9	12	.1	1.45	89
Calendar year 1934	27,449.0	4,390	0	75.2	54,450
January 1935	.1	.1	0	0	.2
February	20.5	4.3	0	.73	41
March	7,363.2	2,340	.2	238	14,600
April	743.9	246	.1	24.8	1,480
May	20,751.4	4,790	-	669	41,160
June	14,403.3	-	.8	480	28,570
July	4,039.8	1,120	.2	130	8,010
August	60.2	22	0	1.94	119
September	2,997.7	897	.1	99.9	5,950
Water year 1934-35	63,408.7	4,790	0	174	125,800
October 1935	1,982.9	908	.1	64.0	3,930
November	241.7	120	.2	8.06	479
December	67.3	16	.1	2.17	133
Calendar year 1935	52,672.0	4,790	0	144	104,500
January 1936	.2	.1	0	.01	.4
February	0	0	0	0	0
March	0	0	0	0	0
April	10	10	0	.33	20
May	6,079.9	1,110	.6	196	12,060
June	1,338.6	613	0	44.6	2,660
July	1,065.7	571	0	34.4	2,110
August	0	0	0	0	0
September	49,772	8,270	0	1,659	98,720
Water year 1935-36	60,558.3	8,270	0	165	120,100
October 1936	1,471.8	480	.2	47.5	2,920
November	12.3	2.5	.1	.41	24
December	7.4	.6	.1	.24	15
Calendar year 1936	59,758.1	8,270	0	163	118,500
January 1937	3.1	.2	0	.10	6.1
February	2.8	.1	.1	.10	5.6
March	5,038.5	-	.1	163	9,990
April	2,022.1	871	.1	67.4	4,010
May	579.7	403	0	18.7	1,150
June	1,189.4	400	.1	39.6	2,360
July	10.5	3.9	0	.34	21
August	1,485.6	576	0	47.9	2,950
September	74.0	3.8	0	2.47	147
Water year 1936-37	11,897.0	871	0	32.6	23,600

Washita River near Clinton, Okla.

Location.- Wire-weight gage, lat. 35°31', long. 98°57', in sec. 11, T. 12 N., R. 17 W., 1⅝ miles northwest of Clinton, 1½ miles above Beaver Creek, and 4 miles below Barnitz Creek. Zero of gage is 1,467.60 feet above mean sea level (general adjustment of 1929).

Drainage area.- 1,860 square miles.

Records available.- October 1935 to September 1937.

Extremes.- Maximum discharge observed during water year 1935-36, 26,900 second-feet June 5 (gage height, 28.50 feet), from rating curve extended above 8,700 second-feet; minimum discharge, 10 second-feet Apr. 15, 16; minimum gage height, 5.29 feet Aug. 27.
Maximum discharge observed during water year 1936-37, ~~3,800~~ second-feet May 30 (gage height, 19.78 feet); minimum discharge, 9 second-feet Aug. 15-17; minimum gage height, 5.52 feet Aug. 16.

Remarks.- Records poor. Discharge for July 25-27, 1936, Jan. 9, 1937 interpolated. Gage read twice daily.

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	15	22	22	15	16	12	8,750	405	96	23	13
2	-	13	22	20	21	15	12	1,370	549	72	23	482
3	-	14	19	20	14	15	12	238	332	68	22	28
4	-	13	17	20	13	15	12	1,810	238	64	20	1,050
5	-	13	16	21	12	14	12	1,080	16,700	61	22	1,380
6	-	13	18	19	13	14	12	214	11,200	58	22	375
7	-	13	17	17	17	15	12	139	2,220	52	19	114
8	-	14	16	18	19	15	12	2,320	1,100	52	19	139
9	-	13	15	18	15	14	12	375	566	49	19	58
10	-	14	15	17	14	14	12	170	390	46	18	49
11	-	13	15	16	14	14	12	124	318	44	18	39
12	-	13	15	16	15	13	12	673	290	44	18	32
13	-	13	14	16	16	13	12	159	263	39	18	30
14	-	13	14	15	15	13	11	100	276	39	17	68
15	-	13	14	15	13	14	10	79	276	39	18	39
16	-	13	13	15	14	13	10	68	192	36	16	83
17	-	13	13	15	12	13	31	64	170	36	16	673
18	271	13	13	13	12	13	69	61	159	205	15	451
19	243	13	13	12	12	12	37	52	149	129	14	646
20	91	13	13	13	12	12	96	49	119	68	14	360
21	40	13	13	20	13	12	40	44	119	46	14	238
22	32	14	13	21	14	12	20	36	124	39	14	159
23	22	14	13	16	24	12	14	790	114	36	14	975
24	19	15	13	16	20	12	13	2,360	114	34	13	950
25	21	14	13	17	16	12	12	1,900	149	32	13	304
26	20	143	13	13	18	12	12	1,580	91	30	13	810
27	17	116	14	13	20	12	3,450	1,520	83	28	12	1,050
28	16	54	22	14	18	11	2,860	1,580	79	26	12	203
29	16	34	14	14	16	12	459	2,140	75	23	13	129
30	16	26	21	14	-	12	178	1,180	87	30	13	100
31	61	-	54	14	-	12	-	515	-	24	13	-

Discharge, in second-feet, of Washita River near Clinton, Okla.--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	30	26	26	28	23	23	15	304	28	19	24
2	64	28	26	26	28	23	22	14	304	32	18	24
3	61	30	26	26	28	22	23	14	1,760	32	15	23
4	55	30	26	26	28	22	23	14	451	34	12	20
5	52	28	28	26	26	22	23	13	192	34	12	19
6	46	28	30	26	26	23	22	13	139	32	12	18
7	129	28	28	26	24	24	22	13	109	30	11	130
8	332	26	26	26	24	26	20	22	104	32	11	276
9	159	26	26	26	24	24	19	44	87	32	11	483
10	87	26	26	26	24	24	18	64	170	28	11	600
11	64	26	26	26	24	23	18	39	109	24	10	360
12	55	26	26	26	24	24	17	26	139	23	11	532
13	49	26	26	28	24	24	18	26	214	22	10	420
14	46	24	26	30	24	26	17	23	114	22	10	346
15	42	24	26	30	24	30	17	20	109	20	9	263
16	39	24	26	30	23	28	16	20	1,350	18	9	139
17	36	26	26	30	23	24	16	366	318	18	9	96
18	34	26	26	28	23	23	16	1,120	129	18	17	83
19	34	26	26	26	23	23	15	203	109	18	18	72
20	32	26	26	28	23	22	20	159	104	18	15	64
21	32	26	24	26	22	22	32	181	109	19	319	61
22	30	26	24	26	22	23	28	114	100	865	1,610	238
23	30	26	24	26	22	24	28	75	79	226	1,180	139
24	30	26	24	26	22	44	28	58	72	139	263	109
25	30	26	24	26	22	26	23	52	64	91	114	75
26	30	26	26	26	22	23	20	451	52	61	75	64
27	30	26	26	26	22	23	18	181	46	28	55	58
28	30	26	26	26	23	23	17	91	46	22	44	52
29	30	26	26	26	-	23	16	75	32	22	36	49
30	30	26	26	26	-	23	15	3,250	28	20	32	44
31	30	-	26	26	-	23	-	1,780	-	20	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 18-31, 1935	885	271	16	63.2	1,760
November	708	143	13	23.6	1,400
December	517	54	13	16.7	1,030
Calendar year					
January 1936	510	22	12	16.5	1,010
February	447	24	12	15.4	887
March	408	16	11	13.2	809
April	7,478	3,450	10	249	14,830
May	31,540	8,750	36	1,017	62,560
June	36,947	16,700	75	1,232	73,280
July	1,645	205	23	53.1	3,260
August	515	23	12	16.6	1,020
September	11,007	1,380	13	367	21,830
The period					183,700
October 1936	1,827	332	30	58.9	3,620
November	794	30	24	26.5	1,570
December	804	30	24	25.9	1,590
Calendar year 1936	93,922	16,700	10	257	186,300
January 1937	828	30	26	26.7	1,640
February	672	28	22	24.0	1,330
March	757	44	22	24.4	1,500
April	610	32	15	20.3	1,210
May	8,536	3,250	13	275	16,930
June	6,943	1,760	28	231	13,770
July	2,028	865	18	65.4	4,020
August	4,008	1,610	9	129	7,950
September	4,881	600	18	163	9,680
Water year 1936-37	32,688	3,250	9	89.6	64,810

Washita River at Anadarko, Okla.

Location.- Wire-weight gage, lat. 35°05', long. 90°14', in NW¼ sec. 15, T. 7 N., R. 10 W., half a mile north of Anadarko and 5 miles above Sugar Creek.

Drainage area.- 3,530 square miles.

Records available.- October 1902 to June 1908, January 1936 to September 1937. May 1924 to June 1925, at site about 7 miles downstream.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1936, 10,800 second-feet June 8 (gage height, 21.69 feet); minimum, 28 second-feet Aug. 31 (gage height, 1.75 feet).

Maximum discharge observed during water year 1936-37, 4,660 second-feet June 19 (gage height, 17.55 feet); minimum, 63 second-feet Aug. 6, 12, 14, 16, 17 (gage height, 2.05 feet).

1902-08, 1936-37: Maximum discharge observed, that of June 8, 1936; minimum, that of Aug. 31, 1936.

Remarks.- Records poor. Operation of hydroelectric plant 10 miles upstream causes diurnal fluctuation during low water. Gage read twice daily.

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				-	126	117	99	1,790	2,420	247	126	72
2				-	126	117	108	1,360	1,260	409	135	72
3				-	126	117	94	2,310	828	635	126	72
4				-	108	135	108	3,050	719	449	126	90
5				-	94	117	99	3,090	806	280	126	1,070
6				-	99	126	99	1,790	1,520	232	126	677
7				-	117	117	94	2,700	3,490	232	117	938
8				-	135	135	94	1,800	9,160	194	126	1,360
9				-	90	144	108	740	9,400	194	94	850
10				135	104	144	104	806	7,550	184	117	352
11				126	117	126	99	1,580	5,330	184	104	247
12				135	104	117	104	762	1,610	194	99	206
13				126	117	117	104	509	1,160	174	104	154
14				126	135	117	104	469	982	184	94	154
15				126	126	112	104	698	872	174	99	135
16				104	94	117	108	449	784	174	94	135
17				117	99	126	99	352	698	164	90	164
18				117	117	117	99	280	656	164	90	232
19				117	126	108	126	263	614	154	86	489
20				112	112	112	135	218	551	154	86	719
21				117	126	112	126	184	509	144	86	1,000
22				104	135	108	99	218	469	210	81	982
23				135	126	112	126	206	469	218	81	1,280
24				117	126	104	174	315	449	194	81	1,960
25				135	126	108	135	593	429	174	76	1,360
26				108	135	108	126	1,520	371	144	72	1,670
27				117	135	104	126	2,420	352	144	68	3,530
28				108	135	104	117	2,280	297	135	68	3,530
29				108	135	104	112	2,660	333	144	68	2,620
30				99	-	94	1,330	3,170	297	135	66	1,680
31				104	-	104	-	3,010	-	135	45	-

Discharge, in second-feet, of Washita River at Anadarko, Okla.--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	656	135	126	117	135	112	154	117	2,700	218	112	164
2	489	135	117	117	126	126	144	112	2,520	206	112	154
3	297	135	117	126	117	126	135	104	2,000	194	104	135
4	280	154	126	117	117	126	247	99	1,090	206	99	154
5	263	247	117	112	126	117	194	99	1,960	174	90	282
6	232	164	117	117	126	135	174	99	2,030	184	68	352
7	184	135	135	117	117	126	184	99	828	174	72	263
8	206	126	126	117	117	144	164	108	449	164	81	258
9	218	126	117	117	117	144	144	104	371	164	72	2,240
10	449	117	108	117	117	144	117	108	614	174	68	2,620
11	469	117	126	112	117	135	117	117	635	164	76	1,280
12	390	126	117	117	117	135	126	117	333	164	72	1,280
13	247	126	108	112	117	126	108	117	315	154	68	850
14	206	117	126	112	117	126	112	104	263	144	68	469
15	194	117	117	126	112	126	112	112	247	144	68	784
16	174	117	117	135	112	135	117	112	2,890	126	63	572
17	174	117	117	126	112	126	112	99	4,050	126	63	352
18	154	117	117	117	112	135	117	99	4,480	126	81	280
19	154	117	117	126	112	135	126	104	3,950	126	126	232
20	154	126	117	117	112	126	144	104	1,030	117	154	206
21	144	126	117	117	112	126	144	740	593	117	135	184
22	144	117	117	126	117	126	436	352	469	126	429	174
23	144	117	117	94	117	126	656	530	429	112	1,460	164
24	144	117	112	108	112	135	280	551	429	135	2,620	154
25	144	117	117	117	117	144	164	409	352	698	2,620	206
26	144	112	117	112	117	144	154	206	297	390	1,530	218
27	135	112	117	117	108	174	135	174	280	232	551	174
28	135	117	117	126	117	164	135	174	315	164	333	164
29	135	117	117	126	-	164	135	572	409	144	263	154
30	135	126	126	126	-	154	126	352	280	135	174	144
31	135	-	117	126	-	144	-	2,340	-	117	174	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October					
November					
December					
Calendar yea.					
January 10-31, 1936	2,593	135	99	118	5,140
February	3,451	135	90	119	6,840
March	3,600	144	94	116	7,140
April	4,560	1,330	94	152	9,040
May	41,592	3,170	184	1,342	82,500
June	54,385	9,400	297	1,813	107,900
July	6,561	635	135	212	13,010
August	2,959	135	45	95.5	5,870
September	27,800	3,530	72	927	55,140
The period					292,600
October 1936	7,129	656	135	230	14,140
November	3,849	247	112	128	7,630
December	3,676	135	108	119	7,290
Calendar year					
January 1937	3,669	135	94	118	7,280
February	3,272	135	108	117	6,490
March	4,206	174	112	136	8,340
April	5,213	656	108	174	10,340
May	8,534	2,340	99	275	16,930
June	36,508	4,480	247	1,220	72,610
July	5,619	698	112	181	11,150
August	12,006	2,620	63	387	23,810
September	14,663	2,620	135	489	29,080
Water year 1936-37	108,444	4,480	63	297	215,100

Washita River near Durwood, Okla.

Location.- Wire-weight gage, lat. 34°14', long. 96°58', in sec. 3, T. 4 S., R. 3 E., 3 miles north of Durwood.

Records available.- August 1928 to September 1937.

Extremes.- Maximum discharge observed during year, ~~10,500~~ second-feet Aug. 23 (gage height, 20.75 feet); minimum, 92 second-feet Apr. 19 (gage height, 3.17 feet).
1928-37: Maximum discharge observed, 36,400 second-feet May 19, 1935 (gage height, 37.22 feet); minimum, 17 second-feet Aug. 14, 1934 (gage height, 2.77 feet).
Maximum stage known, 38 feet in April and June 1927.

Remarks.- Records good. Discharge for Jan. 7-9, 22-24, estimated. Gage read twice daily.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,100	478	273	273	628	263	850	508	207	478	225	816
2	3,430	450	273	303	818	273	658	450	182	508	254	689
3	2,650	450	263	165	720	273	478	478	161	537	293	567
4	1,940	537	263	268	689	283	915	478	154	478	324	293
5	1,260	478	273	283	658	283	1,190	303	658	478	350	293
6	1,050	366	273	273	628	293	628	254	720	366	173	263
7	1,710	345	278	250	567	478	537	216	1,560	334	165	537
8	915	345	268	225	508	658	508	225	3,120	313	161	720
9	1,710	345	263	200	478	689	508	177	5,100	293	165	785
10	1,640	324	268	190	450	658	537	207	4,500	303	142	720
11	689	298	273	199	394	720	537	313	3,490	283	134	658
12	628	355	254	216	394	5,410	537	334	2,010	263	121	628
13	567	355	254	263	366	5,680	508	567	1,410	258	131	567
14	478	334	258	355	366	5,690	478	3,420	1,410	249	121	1,410
15	318	324	254	450	366	2,270	450	1,260	1,330	235	114	1,260
16	300	293	235	421	345	1,190	394	818	1,330	216	127	1,120
17	293	298	235	421	293	1,120	366	628	1,260	195	161	915
18	689	421	230	394	268	980	182	350	1,260	293	324	752
19	537	394	235	350	273	785	98	283	1,410	313	450	689
20	394	254	240	298	283	689	450	334	1,410	334	508	720
21	345	278	240	278	283	597	9,200	366	1,560	288	537	689
22	508	273	244	263	293	567	4,860	355	1,710	216	7,270	658
23	1,190	293	244	288	298	980	2,530	313	2,010	216	8,600	567
24	628	366	254	313	293	2,530	1,480	303	2,600	207	4,650	508
25	2,860	278	254	324	303	1,860	1,120	293	2,010	199	3,010	450
26	2,140	263	273	324	318	915	850	313	1,120	190	2,010	345
27	915	263	283	334	324	720	478	394	1,050	173	1,120	313
28	689	263	303	1,050	303	689	567	450	980	157	752	283
29	597	268	318	2,400	-	597	658	478	850	165	720	263
30	537	263	345	2,140	-	478	658	508	720	199	818	235
31	478	-	-	1,710	-	537	-	450	-	230	850	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	36,185	4,100	293	1,167	71,770
November	10,252	537	254	342	20,330
December	7,921	345	230	~~264~~	~~15,710~~
Calendar year 1936	377,107	22,500	98	1,030	747,900
January	15,221	2,400	165	491	30,190
February	11,907	818	268	425	23,620
March	39,155	5,690	263	1,263	77,660
April	33,210	9,200	98	1,107	65,870
May	15,826	3,420	177	511	31,390
June	47,292	5,100	154	1,576	93,800
July	8,967	537	157	289	17,790
August	34,660	8,500	114	1,119	68,790
September	18,715	1,410	235	624	37,120
Water year 1936-37	279,331	9,200	98	~~765~~	~~564,600~~

Kiamichi River near Belzoni, Okla.

Location.- Wire-weight gage, lat. 34°12', long. 95°29', in SE¼ sec. 14, T. 4 S., R. 17 E., 1¾ miles northwest of Belzoni and 6 miles below mouth of Cedar Creek.

Drainage area.- 1,420 square miles.

Records available.- December 1925 to September 1931, October 1935 to September 1937 (discontinued).

Extremes.- Maximum discharge observed during water year 1935-36, 36,700 second-feet Dec. 7 (gage height, 36.81 feet); no flow July 19 to Sept. 3, Sept. 6-23.

Maximum discharge observed during water year 1936-37, 23,900 second-feet Jan. 9 (gage height, 31.53 feet); minimum, 0.1 second-foot Aug. 17, 19 (gage height, 3.51 feet).

1925-31, 1935-37: Maximum discharge, about 61,400 second-feet Dec. 14, 1927 (gage height, 41.24 feet), determined by slope-area method; no flow Aug. 10-30, 1930, Sept. 24-30, 1931, and July 19 to Sept. 3, Sept. 6-23, 1936.

Remarks.- Records fair. Gage read twice daily Oct. 1, 1935 to Aug. 21, 1937; once daily, Aug. 22 to Sept. 30, 1937. Discharge Aug. 22-26, 1937, computed from stage graph based on observer's once-daily readings.

Rating table, water years 1935-36 and 1936-37 (gage height, in feet, and discharge, in second-feet)

3.5	0	9.0	2,240
3.7	2.0	11.0	3,440
3.9	8.0	14.0	5,510
4.1	23	17.0	7,900
4.3	53	20.0	10,590
4.6	119	24.0	14,600
5.0	235	28.0	19,150
5.5	419	32.0	24,650
6.0	640	34.0	28,290
7.0	1,140	36.4	35,120

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	127	8,160	940	252	137	526	303	77	65	3.4		0
2	117	5,230	690	252	145	461	286	73	57	3.6		0
3	112	2,080	571	268	153	389	252	73	46	3.6		0
4	88	1,090	482	252	156	440	235	77	36	3.2		97
5	71	740	461	252	145	740	219	82	31	2.6		194
6	59	790	15,200	235	142	1,740	200	80	43	1.8		0
7	48	790	33,700	219	151	1,580	185	69	69	1.7		0
8	41	740	25,500	219	145	1,200	191	69	53	1.5		0
9	41	690	14,800	219	140	890	235	73	36	1.3		0
10	38	594	3,500	219	135	740	191	69	28	1.3		0
11	33	548	2,300	203	129	640	173	1,960	28	1.2		0
12	30	504	1,690	200	129	548	159	1,250	23	1.1		0
13	26	504	1,360	203	135	461	151	790	19	.8		0
14	24	504	1,040	200	135	419	140	840	18	.8		0
15	24	526	840	191	127	379	135	690	19	.6		0
16	22	482	740	185	124	340	119	482	22	.5		0
17	20	419	640	179	124	303	109	360	21	.3		0
18	18	379	571	176	114	286	105	303	18	.2		0
19	17	340	526	173	109	268	97	252	15	0		0
20	15	286	461	167	109	235	91	219	13	0		0
21	112	252	419	170	114	235	84	194	10	0		0
22	140	235	389	173	124	219	77	165	9.2	0		0
23	61	219	379	173	124	235	75	145	8.0	0		0
24	41	191	379	167	119	389	73	135	6.4	0		27
25	28	182	340	162	119	1,360	82	109	4.8	0		182
26	22	235	303	162	137	890	91	100	4.0	0		162
27	36	3,500	286	151	179	690	102	91	3.2	0		20,000
28	77	2,780	268	145	360	548	100	93	3.0	0		35,100
29	57	2,080	252	140	690	461	91	82	2.8	0		24,200
30	122	1,300	252	140	-	389	86	77	2.4	0		6,880
31	379	-	252	140	-	340	-	73	-	-		-

Discharge, in second-feet, of Kiamichi River near Belzoni, Okla., 1935-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,740	940	148	4,250	3,140	360	740	571	109	100	3.2	219
2	1,090	890	167	4,810	2,240	340	640	594	105	82	2.8	303
3	690	9,330	185	4,390	1,740	340	594	740	95	71	2.4	185
4	526	7,500	140	2,900	1,520	838	5,300	1,140	95	59	2.0	127
5	419	3,900	322	2,180	1,300	2,240	3,200	840	91	50	1.8	124
6	322	2,300	4,320	1,740	1,140	2,660	3,020	690	91	41	1.6	235
7	268	1,860	5,580	9,680	1,040	2,240	2,300	548	65	36	1.5	268
8	252	1,200	4,390	21,200	940	2,780	4,530	461	55	31	1.4	219
9	268	940	2,600	23,700	840	2,480	4,110	389	75	26	1.2	203
10	461	790	1,860	19,300	740	1,690	2,840	360	145	24	1.0	303
11	340	640	1,420	5,580	640	1,300	1,910	303	7,260	33	.9	268
12	286	571	1,090	4,530	571	1,470	1,470	286	7,820	19	.8	419
13	235	504	890	8,520	526	2,480	1,200	2,620	5,090	21	.6	340
14	219	440	740	14,200	482	2,180	1,040	9,330	1,740	18	.4	252
15	191	379	640	16,200	440	2,020	890	6,080	940	16	.3	200
16	151	340	548	12,200	389	1,520	790	1,800	10,000	15	.2	156
17	119	303	504	5,020	379	1,200	690	1,300	5,740	14	.1	140
18	114	286	461	3,500	340	1,040	594	740	2,600	12	.2	105
19	109	252	419	2,600	340	940	504	548	1,360	9.8	.1	93
20	100	235	379	2,420	379	840	690	440	940	9.2	21	82
21	86	219	340	2,480	389	740	14,200	379	690	11	203	84
22	122	203	322	2,840	504	640	13,300	379	504	10	362	107
23	890	194	303	3,080	594	740	6,220	322	389	10	8,860	86
24	4,250	182	268	3,020	504	3,830	3,380	268	322	8.0	7,900	65
25	7,960	170	268	5,230	419	4,040	2,240	303	268	6.8	2,600	59
26	16,400	162	252	7,340	379	2,480	1,690	268	219	5.6	890	61
27	12,400	156	10,500	5,900	379	1,740	1,250	235	179	4.0	594	39
28	4,950	153	15,200	5,090	379	1,360	890	203	159	4.0	379	690
29	2,420	151	8,160	4,740	-	1,140	790	185	219	2.8	340	389
30	1,690	151	4,320	4,390	-	940	690	153	135	3.6	268	268
31	990	-	5,660	3,970	-	840	-	124	-	3.4	179	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1935	2,046	379	15	66.0	4,060
November	36,370	8,160	182	1,212	72,140
December	109,531	33,700	252	3,533	217,300
Calendar year					
January 1936	5,987	268	140	193	11,880
February	4,650	690	109	160	9,220
March	18,341	1,740	219	592	36,380
April	4,437	303	73	148	8,800
May	9,152	1,960	69	295	18,150
June	715.8	69	2.4	23.9	1,420
July	29.5	3.6	0	.95	59
August	0	0	0	0	0
September	86,842	35,100	0	3,905	178,200
Water year 1936-37	270,101.3	35,100	0	760	561,600
October 1936	60,058	16,400	86	1,937	119,100
November	35,341	9,330	151	1,178	70,100
December	72,396	15,200	140	2,335	143,600
Calendar year 1936	297,942.3	35,100	0	814	590,900
January 1937	217,000	23,700	1,740	7,000	430,400
February	22,673	3,140	340	810	44,970
March	49,448	4,040	340	1,595	98,080
April	81,702	14,200	504	2,723	162,100
May	32,599	9,330	124	1,052	64,660
June	47,500	10,000	55	1,583	94,210
July	756.2	100	2.8	24.4	1,500
August	22,618.5	8,860	.1	730	44,860
September	6,089	690	39	203	12,080
Water year 1936-37	648,180.7	23,700	.1	1,776	1,286,000

Little River near Idabel, Okla.

Location.- Wire-weight gage, lat. 33°56', long. 94°49', in NE¼ sec. 19, T. 7 S., R. 24 E., 3 miles north of Idabel and 13 miles below mouth of Glover Creek.

Records available.- October 1929 to September 1931, October 1935 to June 1937 (discontinued).

Extremes.- Maximum discharge observed during water year 1935-36, ~~22,400~~ second-feet Dec. 8 (gage height, 33.14 feet); no flow Aug. 4-24, Sept. 4.

Maximum discharge observed during period ending June 30, 1937, ~~12,800~~ second-feet Apr. 22 (gage height, 29.34 feet); minimum, 66 second-feet Oct. 21 (gage height, 3.34 feet).

1929-31, 1935-37: Maximum discharge observed, that of Dec. 8, 1935; no flow Sept. 8, 9, 1930, Aug. 4-24, Sept. 4, 1936.

Remarks.- Records poor. Gage read twice daily.

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	1,870	1,760	425	275	890	250	135	119	38	3	2
2	90	5,640	1,520	425	288	775	225	99	99	175	2	2
3	119	4,240	980	425	350	675	205	90	88	350	1	1
4	70	2,030	800	425	400	800	185	109	84	288	0	0
5	121	1,250	700	400	450	1,430	175	225	81	185	0	1
6	70	1,040	2,470	375	425	3,130	185	215	78	145	0	6
7	68	1,670	10,200	350	425	2,930	165	195	75	135	0	8
8	62	2,140	~~22,000~~	400	450	1,850	155	145	69	107	0	9
9	57	1,430	17,000	575	425	1,520	155	600	62	88	0	10
10	60	1,220	11,100	675	425	1,250	155	5,640	58	86	0	12
11	64	1,430	7,890	625	425	1,040	145	7,030	54	125	0	13
12	69	1,610	4,280	575	425	860	135	5,950	56	92	0	14
13	54	1,550	2,100	525	400	725	135	6,170	64	78	0	16
14	51	1,340	1,430	500	400	625	125	5,390	72	74	0	16
15	46	1,280	1,280	475	400	575	119	3,570	62	68	0	16
16	40	1,010	1,190	450	375	525	113	1,910	46	60	0	17
17	40	890	980	425	375	475	104	1,280	34	42	0	16
18	39	800	830	400	350	425	94	980	34	36	0	16
19	30	725	750	400	350	375	88	1,070	30	27	0	16
20	30	650	575	375	325	325	84	920	27	25	0	18
21	33	575	575	375	325	300	87	550	23	22	0	20
22	69	525	600	375	325	275	86	425	19	17	0	21
23	90	475	575	375	300	250	80	375	21	13	0	22
24	72	425	550	350	300	325	78	350	50	32	0	24
25	66	400	550	350	325	375	78	325	45	10	48	22
26	75	375	450	325	425	350	69	262	34	6	29	24
27	262	1,410	375	300	725	400	58	215	33	6	24	96
28	1,490	4,840	400	300	775	375	57	185	29	6	4	2,180
29	1,190	3,830	400	275	980	325	145	175	27	4	3	5,490
30	675	2,480	450	275	-	325	145	165	24	3	2	3,830
31	890	-	450	275	-	288	-	145	-	2	3	-

Discharge, in second-feet, of Little River near Idabel, Okla., 1935-37--Continued

1936-37.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,640	1,010	185	3,370	2,140	725	950	920	145			
2	830	890	205	2,810	1,790	750	830	1,550	135			
3	575	1,280	262	4,420	1,520	675	750	1,550	125			
4	325	5,790	500	3,450	1,310	830	1,160	1,220	117			
5	350	4,240	1,030	2,380	1,190	3,130	2,850	1,040	165			
6	250	2,240	4,990	1,970	1,100	4,600	3,210	830	125			
7	205	1,430	8,540	1,790	980	3,700	3,010	675	121			
8	175	1,010	7,760	5,790	950	3,210	3,090	600	115			
9	165	830	4,940	9,430	860	2,620	5,040	500	109			
10	155	675	2,630	11,500	775	2,100	3,880	450	145			
11	145	550	1,730	11,400	700	1,850	2,890	400	985			
12	135	475	1,340	8,280	625	1,640	2,140	400	5,340			
13	125	400	980	5,790	575	3,250	1,640	700	6,500			
14	125	375	860	6,120	550	3,410	4,500	1,760	3,330			
15	113	350	750	9,220	525	2,850	4,010	2,420	1,520			
16	113	238	675	11,000	500	2,310	2,170	1,460	1,160			
17	96	238	600	8,740	425	1,820	1,520	980	2,030			
18	90	215	550	6,000	425	1,580	1,190	750	1,970			
19	84	215	525	3,410	650	1,520	980	600	1,430			
20	81	195	500	2,520	1,070	1,250	890	475	800			
21	69	195	450	2,590	1,040	1,010	3,640	400	650			
22	94	195	400	3,490	980	890	12,000	350	528			
23	135	195	375	4,790	950	800	11,900	475	425			
24	1,700	185	375	4,840	890	1,370	8,480	525	325			
25	2,890	185	350	6,000	830	4,060	5,640	475	250			
26	6,500	175	375	6,790	775	3,570	3,450	400	205			
27	9,580	175	700	5,840	774	2,480	2,030	325	165			
28	6,560	175	6,230	4,370	750	1,820	1,370	262	185			
29	3,210	175	6,500	3,450	-	1,490	1,130	225	475			
30	1,670	185	4,690	2,620	-	1,250	950	185	288			
31	1,340	-	3,880	2,310	-	1,130	-	165	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1935	6,172	1,490	30	199	12,240
November	49,150	5,640	375	1,638	97,490
December	~~85,810~~	~~92,000~~	375	~~3,071~~	~~188,800~~
Calendar year					
January 1936	12,800	675	275	413	25,390
February	12,218	980	275	421	24,230
March	24,788	3,130	250	800	49,170
April	3,880	250	57	129	7,700
May	45,095	7,030	90	1,455	89,440
June	1,597	119	19	53.2	3,170
July	2,345	350	2	75.6	4,650
August	119	48	0	3.8	236
September	11,938	5,490	0	398	23,680
Water year 1935-36	~~265,312~~	~~22,000~~	0	~~726~~	~~526,000~~
October 1936	39,525	9,580	69	1,275	78,400
November	24,486	5,790	175	816	48,570
December	63,877	8,540	185	2,061	126,700
Calendar year 1936	242,668	9,580	0	663	481,300
January 1937	166,480	11,500	1,790	5,370	330,200
February	25,649	2,140	425	916	50,870
March	63,690	4,600	675	2,055	126,300
April	97,290	12,000	750	3,243	193,000
May	23,067	2,420	165	744	45,750
June	29,860	6,500	109	995	59,230
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
The period					1,059,000

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Little River near Horatio, Ark.

Location.- Water-stage recorder, lat. 33°55', long. 94°23', in E½ sec. 11, T. 10 S., R. 32 W., 1 mile above Canney Creek, 2 miles south of Horatio, and about 20 miles above junction with Cossatot River.

Records available.- December 1930 to September 1937.

Extremes.- Maximum discharge during year, 26,700 second-feet Jan. 11 (gage height, 28.15 feet); minimum, 15 second-feet Aug. 17 (gage height, 3.54 feet).
1930-37: Maximum discharge, 42,700 second-feet May 6, 1935 (gage height, 34.80 feet) from rating curve extended above 25,000 second-feet; minimum, 1 second-foot Aug. 18 to Sept. 1, 1934; minimum stage, 3.09 feet Aug. 25-27, 1934.
Maximum stage known, 38 feet in August 1915.

Remarks.- Records good.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 17-21 and Jan. 27 to Feb. 7)

3.5	11	8.0	2,380
3.7	35	10.0	4,000
3.9	75	12.0	5,800
4.2	162	15.0	8,700
4.5	269	18.0	11,900
5.0	480	21.0	15,600
5.5	725	24.0	19,600
6.0	1,010	27.0	24,400
7.0	1,680	30.0	30,600

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,810	2,310	353	11,500	4,900	1,820	2,460	2,620	480	650	53	862
2	2,310	1,820	449	10,900	4,180	1,680	2,170	5,430	426	431	53	2,580
3	1,330	1,970	725	11,700	3,420	1,540	1,960	8,700	378	341	57	3,660
4	950	8,400	1,360	10,100	3,020	2,310	2,100	5,890	353	285	57	2,540
5	725	9,500	2,310	7,700	2,700	5,620	3,420	4,180	357	239	57	1,640
6	575	7,500	10,000	5,800	2,540	8,500	4,900	3,260	537	207	55	1,260
7	476	4,900	19,900	4,900	2,380	9,000	5,170	2,540	650	193	48	1,300
8	391	3,340	19,300	6,520	2,240	8,300	5,350	2,100	537	176	42	1,960
9	349	2,540	15,700	11,600	2,100	7,000	7,500	1,750	453	165	35	2,170
10	308	2,030	11,000	19,600	1,960	5,620	8,400	1,540	400	172	31	3,480
11	289	1,680	6,610	26,100	1,750	4,540	6,900	1,440	556	186	25	2,700
12	320	1,440	4,270	24,200	1,540	3,910	5,080	1,200	5,230	189	24	2,170
13	300	1,230	3,180	20,400	1,400	6,250	4,000	2,800	9,100	189	22	1,540
14	265	1,070	2,540	17,400	1,260	8,700	6,900	11,500	8,400	169	21	1,130
15	346	920	2,170	19,700	1,200	8,800	8,100	9,000	5,440	152	19	862
16	228	808	1,820	22,600	1,100	7,300	6,250	5,890	2,940	140	17	725
17	218	725	1,610	19,900	1,010	5,800	4,180	3,660	2,380	124	28	600
18	200	625	1,440	16,500	950	4,720	3,020	2,620	3,660	110	32	513
19	186	570	1,260	11,500	1,040	4,180	2,380	1,960	4,000	104	42	453
20	169	522	1,130	6,900	2,780	3,660	2,100	1,580	3,340	116	31	422
21	156	485	1,040	6,250	4,270	3,100	6,740	1,300	2,380	124	24	395
22	186	453	950	12,600	3,660	2,620	19,600	1,130	1,820	107	104	417
23	210	426	980	23,000	3,020	2,450	20,300	1,160	1,400	98	4,680	395
24	486	404	890	23,100	2,620	6,800	18,200	1,610	1,100	96	15,000	349
25	3,580	370	835	20,600	2,310	9,200	15,300	1,540	890	91	14,500	304
26	8,710	349	808	19,500	2,100	8,500	10,400	1,260	725	85	12,100	5,910
27	14,400	337	1,100	16,500	1,890	6,800	5,620	1,040	590	80	9,160	5,140
28	12,900	328	5,220	12,800	1,820	5,170	3,660	890	508	75	4,260	2,380
29	10,700	328	10,000	9,500	-	4,000	3,020	752	1,300	66	1,890	1,500
30	6,700	349	10,500	6,900	-	3,340	2,380	625	1,070	55	1,260	1,100
31	3,420	-	11,100	5,620	-	2,780	-	556	-	55	980	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	76,193	14,400	156	2,458	151,100
November	57,729	9,500	328	1,924	114,500
December	150,550	19,900	353	4,856	298,600
Calendar year 1936	514,678	19,900	2	1,406	1,021,000
January	441,890	26,100	4,900	14,250	876,500
February	65,160	4,900	950	2,327	129,200
March	164,010	9,200	1,540	5,291	325,300
April	197,560	20,300	1,960	6,585	391,900
May	91,523	11,500	556	2,952	181,500
June	61,400	9,100	353	2,047	121,800
July	5,270	650	55	170	10,450
August	64,707	15,000	17	2,087	128,300
September	50,457	5,910	304	1,682	100,100
Water year 1936-37	1,426,449	26,100	17	3,908	2,829,000

Mountain Fork River near Eagletown, Okla.

Location.- Wire-weight gage, lat. 34°03', long. 94°37', in SE¼ sec. 7, T. 6 S., R. 26 E., 1 mile west of Eagletown and 7 miles above mouth.

Records available.- March 1924 to December 1925, October 1929 to September 1931, and October 1935 to September 1937.

Extremes.- Maximum discharge observed during water year 1935-36, ~~32,400~~ second-feet Dec. 7 (gage height, 17.54 feet) no flow Aug. 20 to Sept. 28.

Maximum discharge observed during water year 1936-37, ~~20,400~~ second-feet Aug. 23 (gage height, ~~14.50~~ feet); minimum, 3 second-feet Aug. 21 (gage height, 1.10 feet).

1929-31, 1935-37: Maximum discharge observed, ~~45,200~~ second-feet May 11, 1930 (gage height, ~~19.62~~ feet) from rating curve extended above 28,000 second-feet; no flow Aug. 10 to Sept. 4, 1930, and Aug. 20 to Sept. 26, 1936.

Maximum stage known, 26.4 feet in August 1915.

Remarks.- Records fair. Gage read twice daily. Discharge Aut. 22-25, 1937, computed on basis of stage graph drawn through observer's gage readings.

Rating table, water years 1935-36 and 1936-37 (gage height, in feet, and discharge, in second-feet)

0.8	0	3.5	560	11.0	12,780
1.0	1	4.0	827	12.0	14,690
1.2	6	5.0	1,520	13.0	17,000
1.4	14	6.0	2,600	14.0	19,800
1.7	32	7.0	4,340	15.0	23,170
2.0	63	8.0	6,750	16.0	26,770
2.3	111	9.0	8,950	17.0	30,490
2.6	189	10.0	10,950	18.0	34,310
3.0	334				

Discharge, in second-feet, 1935-37

1935-36

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	209	4,810	1,360	222	154	1,220	715	113	82	14	6	0
2	162	3,550	885	222	151	945	419	120	73	31	6	0
3	118	1,800	715	202	162	827	257	149	66	1,010	5	0
4	86	1,360	662	192	240	945	206	131	90	1,700	5	0
5	63	1,290	511	219	314	3,040	183	146	171	610	5	0
6	52	1,700	3,340	199	356	3,550	171	196	129	124	4	0
7	48	1,610	27,900	186	314	2,110	165	159	94	100	3	0
8	42	1,520	8,320	199	314	1,700	154	133	76	82	3	0
9	37	1,360	2,890	276	334	1,360	171	1,900	62	68	2	0
10	55	1,360	2,600	511	257	1,150	186	5,800	58	154	3	0
11	47	1,610	1,900	442	240	1,010	177	2,600	52	294	2	0
12	35	2,340	1,520	376	222	885	171	2,470	47	222	1	0
13	31	2,340	1,360	376	240	715	149	2,220	41	149	1	0
14	33	1,800	1,150	376	257	662	129	1,800	35	111	1	0
15	72	1,440	1,080	334	276	610	109	1,360	28	75	1	0
16	59	1,220	827	334	240	536	102	945	24	43	.5	0
17	36	1,080	770	334	206	488	94	827	21	31	.5	0
18	48	885	715	314	202	398	89	636	20	29	.5	0
19	46	715	536	294	196	257	86	536	19	26	.5	0
20	48	636	464	257	183	276	84	442	18	23	0	0
21	62	560	419	240	177	276	78	334	16	24	0	0
22	98	464	398	240	171	276	96	294	14	23	0	0
23	180	398	376	240	171	314	90	240	13	21	0	0
24	240	334	356	171	162	715	98	196	12	20	0	0
25	165	276	334	115	151	1,080	124	177	12	18	0	0
26	156	257	294	189	276	945	171	149	11	16	0	0
27	2,000	1,800	257	171	1,900	662	159	131	10	12	0	42
28	8,100	2,890	257	168	1,800	560	138	122	8	10	0	5,960
29	1,700	2,890	257	174	1,440	488	129	109	7	9	0	1,700
30	1,220	2,110	240	180	-	398	124	100	9	8	0	945
31	885	-	240	156	-	334	-	92	-	6	0	-

Discharge, in second-feet, of Mountain Fork River near Eagletown, Okla.--Continued
1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	560	715	196	3,200	1,440	662	770	2,110	149	115	14	138
2	398	662	314	3,920	1,220	610	662	7,210	138	103	13	585
3	240	5,000	636	3,370	1,150	610	585	3,920	129	94	12	1,080
4	177	3,550	1,010	2,340	1,010	1,010	715	1,900	120	89	12	885
5	143	2,110	1,700	1,800	885	2,340	1,010	1,440	109	82	10	636
6	115	1,440	17,000	1,520	827	2,110	1,080	1,150	398	71	12	442
7	103	1,150	8,320	1,610	770	1,800	1,010	945	240	68	12	1,220
8	92	945	3,920	5,300	770	1,700	1,900	827	171	66	12	1,010
9	82	1,440	2,470	7,440	715	1,610	2,470	715	165	67	10	2,740
10	78	715	1,800	17,500	636	1,520	2,110	662	165	71	11	2,220
11	171	585	1,440	6,750	560	1,440	1,440	585	257	68	11	1,610
12	138	511	1,150	4,340	488	1,520	1,080	488	5,550	61	10	1,010
13	120	442	945	4,120	419	1,900	1,800	6,170	1,700	50	8	662
14	102	376	827	7,760	536	2,890	1,440	8,100	1,010	43	8	560
15	89	334	715	14,100	376	2,340	1,010	3,550	610	37	6	419
16	76	276	662	6,280	356	1,900	885	1,900	770	33	5	560
17	63	257	610	3,550	334	1,520	770	1,220	885	31	4	770
18	55	222	536	2,600	314	1,290	662	885	2,110	29	5	715
19	47	209	488	2,000	662	1,220	610	715	2,110	26	4	662
20	40	183	442	1,700	1,700	1,080	536	585	1,080	31	4	419
21	34	159	398	2,220	1,900	945	14,700	511	715	36	3	189
22	44	159	376	9,770	1,360	827	11,100	488	536	30	94	154
23	98	154	334	9,770	1,150	827	4,120	636	398	27	11,200	129
24	1,700	154	334	5,800	1,010	3,920	2,340	827	314	25	5,580	111
25	1,800	149	334	8,740	885	2,600	1,700	585	240	23	1,150	320
26	14,100	154	314	5,300	827	2,110	1,360	442	192	21	715	8,740
27	3,550	149	1,220	3,920	770	1,700	1,150	356	165	20	464	1,900
28	1,900	143	3,920	3,200	715	1,440	885	294	143	18	334	1,080
29	1,290	138	2,220	2,340	-	1,150	827	257	129	17	240	827
30	945	159	2,470	1,800	-	945	715	222	120	16	177	715
31	770	-	5,550	1,610	-	827	-	177	-	15	146	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1935	16,133	8,100	31	520	32,000
November	46,405	4,810	257	1,547	92,040
December	62,933	27,900	240	2,030	124,800
Calendar year					
January 1936	7,909	511	115	255	15,690
February	11,106	1,900	151	383	22,030
March	28,732	3,550	257	927	56,990
April	5,024	715	78	167	9,960
May	24,627	5,800	92	794	48,850
June	1,318	171	7	43.9	2,610
July	5,063	1,700	6	163	10,040
August	50	6	0	1.61	99
September	8,647	5,960	0	288	17,150
Water year 1935-36	217,947	27,900	0	595	432,300
October 1936	29,120	14,100	34	939	57,760
November	22,640	5,000	138	755	44,910
December	62,651	17,000	196	2,021	124,300
Calendar year 1936	206,887	17,000	0	565	410,400
January 1937	155,670	17,500	1,520	5,022	308,800
February	23,785	1,900	314	849	47,180
March	48,363	3,920	610	1,560	95,930
April	61,442	14,700	536	2,048	121,900
May	49,872	8,100	177	1,609	98,920
June	20,818	5,550	109	694	41,290
July	1,483	115	15	47.8	2,940
August	20,286	11,200	3	654	40,240
September	32,508	8,740	111	1,084	64,480
Water year 1936-37	528,638	17,500	3	1,448	1,049,000

Sulphur River near Darden, Tex.

Location.- Water-stage recorder, lat. 33°15', long. 94°37', at bridge on State Highway 1, 0.5 mile above St. Louis Southwestern Railway and 1 mile southwest of Darden, Bowie County. Zero of gage is 221.7 feet above mean sea level.

Drainage area.- 2,754 square miles.

Records available.- October 1923 to September 1937.

Average discharge.- 14 years, 1,836 second-feet.

Extremes.- Maximum discharge during year, 16,100 second-feet Mar. 29 (gage height, 26.58 feet); minimum, 0.8 second-foot Aug. 17.

1923-37: Maximum discharge, 67,200 second-feet May 19, 1930 (gage height, about 33.3 feet (revised), present site, from graph based on gage readings at former site and corrected for slope between sites); no flow at times.

Remarks.- Records good. No diversions. Gage-height record for periods Dec. 5-12, and Mar. 1-6 computed on basis of graph plotted from daily readings of U. S. Weather Bureau.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,120	3,050	8.8	4,000	8,780	547	6,410	2,170	42	24	52	264
2	2,320	1,880	10	4,760	6,050	573	4,120	1,340	36	17	36	195
3	2,690	1,020	11	5,600	4,750	625	3,000	870	29	12	25	133
4	3,050	795	13	5,460	3,180	845	3,280	1,060	27	9.2	18	95
5	2,830	512	22	5,350	2,350	2,720	3,010	1,340	28	6.8	12	68
6	1,750	256	359	4,150	1,680	3,700	3,010	970	31	5.4	8.0	70
7	1,240	284	1,490	2,850	1,180	4,960	3,520	610	34	5.6	5.8	307
8	840	242	2,330	2,090	800	6,700	3,980	393	36	6.8	4.2	350
9	500	138	2,880	1,890	540	8,800	4,480	282	45	6.8	3.4	248
10	210	99	3,640	2,840	424	12,300	4,380	180	77	9.8	2.6	140
11	155	79	4,940	3,270	303	12,300	3,520	124	99	11	2.0	102
12	68	79	6,580	3,920	296	11,100	2,520	102	110	11	1.9	119
13	51	79	7,810	4,920	254	9,680	1,970	89	136	7.6	1.8	116
14	36	68	7,110	6,070	212	6,810	1,550	82	416	6.4	1.5	110
15	26	53	4,760	7,370	182	5,570	1,180	89	325	5.2	1.1	92
16	21	44	3,180	7,110	153	4,850	840	504	199	11	.9	72
17	17	36	2,180	7,110	130	5,250	598	838	298	17	.9	53
18	13	30	1,210	7,740	119	5,250	422	588	256	14	1.4	38
19	11	26	680	9,550	321	5,250	448	477	194	10	1.5	27
20	9.2	23	379	10,700	844	4,250	1,040	357	236	7.2	1.3	21
21	7.6	20	182	11,500	900	3,600	2,230	231	141	6.4	1.5	16
22	6.8	18	125	11,500	850	3,330	3,430	148	87	5.6	3.6	13
23	7.8	17	110	11,100	870	2,540	3,860	109	66	4.6	47	11
24	11	15	94	10,400	660	2,760	4,820	92	48	4.0	125	8.5
25	133	14	84	10,000	502	3,930	7,650	74	34	74	147	7.2
26	1,440	12	74	9,680	409	5,720	10,600	72	25	258	762	6.6
27	1,680	10	404	9,380	434	9,120	10,700	66	20	153	1,420	5.4
28	1,500	9.0	1,120	9,080	521	13,500	7,500	56	24	100	1,120	4.6
29	2,590	9.8	1,870	10,000	-	15,600	5,800	48	40	94	722	4.2
30	2,770	9.5	2,700	11,100	-	13,500	4,120	43	34	86	456	3.8
31	3,230	-	3,320	10,400	-	10,000	-	43	-	72	340	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	31,333.4	3,230	6.8	1,011	62,150
November	8,927.3	3,050	9.0	298	17,710
December	59,675.8	7,810	8.8	1,925	118,400
Calendar year 1936	205,625.2	14,000	0	562	407,900
January	220,890	11,500	1,890	7,125	438,100
February	37,694	8,780	119	1,346	74,760
March	195,480	15,600	547	6,306	387,700
April	113,988	10,700	422	3,800	226,100
May	13,447	2,170	43	434	26,670
June	3,173	416	20	106	6,290
July	1,061.4	258	4.0	34.2	2,110
August	5,325.4	1,420	.9	172	10,560
September	2,700.3	350	3.8	90.0	5,360
Water year 1936-37	693,695.6	15,600	.9	1,901	1,376,000

Cypress Creek near Jefferson, Tex.

Location.- Water-stage recorder, lat. 32°45', long. 94°29', at Farrell Bridge, on Jefferson-Harleton highway, 8 miles west of Jefferson, Marion County, and 14 miles above mouth of Black Cypress Creek.

Drainage area.- 848 square miles.

Records available.- July 1924 to September 1937.

Average discharge.- 13 years, 556 second-feet.

Extremes.- Maximum discharge during year, 6,430 second-feet Jan. 26 (gage height, 17.30 feet); minimum, 0.2 second-foot Oct. 2 and 3.
1924-37: Maximum discharge, 22,600 second-feet May 20, 1930 (gage height, 25.37 feet, from floodmarks), from rating curve extended above 16,000 second-feet; no flow at times.

Remarks.- Records good except those below 100 second-feet and those for periods of missing gage heights, Feb. 2 to Mar. 7 and Mar. 15 to Apr. 4, which were computed on basis of graph plotted from daily readings of U. S. Weather Bureau at Jefferson, and are fair. No diversions.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	141	46	342	2,370	728	1,380	668	54	20	15	74
2	.2	144	50	442	2,010	768	1,410	456	45	17	12	62
3	3.6	124	55	548	1,860	768	1,430	282	39	15	9.0	48
4	88	86	58	632	1,680	788	1,460	200	36	13	7.4	38
5	124	62	63	708	1,550	869	1,430	189	37	11	6.7	28
6	124	49	87	748	1,350	1,000	1,330	169	44	9.4	6.2	20
7	96	41	218	768	1,150	1,150	1,200	162	50	8.5	4.5	15
8	60	38	376	788	1,000	1,250	1,150	148	56	7.6	4.0	27
9	45	34	470	808	848	1,410	1,150	134	70	6.9	3.5	96
10	41	31	484	890	708	1,930	1,270	124	116	8.8	2.9	113
11	30	30	428	981	580	2,670	1,430	113	188	12	2.3	78
12	44	30	364	1,050	532	3,010	1,520	103	226	11	2.2	47
13	54	30	342	1,050	500	2,820	1,490	99	235	11	1.8	32
14	43	31	322	1,050	470	2,740	1,410	103	226	10	1.7	23
15	30	32	322	1,100	414	2,670	1,250	113	204	8.8	1.5	16
16	21	30	312	1,170	388	2,440	1,050	124	165	7.6	1.4	13
17	17	34	253	1,250	388	2,250	768	127	138	7.9	1.0	12
18	14	32	200	1,300	442	2,010	516	120	116	9.2	2.2	9.8
19	12	32	113	1,330	484	1,790	376	116	116	8.6	2.7	9.4
20	10	31	96	1,350	500	1,580	302	113	130	7.2	2.5	9.0
21	8.8	31	86	1,680	516	1,410	364	99	144	7.2	1.7	8.1
22	7.7	36	81	2,520	548	1,270	500	86	116	11	1.4	7.0
23	7.6	43	77	3,390	548	1,170	596	78	81	14	17	6.1
24	8.6	46	75	4,160	564	1,150	668	84	61	15	27	5.2
25	10	43	73	5,680	596	1,150	748	106	50	14	31	4.9
26	11	42	72	6,430	650	1,250	788	113	42	13	56	4.8
27	13	42	63	5,540	688	1,330	828	134	39	14	92	4.3
28	22	43	110	4,520	708	1,410	848	130	33	22	120	3.9
29	24	45	148	3,720	-	1,410	869	103	26	24	127	3.6
30	33	46	208	3,100	-	1,410	828	78	23	24	110	3.9
31	113	-	282	2,740	-	1,380	-	64	-	20	84	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,115.7	124	0.2	36.0	2,210
November	1,479	144	30	49.3	2,930
December	5,954	484	46	192	11,810
Calendar year 1936	54,648.7	1,790	.2	149	108,400
January	61,785	6,430	342	1,993	122,500
February	24,042	2,370	388	859	47,690
March	48,981	3,010	728	1,580	97,150
April	30,359	1,520	302	1,012	60,220
May	4,718	668	64	152	9,360
June	2,906	235	23	96.9	5,760
July	388.7	24	6.9	12.5	771
August	758.4	127	1.4	24.5	1,500
September	822.0	113	3.6	274	1,630
Water year 1936-37	183,308.8	6,430	.2	502	363,500

Ouachita River near Mountain Pine, Ark.

Location.- Water-stage recorder, lat. 34°35'50", long. 93°12'30", in NW¼NW¼ sec. 1, T. 2 S., R. 21 W., three-quarters of a mile below Mill Creek, 2 miles below Blakely Creek, and 4 miles northwest of Mountain Pine. Zero of gage is 404.29 feet above mean sea level.

Drainage area.- 1,100 square miles.

Records available.- June 1936 to September 1937.

Extremes.- Maximum discharge during period ending Sept. 30, 1936, 2,140 second-feet July 3 (gage height, 6.33 feet); minimum, 11 second-feet Sept. 14 (gage height, 2.0 feet).

Maximum discharge during year ending Sept. 30, 1937, 49,300 second-feet Jan. 23 (gage height, 22.38 feet), from rating curve extended above 10,500 second-feet; minimum, 39 second-feet Aug. 17 (gage height, 2.50 feet).

Remarks.- Records good except those above 12,000 second-feet, which are fair.

Discharge, in second-feet, 1936-37

1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									-	81	26	13
2									-	574	26	13
3									-	1,670	26	13
4									-	772	25	13
5									-	554	24	13
6									-	425	23	13
7									-	338	21	13
8									-	272	22	12
9									-	230	32	13
10									-	221	33	13
11									-	201	26	13
12									-	169	24	13
13									-	146	20	12
14									-	130	19	12
15									-	116	17	12
16									-	101	17	13
17									-	92	18	13
18									-	83	18	13
19									-	77	18	13
20									-	71	18	15
21									-	66	17	17
22									-	62	16	22
23									-	57	14	84
24									63	52	14	49
25									63	49	14	36
26									62	49	14	29
27									59	45	14	125
28									59	42	14	171
29									59	37	14	171
30									59	35	14	272
31									-	31	13	-

Discharge, in second-feet, of Quachita River near Mountain Pine, Ark., 1936-37--Continued

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	518	380	4,260	1,940	718	860	4,400	304	177	134	454
2	190	460	536	9,450	1,660	675	772	13,100	281	144	185	226
3	161	1,400	920	6,380	1,400	630	718	10,300	278	127	171	480
4	136	1,050	1,280	3,610	1,200	985	685	4,130	284	114	144	437
5	118	1,400	2,350	2,490	1,080	2,040	680	3,130	275	170	118	1,160
6	103	1,020	11,700	1,990	952	2,190	615	2,390	2,060	657	95	985
7	99	800	15,200	3,020	890	2,390	586	1,750	885	227	84	745
8	306	645	6,170	3,610	860	3,130	745	1,360	522	207	74	500
9	590	550	3,370	6,870	772	2,590	920	1,120	444	193	68	509
10	444	484	2,290	17,200	690	1,940	1,080	985	414	154	62	417
11	345	433	1,700	14,200	640	1,570	952	830	391	180	57	328
12	275	395	1,220	6,730	586	1,750	830	745	380	156	53	275
13	224	359	1,050	6,380	550	2,390	772	2,750	382	196	50	224
14	188	331	860	7,460	522	4,000	745	5,110	680	253	48	196
15	158	301	745	9,870	500	3,250	745	2,800	496	188	45	180
16	141	278	660	8,430	472	2,490	685	1,800	476	154	43	168
17	125	259	595	4,540	448	1,940	630	1,220	554	125	45	139
18	116	247	540	3,370	429	1,660	581	1,050	472	108	69	127
19	105	233	496	2,590	675	1,440	540	860	522	93	66	120
20	97	221	452	3,640	2,140	1,240	532	718	484	88	55	110
21	95	213	414	15,200	2,140	1,050	4,160	635	572	84	56	101
22	148	199	384	35,900	1,700	920	7,650	600	472	83	59	95
23	269	201	362	43,400	1,560	976	5,410	685	370	110	57	92
24	414	204	341	14,500	1,120	7,280	4,540	630	307	74	74	84
25	920	199	324	11,000	985	3,740	2,140	572	266	65	103	86
26	3,240	193	307	8,430	860	2,490	1,620	518	230	65	99	92
27	4,070	188	328	5,410	800	1,850	1,240	464	207	65	86	93
28	1,990	182	384	4,260	772	1,480	1,020	421	190	66	114	105
29	1,160	177	536	3,250	-	1,280	890	388	201	79	136	114
30	830	247	2,640	2,690	-	1,080	800	355	213	118	112	101
31	630	-	4,680	2,290	-	985	-	331	-	108	222	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
June 24-30, 1936	424	63	59	60.6	0.055	0.01	841
July	6,848	1,670	31	221	.201	.23	13,580
August	611	33	13	19.7	.018	.02	1,210
September	1,234	272	12	41.1	.037	.04	2,450
The period							18,080
October 1936	17,934	4,070	95	579	.526	.61	35,570
November	13,387	1,400	177	446	.405	.45	26,550
December	63,214	15,200	307	2,039	1.85	2.13	125,400
Calendar year							
January 1937	272,420	43,400	1,990	8,782	7.99	9.21	540,300
February	28,143	2,140	429	1,005	.914	.95	55,820
March	62,149	7,280	630	2,005	1.82	2.10	123,300
April	44,143	7,650	532	1,471	1.34	1.50	87,560
May	66,147	13,100	331	2,134	1.94	2.24	131,200
June	13,612	2,060	190	454	.413	.46	27,000
July	4,628	657	65	149	.135	.16	9,180
August	2,784	222	43	89.8	.082	.09	5,520
September	8,733	1,160	84	291	.265	.30	17,320
Water year 1936-37	597,294	43,400	43	1,636	1.49	20.20	1,184,000

Ouachita River at Remmel Dam, near Malvern, Ark.

Location.- Water-stage recorder, lat. 34°26', long. 92°54', in SW¼NW¼ sec. 36, T. 3 S., R. 18 W., 700 feet below Remmel Dam and 9 miles northwest of Malvern. Zero of gage is 247.94 feet above mean sea level (general adjustment of 1912).

Drainage area.- 1,540 square miles.

Records available.- January 1925 to March 1937 (discontinued).

Extremes.- Maximum discharge during period, 53,800 second-feet Jan. 22 (gage height, 24.67 feet); minimum daily discharge, 92 second-feet Nov. 22.
1925-37: Maximum discharge, about 138,000 second-feet Apr. 21, 1927 (gage height, 35.7 feet), from rating curve extended above 50,000 second-feet; minimum daily discharge, 39 second-feet June 22, 1929.
Maximum stage known, 36.3 feet May 16, 1923 (discharge, about 140,000 second-feet).

Remarks.- Records good. Regulation by Remmel Dam. Discharge computed from hydroelectric power output Dec. 8-12.

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

1.9	59	4.0	784	10.0	8,100
2.1	86	4.5	1,120	12.0	12,100
2.3	118	5.0	1,490	14.0	16,900
2.5	156	5.5	1,890	16.0	22,500
2.8	228	6.0	2,370	18.0	28,900
3.2	369	7.0	3,600	22.0	43,500
3.6	558	8.0	4,900	26.0	58,800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	243	1,170	2,440	2,790	1,230						
2	550	912	1,260	6,680	2,860	1,760						
3	188	1,070	1,320	9,610	2,840	1,540						
4	125	778	813	8,540	2,720	2,520						
5	238	580	1,020	7,890	2,140	3,820						
6	271	528	3,000	4,330	2,540	2,410						
7	128	380	6,550	3,170	1,820	4,090						
8	124	260	8,860	6,420	2,020	3,830						
9	179	780	6,960	11,800	1,670	3,710						
10	123	1,370	6,710	24,000	1,340	3,300						
11	231	1,120	4,770	20,000	920	2,370						
12	112	660	2,690	10,400	1,770	2,270						
13	281	915	2,150	9,650	1,370	3,900						
14	285	1,000	2,500	12,900	249	4,320						
15	377	256	1,570	14,200	1,590	5,160						
16	440	857	1,610	12,100	1,250	2,950						
17	345	649	1,910	11,100	1,580	2,700						
18	163	1,100	1,920	7,930	1,560	2,680						
19	112	923	1,680	5,020	1,330	2,640						
20	256	843	697	12,300	1,090	2,640						
21	453	701	2,070	39,400	983	2,190						
22	453	92	1,770	44,700	1,370	2,040						
23	128	1,250	1,690	44,400	1,290	1,850						
24	122	1,710	229	22,800	1,500	5,810						
25	307	1,230	106	13,900	1,360	8,550						
26	202	361	243	13,300	1,660	2,770						
27	446	830	311	8,770	1,040	2,520						
28	467	501	1,240	7,490	674	2,200						
29	372	160	1,270	6,800	-	2,640						
30	786	1,050	1,510	4,990	-	2,710						
31	505	-	1,140	3,980	-	2,710						

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	9,014	786	112	291	17,880
November	23,109	1,710	92	770	45,840
December	70,739	8,860	106	2,282	140,300
Calendar year 1936	243,756	8,860	62	666	483,500
January	411,010	44,700	2,440	13,260	815,200
February	45,826	2,860	249	1,637	90,890
March	95,830	8,550	1,230	3,091	190,100
April					
May					
June					
July					
August					
September					
The period					1,300,000

Bayou Duplantier at City Lake, Baton Rouge, La.

Location.- Water-stage recorder and concrete control, lat. 30°26', long. 91°11', in T. 7 S., R. 1 W., at triple-box culvert at lower end of City Park Lake in Baton Rouge.

Drainage area.- 0.808 square mile.

Records available.- April 1933 to September 1937.

Extremes.- Maximum discharge during year, 86 second-feet Jan. 19 (gage height, 1.045 feet); no flow at times.
1933-37: Maximum discharge, 173 second-feet June 16, 1934 (gage height, 1.43 feet); no flow at times.

Remarks.- Records only fair for October and November because of obstructions above control, and poor for rest of year for the same reason and because conditions made it impracticable to obtain reliable discharge measurements. Flow past station affected by evaporation loss from surface of lake and artificial inflow from outside the drainage area.

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

Oct. 1 to 4 p.m. Dec. 10						4 p.m. Dec. 10 to Sept. 30					
0.04	0	0.14	.41	0.36	6.00	0.04	0	0.24	2.5	0.52	18.0
.06	.03	.16	.60	.41	8.50	.07	.1	.28	3.7	.56	21.6
.08	.08	.20	1.10	.45	10.9	.10	.2	.32	5.3	.62	27.6
.10	.15	.25	2.10	.50	14.5	.13	.4	.38	9.3	.68	34.2
.12	.26	.30	3.60			.16	.7	.43	11.3	.74	41.4
						.20	1.5	.48	14.8	.82	52.0

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.10	0	0.84	0.6	1.4	0.2	0.5	32	0.1	0.2	6.0	1.3
2	.06	0	1.08	.9	1.0	.1	.4	6.2	0	.2	5.4	3.4
3	.03	.03	1.65	.9	.6	.1	.3	2.0	0	.1	2.4	2.0
4	.01	.02	.77	.4	.4	.1	.8	.9	0	.2	.6	1.9
5	.01	0	.51	21	.3	.2	18	.5	.3	.3	.5	1.7
6	.43	0	.58	12	.3	.2	3.5	.3	3.8	.2	.4	18
7	1.12	0	.64	4.1	.3	.7	1.2	.2	10	.5	.2	9.8
8	.72	0	.40	2.2	.4	.5	.6	.2	3.5	.4	.1	2.1
9	.45	0	.28	1.3	.8	.3	.3	.2	1.4	3.6	.2	.8
10	.30	0	14	.8	.4	.2	.2	.2	.7	3.6	.2	.4
11	.20	0	7.3	.5	.2	.1	.2	.1	.5	1.7	.1	.3
12	.14	0	6.6	3.2	.2	.1	.1	.1	.4	1.4	.2	.1
13	.11	0	1.0	3.6	.2	.1	.1	.2	.3	.8	.2	.1
14	.09	0	.5	2.2	.2	1.7	0	.2	.6	.4	.2	0
15	.08	0	.4	7.2	.2	3.2	0	.1	.5	.5	1.8	0
16	.08	0	.3	2.9	.1	.9	0	0	.3	.4	2.3	0
17	.07	0	.2	1.5	0	.5	0	.2	.4	.3	1.0	0
18	.05	0	.3	3.4	0	.3	0	.2	.3	.3	.5	0
19	.04	0	.2	52	.2	.4	0	.1	.3	.5	.5	0
20	.03	0	.2	19	.3	.5	0	0	.3	.3	.5	0
21	.02	0	.1	5.4	.2	.3	.2	0	.5	.2	.4	0
22	.02	0	.1	2.6	.1	.2	.2	0	.6	.3	.3	0
23	0	0	.1	1.4	.1	.2	.2	0	.4	.3	.6	0
24	0	0	.1	1.7	1.4	1.0	.4	.1	.3	.3	1.2	0
25	0	0	.1	4.6	1.3	.8	.2	0	.3	.2	1.4	0
26	.02	0	.1	2.0	.5	.9	.1	0	.2	.3	.6	0
27	0	0	.1	1.1	.4	.8	0	0	.4	.2	.4	0
28	0	0	.1	.8	.3	.3	0	0	.7	.1	4.4	0
29	0	.05	.2	.6	-	.2	.1	0	.5	.2	6.4	0
30	0	1.37	.4	.4	-	1.3	.1	0	.4	.9	1.6	0
31	0	-	.9	.5	-	.8	-	.1	-	1.4	.7	-

Month	Observed						Adjustment for evaporation from lake (inches)	Adjustment for inflow from outside area (inches)	*Adjusted run-off in inches
	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October	4.19	1.12	0	0.135	0.167	0.19	0.67	0.16	0.70
November	1.47	1.37	0	.049	.061	.07	.38	.16	.29
December	40.05	14	.1	1.29	1.60	1.84	.24	.16	1.92
Calendar year 1936	411.07	19.0	0	1.12	1.39	18.92	7.23	4.91	21.24
January	160.8	52	.4	5.19	6.42	7.40	.25	.16	7.49
February	11.8	1.4	0	.421	.521	.54	.38	.15	.77
March	17.2	3.2	.1	.555	.687	.79	.49	.16	1.12
April	27.7	18	0	.923	1.14	1.27	.70	.16	1.81
May	44.1	32	0	1.42	1.76	2.03	.95	.55	2.43
June	28.0	10	0	.933	1.15	1.28	.93	1.13	1.08
July	20.3	3.6	.1	.655	.811	.94	.94	1.20	.68
August	41.3	6.4	.1	1.33	1.65	1.90	.77	.92	1.75
September	41.9	18	0	1.40	1.73	1.93	.80	.16	2.57
Water year 1936-37	438.81	52	0	1.20	1.49	20.18	7.50	5.07	22.61

*Adjusted for evaporation loss from City Lake and artificial inflow from outside the drainage area.

Atchafalaya River at Krotz Springs, La.

Location.- Water-stage recorder, lat. 30°32', long. 91°44', in T. 6 S., R. 7 E., Louisiana Meridian, at highway bridge on State Highway 7, half a mile north of Krotz Springs, 10 miles above mouth of Bayou Courtableau, 16 miles above Alabama Bayou, and 42 miles (revised) below mouth of Red River (head of Atchafalaya River). Zero of gage is at mean Gulf level (datum of Corps of Engineers, U. S. Army).

Records available.- October 1934 to September 1937.

Extremes.- Maximum discharge during year, 443,000 second-feet Feb. 28 (gage height, 37.80 feet), discharge measurement; minimum discharge, 29,000 second-feet Oct. 1 (gage height, 5.38 feet).

1934-37: Maximum discharge, that of Feb. 28, 1937; minimum discharge, 17,800 second-feet Aug. 31, 1936; minimum gage height, 3.58 feet Sept. 6, 1936.

Maximum stage known, 38.5 feet above mean Gulf level May 15, 1927, at Missouri Pacific Railroad bridge half a mile downstream.

Remarks:- Records excellent.

Gage height, at 8 a. m., in feet of Atchafalaya River at Krotz Springs, La., water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.58	9.10	10.17	10.34	31.56	37.77	28.70	23.05	25.94	18.95	13.13	9.27
2	6.15	9.73	9.50	10.47	31.91	37.73	28.25	23.30	25.21	18.56	13.08	9.43
3	6.83	10.32	9.09	11.05	32.30	37.70	27.84	23.56	24.41	18.17	12.83	9.47
4	7.71	10.39	8.58	11.96	32.74	37.64	27.70	23.75	23.54	17.77	12.40	9.47
5	8.65	10.20	8.12	13.00	33.14	37.60	27.56	23.83	22.74	17.41	11.87	9.46
6	9.79	9.94	7.72	14.15	33.48	37.60	27.28	23.98	21.94	17.12	11.26	9.42
7	10.83	9.64	7.46	15.23	33.86	37.52	27.00	24.15	21.18	16.99	10.75	9.46
8	11.40	9.41	7.20	16.23	34.19	37.42	26.63	24.34	20.50	16.92	10.27	9.50
9	11.69	9.23	7.22	17.09	34.58	37.39	26.32	24.67	19.86	16.96	9.87	9.60
10	11.77	9.16	7.50	18.09	35.00	37.13	25.93	24.96	19.39	17.01	9.47	9.67
11	11.69	9.49	7.86	19.07	35.30	36.94	25.56	25.22	19.02	17.07	9.18	9.49
12	11.40	10.34	8.10	20.13	35.50	36.70	25.14	25.42	18.78	16.95	8.92	9.09
13	11.04	11.68	8.54	21.33	35.70	36.50	24.76	25.67	18.60	16.69	8.68	8.56
14	10.58	12.90	9.14	22.45	36.20	36.30	24.30	25.82	18.50	16.33	8.52	8.26
15	10.14	13.82	9.62	23.50	36.30	36.09	23.86	25.99	18.46	15.86	8.47	8.14
16	9.90	14.39	10.15	24.28	36.43	35.74	23.50	26.14	18.52	15.27	8.45	8.14
17	10.00	14.74	10.72	24.84	36.68	35.28	23.04	26.29	18.90	14.63	8.40	8.17
18	10.20	14.92	11.33	25.45	36.84	34.80	22.70	26.45	19.27	14.04	8.47	8.20
19	10.29	15.01	11.89	26.09	36.96	34.46	22.40	26.65	19.56	13.48	8.58	8.28
20	10.35	15.05	12.33	26.78	37.02	34.10	22.10	26.84	19.94	12.90	8.65	8.52
21	10.32	15.03	12.58	27.20	37.14	33.83	21.90	27.02	20.17	12.45	8.63	8.82
22	10.26	14.93	12.70	27.60	37.30	33.38	21.69	27.19	20.23	12.08	8.48	9.01
23	10.16	14.75	12.73	28.16	37.40	32.92	21.52	27.33	20.14	11.93	8.35	8.99
24	9.96	14.64	12.60	28.49	37.48	32.43	21.69	27.43	20.03	11.87	8.28	8.82
25	9.74	14.28	12.40	28.94	37.65	32.02	21.70	27.52	20.00	11.84	8.39	8.51
26	9.58	13.81	12.20	29.36	37.74	31.66	21.57	27.52	19.93	11.91	8.40	8.01
27	9.41	13.22	11.93	29.74	37.74	31.14	21.58	27.45	19.90	12.09	8.33	7.47
28	9.20	12.47	11.63	30.04	37.80	30.59	21.70	27.36	19.61	12.31	8.12	7.03
29	9.04	11.65	11.28	30.40	-	30.08	21.88	27.20	19.42	12.55	7.98	6.78
30	8.91	10.95	10.88	30.73	-	29.63	22.17	26.90	19.15	12.80	7.97	6.57
31	8.80	-	10.57	31.18	-	29.20	-	26.50	-	13.05	8.70	-

Note.- Gage heights for this station, published in previous water supply papers, are mean daily gage heights.

Discharge, in second-feet, of Atchafalaya River at Krotz Springs, La., water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31,000	49,100	47,000	54,700	295,000	436,000	246,000	172,000	202,000	127,000	78,600	55,400
2	34,000	53,300	44,000	57,500	300,000	439,000	240,000	178,000	195,000	124,000	77,800	56,100
3	39,200	56,100	42,200	63,400	305,000	432,000	234,000	180,000	185,000	118,000	75,400	56,100
4	44,600	55,400	40,400	72,200	310,000	430,000	230,000	182,000	174,000	115,000	69,000	56,100
5	51,900	53,300	38,600	81,000	312,000	433,000	235,000	184,000	164,000	111,000	66,600	56,100
6	58,900	51,200	36,800	91,400	327,000	430,000	229,000	186,000	156,000	109,000	63,400	56,100
7	65,800	49,100	35,000	101,000	335,000	427,000	223,000	190,000	146,000	110,000	60,300	56,100
8	67,400	47,700	34,500	109,000	341,000	427,000	218,000	194,000	138,000	110,000	57,500	56,800
9	68,200	47,700	35,000	118,000	354,000	427,000	212,000	195,000	132,000	110,000	55,400	56,800
10	68,200	48,400	38,600	129,000	363,000	421,000	208,000	197,000	127,000	110,000	53,300	56,800
11	65,800	51,900	42,200	138,000	372,000	418,000	202,000	198,000	124,000	108,000	51,900	55,400
12	62,600	58,900	44,000	147,000	379,000	412,000	198,000	204,000	122,000	107,000	51,200	53,300
13	59,600	69,000	46,400	160,000	384,000	407,000	193,000	209,000	122,000	105,000	49,800	49,800
14	56,800	78,600	50,500	172,000	392,000	402,000	186,000	215,000	121,000	100,000	49,800	48,400
15	54,000	85,800	54,000	188,000	397,000	394,000	180,000	220,000	121,000	95,700	49,100	47,000
16	53,300	90,600	58,200	198,000	405,000	384,000	174,000	220,000	122,000	89,800	49,100	47,000
17	54,000	93,000	62,600	204,000	410,000	375,000	166,000	222,000	126,000	83,400	49,100	48,400
18	54,700	94,800	66,600	211,000	410,000	363,000	162,000	223,000	130,000	78,600	49,800	48,400
19	55,400	92,200	69,800	218,000	412,000	356,000	160,000	226,000	133,000	72,200	50,500	49,100
20	55,400	92,200	72,200	225,000	421,000	347,000	158,000	230,000	138,000	69,800	49,800	51,200
21	54,000	91,400	73,000	230,000	427,000	339,000	157,000	234,000	141,000	67,400	48,400	54,000
22	53,300	89,800	73,800	235,000	427,000	331,000	156,000	235,000	142,000	65,800	47,700	54,700
23	52,600	88,200	73,800	242,000	424,000	323,000	154,000	236,000	140,000	65,800	47,700	52,600
24	51,200	86,600	72,200	247,000	421,000	314,000	158,000	238,000	138,000	66,800	49,100	51,200
25	49,800	81,800	69,800	256,000	430,000	309,000	156,000	238,000	137,000	68,200	49,100	48,400
26	49,100	77,000	67,400	264,000	433,000	298,000	153,000	238,000	136,000	69,000	48,400	45,200
27	48,400	70,600	65,000	272,000	430,000	288,000	154,000	238,000	134,000	71,400	47,700	41,600
28	47,700	63,400	62,600	277,000	439,000	280,000	157,000	234,000	131,000	73,800	47,000	38,600
29	47,000	56,800	59,600	280,000	-	272,000	159,000	228,000	130,000	75,400	46,400	37,400
30	46,400	51,200	57,500	283,000	-	262,000	162,000	225,000	129,000	77,000	48,400	36,200
31	46,400	-	55,400	288,000	-	253,000	-	220,000	-	78,600	52,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,646,700	68,200	31,000	53,120	3,266,000
November	2,075,100	94,800	47,700	69,170	4,116,000
December	1,688,700	73,800	34,500	54,470	3,349,000
Calendar year 1936	30,393,900	260,000	18,000	83,040	60,279,000
January	5,612,200	288,000	54,700	181,000	11,130,000
February	10,661,000	439,000	295,000	380,800	21,150,000
March	11,430,000	439,000	253,000	368,700	22,670,000
April	5,620,000	246,000	153,000	187,300	11,150,000
May	6,589,000	238,000	172,000	212,500	13,070,000
June	4,243,000	209,000	121,000	141,400	8,416,000
July	2,832,700	127,000	65,800	91,380	5,619,000
August	1,689,900	78,600	46,400	54,510	3,352,000
September	1,520,300	56,800	36,200	50,680	3,015,000
Water year 1936-37	55,608,600	439,000	31,000	152,400	110,303,000

In addition to the records of stream flow obtained at gaging stations in the lower Mississippi River Basin and reported in the preceding pages, measurements of flow were made also at the points indicated in the following table.

Miscellaneous discharge measurements in lower Mississippi River Basin during water year October 1936 to September 1937

Date	Stream	Tributary to-	Locality	Drainage area (sq. mi.)	Discharge (sec.-ft.)
June 7	Crooked Creek...	Meramec River...	NW¼NE¼ sec. 26, T. 35 N., R. 4 W., in Indian Trail State Park and 3½ miles southeast of Sligo, Mo.		1.40
7	....do.....	....do.....	....do.....		1.19
7	Fishwater Creek.	....do.....	NW¼NE¼ sec. 32, T. 35 N., R. 4 W., in Indian Trail State Park and 4 miles south of Sligo, Mo.		.75
Dec. 17	Ebb and Flow Spring.	Prewett Creek...	SE¼SE¼ sec. 8, T. 38 N., R. 5 W., 1 mile southwest of Fanning, Mo.		.02
May 25	Falling Spring..	Elm Spring Branch.	NE¼ sec. 14, T. 40 N., R. 2 W., 2 miles east of Sullivan, Mo.....		.08
25	Elm Spring.....	Meramec River...	SW¼ sec. 11, T. 40 N., R. 2 W., 2 miles east of Sullivan, Mo.		1.2
Oct. 1	Blue Grass Spring.	....do.....	NW¼SW¼ sec. 34, T. 44 N., R. 4 E., 3½ miles east of Eureka, Mo.		.04
Apr. 19	....do.....	....do.....	....do.....		1.2
Aug. 7	Rott Road Spring.	....do.....	NE¼SE¼ sec. 14, T. 44 N., R. 5 E., three-quarters of a mile southwest of Goyer, Mo.		.02
May 22	Blue Spring.....	St. Francis River.	Sec. 4, T. 27 N., R. 6 E., 6 miles south of Greenville, Mo.		79.1
Apr. 9	Ross Spring.....	Lateral Ditch 37.	SE¼NE¼ sec. 1, T. 25 N., R. 10 E., 4 miles northeast of Dexter, Mo.		.23
Mar. 6	Roaring River Spring.	Roaring River...	Sec. 27, T. 22 N., R. 27 W., 7 miles south of Cassville, Mo.		44.0
7	Winoka Spring...	James River.....	Sec. 15, T. 28 N., R. 21 W., 1 mile southeast of Galaway, Mo.		3.52
Nov. 6	Black River.....	White River.....	NW¼SE¼ sec. 2, T. 24 N., R. 6 E., at Poplar Bluff, Mo.	1,220	3,330
7	....do.....	....do.....	....do.....	do.	2,460
21	....do.....	....do.....	....do.....	do.	626
Jan. 11	....do.....	....do.....	....do.....	do.	7,160
11	....do.....	....do.....	....do.....	do.	6,640
12	....do.....	....do.....	....do.....	do.	4,680
12	....do.....	....do.....	....do.....	do.	4,210
13	....do.....	....do.....	....do.....	do.	3,490
13	....do.....	....do.....	....do.....	do.	3,400
13	....do.....	....do.....	....do.....	do.	3,350
15	....do.....	....do.....	....do.....	do.	24,100
17	....do.....	....do.....	....do.....	do.	14,500
Feb. 20	....do.....	....do.....	....do.....	do.	1,350
Apr. 7	....do.....	....do.....	....do.....	do.	1,910
May 23	....do.....	....do.....	....do.....	do.	824
July 22	....do.....	....do.....	....do.....	do.	555
Sept. 29	....do.....	....do.....	....do.....	do.	320
29	....do.....	....do.....	....do.....	do.	321
Jan. 6	Cave Spring.....	Current River...	S.½ lot 2, NW¼ sec. 19, T. 26 N., R. 2 E., 3½ miles west of Hunter, Mo.	-	12.0
Nov. 5	Little Lagrue Bayou.	Lagrue Bayou....	NW¼ sec. 19, T. 2 S., R. 4 W., 4 miles east of Stuttgart, Ark.	-	71.0
Dec. 1	....do.....	....do.....	....do.....	-	0
Feb. 2	....do.....	....do.....	....do.....	-	6.42
Mar. 23	....do.....	....do.....	....do.....	-	0
May 27	....do.....	....do.....	....do.....	-	0
July 21	....do.....	....do.....	....do.....	-	.57

*Discharge computed by slope-area method.
†Maximum known flood.

Miscellaneous discharge measurements in lower Mississippi River Basin during water year October 1936 to September 1937--Continued

Date	Stream	Tributary to-	Locality	Drainage area (sq. mi.)	Discharge (sec.-ft.)
May 31	Mustang (Rita Blanca) Creek.	Canadian River..	Lat. 36°17', long. 102°44', 6.6 mi. east of Perico, Dallam County, Tex.	396	*†39,800
May 30	Tierra Blanca Creek (head of Red River.	Red River.....	Lat. 34°55', long. 102° 5', at damsite near Umbarger, Randall County, Tex.	‡575	*†6,100
May 10	Prairie Dog Town Fork of Red River.	Red River.....	Lat. 34°58', long. 101° 41', in state park, 14 mi. east of Canyon, Randall County, Tex.	-	*††**14,100
30	....do.....	....do.....	....do.....	-	*††6,810
June 8	McClellan Creek..	North Fork of Red River.	Lat. 35°18', long. 100° 44', at Beaver Dam bridge, 4 mi. north of Alanreed, Tex.	-	*11,900
Jan. 18	Roaring Springs..	Pease River.....	Lat. 33°51', long. 100° 51', 4 mi. south of Roaring Springs, Motley County, Tex.	-	1.07

*Discharge computed by slope-area method.
†Maximum known flood.
‡Furnished by Resettlement Administration office in Amarillo, Tex.
**This flood from rainfall in canyon between this point and city of Canyon, Tex.
††This flood was 3 feet higher than any other known in last 40 years at old gaging station near Canyon and was caused by rains on headwaters.

Note.- Discharge of Palo Duro Creek, a tributary of Beaver River, lat. 36°11', long. 101°19', at Hansford, near Spearman, Hansford County, Tex., on June 4, 1936 (maximum flood known), was 18,100 second-feet, by slope-area measurement.

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