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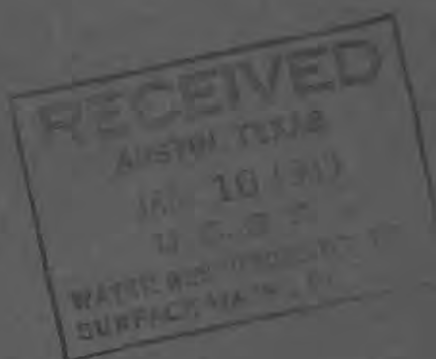
UNITED STATES DEPARTMENT OF THE INTERIOR

SURFACE WATER SUPPLY
of the **UNITED STATES**
1935

PART 7
LOWER MISSISSIPPI RIVER BASIN

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 787



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

Water-Supply Paper 787

SURFACE WATER SUPPLY
of the UNITED STATES
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PART 7
LOWER MISSISSIPPI RIVER BASIN

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

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SURFACE WATER SUPPLY OF THE LOWER
MISSISSIPPI RIVER BASIN, 1935

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the year ending September 30, 1935. The work was begun in 1888 in connection with special studies relating to irrigation. In the execution of the work, measurements of stream flow have been made at about 7,020 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1935, 3,020 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

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

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

"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 information in regard to the location and type of gage, 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 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



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.

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.

In order to permit greater refinement in analysis and comparison of records for adjacent stations, the following changes in computation procedure were followed in preparing some of the records published in the series of reports for 1934 and all the records for 1935: (a) Mean monthly discharge above 1,000 second-feet and monthly run-off above 10,000 acre-feet are expressed to four significant figures instead of three significant figures, as formerly; (b) monthly run-off in acre-feet is computed from the total second-foot-days for the month and not from the mean discharge for the month; (c) drainage areas above 1,000 square miles, if measured on topographic maps, or if otherwise warranted, are expressed to four significant figures instead of three as formerly.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts (parts 12, 13, and 14 were formerly 12-A, 12-B, and 12-C), 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 United States Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated below.

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

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

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

Augusta, Maine, Statehouse.
 Boston, Mass., 945 Post Office Building.
 Hartford, Conn., 205 Federal Building.
 Albany, N. Y., 526 Federal Building.
 Trenton, N. J., 226 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., 801 National Loan & Exchange Bank Building.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., Post Office Building.
 Chattanooga, Tenn., 217 Post Office 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., 403 Post Office Building.
 Salt Lake City, Utah, 303 Federal Building.
 Idaho Falls, Idaho, 228 Federal Building.
 Boise, Idaho, 429 Federal Building.
 Helena, Mont., 421 Federal Building.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 806 Post Office Building.
 San Francisco, Calif., 303 Customhouse.
 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, United States 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 United States Geological Survey

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

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.....	
11th A, pt. 2	Monthly discharge and descriptive information....	1884 to Sept. 1890
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....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.....	
3 140.....	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.

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

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

Report	Character of data	Year
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 10.

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

The following table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1935. 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, 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. Special papers containing compilation of records previously published and also records not contained in the annual series of water-supply papers have been published for some States and drainage basins. For example, stream-flow records for the New-Kanawha River Basin in part 3 from 1895 to 1920 are contained in Water-Supply Paper 536.

Numbers of water-supply papers containing results of stream measurements, 1899-1935
(For basins included see p. 7)

Year	1	2	3	4	5	6	7	8	9	10	11	12 (12-A)	13 (12-B)	14 (12-C)
1899 a...	35	b 35, 36	36	36	36	36, 37	37	37	d 37, 38	38, e 39	38, f 39	38	38	38
1900 g...	47, h 48	48, i 49	49	49	49	49, 50	50	50	50, 51	51	51	51	51	51
1901.....	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	k 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82, 83	b 82, 83	m 82, 83	82, 83	k 83, 85	84	k 83, 84	84	85	85	85	85	85	85
1903.....	b 97, 98	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, s 134	134	134	136	136	136
1905.....	o 165, p 166, q 167	q 167, 168	169	170	170	171	k 169, 173	174	175, t 177	177	177	178	178	178
1906.....	o 201, p 202, q 203	q 203, 204	205	206	207	208	k 205, 207	209	210, u 211, t 212	211, t 212	212	213	213	213
1907-8.....	211	212	213	214	215	216	217	218	219	220	221	222	222	222
1909.....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1910.....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1911.....	321	322	323	324	325	326	327	328	329	330	331	332	332-B	332-B
1912.....	351	352	353	354	355	356	357	358	359	360	361	362	362-A	362-C
1913.....	381	382	383	384	385	386	387	388	389	390	391	392	392	392
1914.....	411	412	413	414	415	416	417	418	419	420	421	422	422	422
1915.....	431	432	433	434	435	436	437	438	439	440	441	442	442	442
1916.....	451	452	453	454	455	456	457	458	459	460	461	462	462	462
1917.....	471	472	473	474	475	476	477	478	479	480	481	482	482	482
1918-20.....	501	502	503	504	505	506	507	508	509	510	511	512	512	512
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	532	532
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	552	552
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	572	572
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	592	592
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	612	612
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	632	632
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	652	652
1928.....	661	662	663	664	665	666	667	668	669	670	671	672	672	672
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	692	692
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	707	707
1931.....	711	712	713	714	715	716	717	718	719	720	721	722	722	722
1932.....	726	727	728	729	730	731	732	733	734	735	736	737	737	737
1933.....	741	742	743	744	745	746	747	748	749	750	751	752	752	752
1934.....	756	757	758	759	760	761	762	763	764	765	766	767	767	767
1935.....	781	782	783	784	785	786	787	788	789	790	791	792	792	792

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply

paper 39. Tables of monthly discharge for 1909 in 21st Annual Report, part 4.

b James River only.

c Green and Gunnison Rivers and Colorado River above Gunnison River.

d Mojave River only.

e Kings and Kern Rivers and south Pacific slope basins.

f 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.

g Monthly discharge for 1900 in 22d Annual Report, part 4.

h Mississippian and Sanuykill Rivers to James River.

i Sebec 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 New England rivers only.

o Hudson River to Delaware River, inclusive.

p Susquehanna River to Yorkin River, inclusive.

q Plate and Kansas Rivers.

r The Great Basin in California, except Truckee and Carson River Basins.

s Below junction with Gila River.

t Rogue, Umpqua, and Siletz Rivers only.

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 discharge were collected during the year ending September 30, 1935, by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey, 1928-35

Mississippi River at Helena, Ark.	White River at Clarendon, Ark.
Mississippi River at Arkansas City, Ark.	Red River at Alexandria, La.
St. Francis River at Parkin, Ark.	Ouachita River at Monroe, La.

Note.- Records for stations in the above table have been collected by the Corps of Engineers, U. S. Army. Records 1928-32 are contained in publications of the Mississippi River Commission; subsequent records are in process of publication.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In Arkansas (except the station on White River at Beaver), with 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 Board of Agriculture, George S. Knapp, chief engineer; in Missouri and for the station on the White River at Beaver, Ark., with the Missouri Geological Survey, 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, the city of Joplin, J. J. Sanders, commissioner, department of streets and public improvements, and the city of Springfield, F. F. Edmonds, 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; in Tennessee, with the Tennessee Division of Geology, Walter F. Pond, State geologist; in Texas, with the State through the board of water engineers, John A. Norris, chairman, C. S. Clark, and A. H. Dunlap.

Acknowledgments are also due to the Corps of Engineers, United States Army, 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., and Van Buren Waterworks Improvement District No. 1; in Colorado, by the Arkansas Valley Ditch Association; 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.

Funds for the rehabilitation of gaging stations, repairs, replacement of equipment, improvement of records, and establishment and operation of new stations on the Mississippi River were allocated by the Public Works Administration from funds made available by the National Industrial Recovery Act.

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

The data for stations in the several States were collected and prepared for publication under supervision of district engineers as follows: In Arkansas (except 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, Mississippi River at Memphis, Tenn., prior to July 16, 1935, and on White River at Beaver, Ark., H. C. Beckman; in New Mexico, Berkeley Johnson; in Tennessee (except as noted above), C. E. McCashin; in Texas, C. E. Ellsworth.

MISSISSIPPI RIVER

Mississippi River at St. Louis, Mo.

Location.- Water-stage recorder, lat. 38°37'44", long. 98°10'54", at foot of Washington Street, 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 (adjustment of U. S. Coast and Geodetic Survey 1929) and 379.80 feet above mean Gulf level.

Drainage area.- 701,000 square miles.

Records available.- March 1933 to September 1935. 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 by Corps of Engineers, U. S. Army, and Mississippi River Commission since 1866 are contained in reports of those organizations.

Extremes.- Maximum discharge during year, 649,000 second-feet June 7; maximum gage height, 33.52 feet June 9; minimum discharge, 62,100 second-feet Oct. 19 (gage height, 0.49 foot).

1933-35: Maximum discharge, that of June 7, 1935; maximum gage height, that of June 9, 1935; minimum observed discharge, 35,200 second-feet Dec. 29, 1933 (gage height, -4.4 feet). Maximum stage known, 41.39 feet June 28, 1844.

Remarks.- Records excellent. Gage-height record collected in cooperation with U. S. Weather Bureau. Discharge records computed on basis of shifting stage-discharge relation.

Discharge measurements, water year 1934-35

Date	Width	Area of section	Mean velocity	Gage height	Discharge	Date	Width	Area of section	Mean velocity	Gage height	Discharge
	Feet	Square feet	Feet per second	Feet	Second-feet		Feet	Square feet	Feet per second	Feet	Second-feet
Oct. 1	1,561	32,700	3.24	5.00	106,000	May 16	1,716	62,600	5.50	22.71	344,000
Oct. 8	1,556	26,700	2.73	1.68	73,000	May 18	1,716	63,600	5.50	22.91	349,000
Oct. 16	1,544	26,600	2.55	1.46	67,700	May 22	1,728	63,400	5.68	23.46	360,000
Oct. 22	1,541	25,800	2.62	1.04	67,600	May 24	1,731	64,800	5.74	24.10	372,000
Oct. 29	1,556	30,200	2.86	4.02	86,400	May 29	1,718	63,500	5.42	22.70	343,000
Nov. 5	1,541	27,600	2.79	2.15	77,000	May 31	1,736	69,200	6.13	26.18	424,000
Nov. 12	1,557	29,700	2.98	5.61	87,500	June 3	1,766	74,600	6.64	29.34	495,000
Nov. 19	1,546	26,500	2.67	1.65	70,800	June 4	1,789	77,400	6.72	30.58	520,000
Nov. 26	1,594	42,700	4.05	11.42	173,000	June 6	1,931	82,700	7.45	32.60	635,000
Dec. 3	1,615	50,000	4.44	14.86	222,000	June 7	2,435	86,800	7.48	33.28	649,000
Dec. 10	1,596	42,900	3.99	11.08	167,000	June 8	2,445	85,700	7.48	33.51	641,000
Dec. 17	1,556	31,300	3.10	4.94	97,000	June 9	2,435	87,500	7.15	33.40	628,000
Dec. 24	1,561	30,000	3.53	5.24	105,000	June 10	2,346	84,900	7.21	32.88	612,000
Dec. 31	1,557	29,600	3.23	4.46	95,700	June 11	2,311	84,200	7.21	32.53	607,000
Jan. 8	1,552	27,800	2.91	2.79	80,900	June 13	1,801	85,000	6.68	31.61	546,000
Jan. 14	1,577	38,000	3.63	8.69	138,000	June 17	1,751	78,100	5.68	27.69	419,000
Jan. 31	1,549	29,700	2.97	3.88	88,500	June 19	1,731	69,700	5.31	26.19	370,000
Feb. 7	1,549	28,500	3.02	3.46	85,500	June 22	1,751	71,900	5.80	27.06	417,000
Feb. 12	1,555	30,600	3.25	4.86	99,500	June 25	1,781	76,700	6.00	28.87	460,000
Feb. 18	1,577	36,700	3.73	8.49	135,000	June 28	1,738	71,100	6.19	28.20	399,000
Feb. 25	1,596	40,700	3.61	10.54	155,000	July 2	1,781	75,700	5.94	27.78	436,000
Mar. 4	1,585	39,200	3.65	9.39	143,000	*July 3	1,766	72,700	5.71	27.66	415,000
Mar. 12	1,701	55,200	5.68	19.40	308,000	July 11	1,721	66,500	4.80	25.16	318,000
Mar. 14	1,691	57,000	5.21	20.22	297,000	July 18	1,816	55,100	3.70	14.60	204,000
Mar. 15	1,691	56,900	5.13	20.27	292,000	July 26	1,721	65,800	4.23	19.64	270,000
Mar. 18	1,681	52,600	4.74	17.47	249,000	Aug. 2	1,681	49,600	3.17	11.56	157,000
Mar. 25	1,616	47,000	4.30	14.28	202,000	Aug. 8	1,661	42,600	2.72	7.56	116,000
Apr. 1	1,626	47,800	4.43	14.72	211,000	Aug. 16	1,664	42,500	2.76	7.36	117,000
Apr. 8	1,621	48,200	4.56	14.75	210,000	Aug. 21	1,567	42,100	2.99	7.64	128,000
Apr. 15	1,621	52,100	4.80	17.17	250,000	Aug. 28	1,556	37,000	2.60	5.19	96,500
Apr. 22	1,621	48,600	4.54	14.87	211,000	Sept. 4	1,553	35,100	2.47	4.02	86,500
Apr. 29	1,601	44,400	3.94	12.60	175,000	Sept. 10	1,660	36,600	2.76	5.49	101,000
May 6	1,696	55,800	5.09	19.30	284,000	Sept. 18	1,644	32,000	2.31	2.61	73,900
May 13	1,691	56,100	4.87	18.91	273,000	Sept. 24	1,642	31,500	2.38	2.52	75,000

*Doubtful accuracy.

Gage height, in feet, of Mississippi River at St. Louis, Mo., water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.30	1.13	*10.60	4.57	4.03	11.58	14.78	10.92	27.57	27.91	12.64	3.57
2	6.78	.90	*13.46	4.18	4.15	11.02	14.41	11.07	28.51	27.79	11.55	3.68
3	6.68	.84	*14.75	3.37	4.12	10.09	13.77	12.45	29.26	27.70	10.54	3.27
4	5.86	1.20	14.14	2.61	4.15	9.34	13.57	15.89	30.20	27.62	9.39	4.03
5	4.38	2.27	13.29	2.45	4.02	8.84	13.76	18.35	31.43	27.70	8.64	4.06
6	*3.02	4.04	13.52	2.61	3.75	9.20	13.79	19.26	32.55	27.38	8.17	4.27
7	*2.06	5.30	14.03	2.76	3.50	10.58	14.09	19.23	33.27	26.98	7.77	4.86
8	*1.84	5.46	13.57	2.83	3.97	12.27	14.70	18.59	33.49	26.29	7.68	6.00
9	1.53	5.12	12.42	4.20	4.47	14.42	16.31	17.77	33.37	25.28	7.66	6.09
10	1.28	4.62	11.08	6.33	4.57	15.82	15.75	17.92	32.69	24.22	7.72	6.35
11	1.07	3.95	9.65	6.63	4.74	17.45	16.24	18.43	32.85	23.16	7.64	4.39
12	1.23	3.61	8.45	9.70	4.86	19.23	16.98	18.68	32.21	22.22	7.50	4.07
13	1.62	3.28	7.57	9.43	4.86	19.82	17.22	16.90	31.54	22.05	7.49	3.94
14	1.75	2.71	6.99	8.64	5.11	20.19	17.22	19.87	30.80	20.73	7.39	3.97
15	1.66	2.23	6.14	7.62	6.16	20.32	17.14	21.43	29.98	19.04	7.22	3.95
16	1.46	1.94	5.42	7.26	7.07	20.33	16.64	22.71	28.84	*17.48	7.35	3.66
17	1.11	1.75	4.94	7.21	7.69	19.14	15.88	23.12	27.69	*15.98	7.30	3.24
18	.74	1.68	4.79	7.45	8.52	17.54	15.64	22.87	26.74	14.75	7.31	2.59
19	.52	1.84	4.74	7.86	9.26	15.90	15.76	22.34	26.19	13.66	7.31	2.39
20	.59	1.84	4.72	7.99	9.40	14.82	15.68	22.00	26.24	13.55	7.34	2.75
21	.67	1.53	4.93	6.15	9.64	14.42	15.26	22.60	26.70	13.06	7.63	2.89
22	1.07	1.63	5.13	7.66	9.96	14.39	14.97	23.44	27.11	13.31	7.36	3.33
23	1.74	2.25	5.15	6.75	10.24	14.29	14.70	24.08	27.74	14.22	6.84	3.21
24	2.21	4.66	5.27	6.15	10.31	14.10	14.17	24.07	28.52	14.93	6.59	2.42
25	2.67	8.94	5.49	6.21	10.49	14.32	13.50	23.85	29.82	16.68	6.37	1.70
26	3.86	11.24	5.34	5.78	10.71	15.00	12.95	23.71	27.96	19.60	6.04	1.46
27	4.82	11.02	4.80	5.05	11.66	14.91	12.60	23.54	25.86	19.24	5.64	1.53
28	4.83	9.24	4.37	4.84	11.86	15.00	12.58	23.18	25.28	18.00	5.16	1.52
29	3.98	*9.52	4.23	4.74	-	15.28	12.53	22.79	26.24	16.12	4.53	1.77
30	3.08	*9.39	4.42	4.93	-	15.12	11.83	24.26	27.46	14.73	4.03	2.08
31	1.91	-	4.47	3.31	-	14.88	-	26.25	-	13.63	3.74	-

*Estimated from graph based on twice daily staff-gage readings.

Discharge, in second-feet, of Mississippi River at St. Louis, Mo.,
water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109,000	67,000	164,000	97,000	89,000	169,000	213,000	155,000	455,000	438,000	170,000	83,400
2	122,000	66,500	208,000	93,000	90,600	163,000	207,000	159,000	475,000	438,000	158,000	84,200
3	118,000	67,000	220,000	86,500	90,800	152,000	197,000	178,000	494,000	433,000	142,000	86,600
4	110,000	69,800	211,000	82,600	90,800	142,000	194,000	228,000	516,000	433,000	133,000	86,600
5	95,400	78,200	199,000	79,800	89,800	138,000	197,000	266,000	569,000	428,000	124,000	87,400
6	83,400	91,400	201,000	79,600	87,400	144,000	197,000	294,000	634,000	418,000	122,000	89,800
7	78,100	102,000	208,000	81,000	85,800	163,000	201,000	283,000	649,000	407,000	118,000	94,600
8	72,600	103,000	201,000	81,000	90,600	187,000	210,000	288,000	641,000	389,000	116,000	105,000
9	71,200	98,700	185,000	92,200	94,600	218,000	218,000	258,000	626,000	365,000	118,000	106,000
10	69,800	94,600	168,000	112,000	96,200	242,000	228,000	287,000	614,000	340,000	118,000	101,000
11	87,700	90,600	148,000	135,000	97,900	270,000	234,000	266,000	604,000	319,000	118,000	91,400
12	87,700	87,400	134,000	143,000	97,700	304,000	250,000	277,000	579,000	304,000	116,000	85,200
13	70,500	85,000	124,000	146,000	99,700	307,000	250,000	273,000	546,000	304,000	118,000	85,200
14	71,200	79,600	118,000	136,000	102,000	297,000	250,000	286,000	516,000	284,000	116,000	86,600
15	70,500	76,100	109,000	128,000	110,000	293,000	249,000	319,000	488,000	260,000	116,000	85,800
16	68,400	73,300	102,000	122,000	120,000	293,000	241,000	344,000	450,000	240,000	118,000	82,600
17	65,600	72,600	97,000	122,000	126,000	274,000	229,000	352,000	418,000	220,000	118,000	79,800
18	63,500	71,200	97,000	124,000	135,000	269,000	246,000	348,000	359,000	203,000	118,000	74,000
19	62,100	70,500	97,000	128,000	142,000	284,000	228,000	336,000	371,000	192,000	120,000	72,600
20	63,500	69,800	97,900	129,000	143,000	208,000	224,000	330,000	380,000	183,000	122,000	75,400
21	64,900	70,500	101,000	130,000	146,000	203,000	217,000	342,000	400,000	178,000	126,000	76,800
22	67,700	71,200	103,000	124,000	149,000	203,000	211,000	358,000	418,000	181,000	122,000	80,300
23	71,900	76,800	104,000	116,000	152,000	201,000	208,000	373,000	433,000	192,000	116,000	79,600
24	75,400	99,700	106,000	110,000	153,000	200,000	200,000	372,000	452,000	200,000	112,000	74,000
25	76,900	144,000	108,000	110,000	154,000	203,000	190,000	387,000	458,000	226,000	110,000	69,100
26	88,200	170,000	105,000	105,000	168,000	213,000	181,000	365,000	438,000	270,000	105,000	67,700
27	95,400	168,000	101,000	98,800	170,000	211,000	177,000	380,000	389,000	274,000	101,000	66,400
28	92,200	155,000	97,900	98,200	173,000	216,000	178,000	354,000	371,000	248,000	96,200	68,400
29	86,600	149,000	94,600	95,400	-	218,000	174,000	346,000	393,000	217,000	90,600	70,600
30	79,800	148,000	95,400	91,400	-	216,000	166,000	380,000	426,000	197,000	86,600	72,600
31	71,900	-	96,200	86,200	-	213,000	-	426,000	-	183,000	84,200	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	2,470,900					122,000	62,100	79,710	4,901,000			
November.....	2,867,300					170,000	66,300	95,680	5,687,000			
December.....	4,196,000					220,000	94,600	135,400	8,525,000			
Calendar year 1934.....	28,779,800					220,000	39,800	78,850	57,080,000			
January.....	3,387,600					148,000	79,600	108,600	6,680,000			
February.....	3,335,500					173,000	85,800	119,100	6,612,000			
March.....	6,784,000					307,000	138,000	217,200	13,580,000			
April.....	6,332,000					260,000	185,000	211,100	12,580,000			
May.....	9,507,000					426,000	155,000	306,700	17,980,000			
June.....	14,592,000					649,000	371,000	488,400	28,940,000			
July.....	8,962,000					438,000	178,000	289,100	17,780,000			
August.....	3,648,600					170,000	84,200	117,700	7,237,000			
September.....	2,473,300					106,000	67,700	82,440	4,906,000			
Water year 1934-35.....	68,484,200					649,000	62,100	187,600	135,800,000			

Mississippi River at Cape Girardeau, Mo.

Location.- Water-stage recorder, lat. 37°18'6", long. 89°31'5", at downstream end of concrete seawall 400 feet below St. Louis & San Francisco Railroad station at Cape Girardeau and 52 miles above mouth of Ohio River. Zero of gage is 304.85 feet above mean sea level (U. S. Coast and Geodetic Survey adjustment of 1929) and 304.43 feet above mean Gulf level. Prior to Dec. 22, 1934, staff gage at foot of Themis Street, 1,100 feet upstream. Zero of staff gage is 0.11 foot higher than present gage but owing to slope of water surface, gage heights are comparable.

Drainage area.- 716,000 square miles.

Records available.- March 1933 to September 1935. 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 intermittently 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, 623,000 second-feet June 10 (determined from average curve based on discharge measurements); maximum gage height, 36.26 feet June 11; minimum observed discharge, 64,500 second-feet Oct. 21; minimum observed gage height, 7.8 feet Oct. 21, 22.

1935-36: Maximum discharge, that of June 10, 1935; maximum gage height, that of June 11, 1935; minimum observed discharge, 39,000 second-feet Jan. 1, 1934 (gage height, 4.6 feet).

Maximum stage known, 42.53 feet July 4, 1844.

Remarks.- Records excellent. Stage-discharge relation occasionally affected by back-water from Ohio River. Discharge determined on basis of slope as obtained by use of auxiliary staff gages located at Moccasin Springs and Grays Point, Mo. Gage-height record furnished by Corps of Engineers, U. S. Army, Oct. 1 to Dec. 21.

Discharge measurements, water year 1934-35

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Oct. 2	1,878	26,200	3.55	10.05	92,900
Oct. 9	1,742	24,100	3.28	9.26	79,000
Oct. 20	1,686	26,000	3.28	9.98	67,000
Oct. 26	1,769	24,400	3.35	9.45	81,800
Nov. 1	1,796	25,600	3.39	9.73	86,700
Nov. 5	1,707	23,000	3.14	8.49	72,200
Nov. 9	2,064	29,500	3.63	11.78	107,000
Nov. 23	1,904	27,000	3.19	10.78	86,200
Dec. 5	3,054	52,400	4.41	19.94	231,000
Dec. 12	2,539	38,500	4.03	15.66	187,000
Dec. 20	2,965	29,000	3.45	11.20	100,000
Dec. 31	2,018	30,100	3.36	11.62	101,000
Jan. 7	1,770	25,900	3.19	9.74	82,500
Jan. 16	2,304	34,800	4.02	14.38	140,000
Feb. 5	1,885	27,600	3.44	10.81	95,000
Feb. 11	1,948	29,500	3.54	11.08	101,600
Feb. 21	2,416	36,600	4.02	14.85	147,000
Feb. 28	2,700	42,000	4.00	16.42	171,000
Mar. 6	2,376	36,900	3.93	14.65	145,000
Mar. 14	3,032	80,100	4.69	29.03	375,000
Mar. 15	3,062	60,700	4.67	29.30	378,000
Mar. 21	3,045	64,500	4.08	24.70	263,000
Mar. 28	3,044	59,500	4.15	22.76	247,000
Apr. 3	3,044	57,800	4.12	22.52	258,000
Apr. 9	3,044	57,200	4.00	22.24	229,000
Apr. 19	3,041	61,100	4.11	23.12	251,000
Apr. 24	3,031	52,400	4.33	20.28	237,000
Apr. 27	2,959	46,300	4.15	18.23	192,000
May 1	2,849	43,600	4.11	17.12	179,000
May 6	3,042	63,600	4.73	23.72	301,000
May 10	3,043	65,700	4.55	24.20	299,000
May 16	3,048	71,100	4.60	25.67	327,000
May 18	3,059	80,200	4.80	26.49	356,000
May 22	3,059	82,200	4.77	29.25	392,000
May 27	3,065	84,700	4.73	29.77	400,000
June 3	3,072	90,500	5.28	31.78	479,000
June 7	3,081	98,200	5.85	34.52	574,000
June 8	3,083	100,000	6.05	35.36	605,000
June 9	3,083	102,000	6.13	35.95	625,000
June 10	3,086	105,000	6.25	36.13	633,000
June 11	3,086	103,000	5.86	36.21	604,000
June 12	3,088	102,000	5.63	36.21	595,000
June 14	3,083	101,000	5.69	35.97	575,000
June 17	3,079	98,000	5.35	34.15	524,000
June 21	3,072	90,000	5.23	31.91	471,000
June 26	3,072	91,200	5.41	32.51	493,000
July 1	3,069	80,700	5.19	31.21	431,000
July 8	3,062	84,400	5.09	30.00	450,000
July 16	3,039	64,500	4.35	23.49	281,000
July 23	3,023	50,500	4.10	19.13	207,000
Aug. 2	3,023	48,100	3.99	18.49	192,000
Aug. 9	2,889	36,100	3.49	14.46	126,000
Aug. 16	2,873	35,700	3.53	14.16	126,000
Aug. 23	2,621	34,900	3.68	14.18	126,000
Aug. 30	2,109	20,700	3.26	12.60	93,200
Sept. 6	2,004	29,100	3.10	11.75	90,200
Sept. 12	2,110	30,700	3.20	12.42	98,100
Sept. 20	1,872	27,100	2.86	10.67	77,400

Gage height, in feet, of Mississippi River at Cape Girardeau, Mo.,
water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.3	9.9	16.0	11.54	11.64	16.97	22.82	17.13	30.22	31.19	19.28	11.80
2	9.4	9.1	16.0	11.66	11.20	16.95	22.54	18.69	31.07	31.45	18.45	11.60
3	11.9	8.4	17.3	11.57	10.99	16.62	22.23	17.63	31.71	31.30	17.60	11.59
4	13.0	8.7	20.0	11.04	10.87	15.97	21.63	18.74	32.22	31.04	16.86	11.66
5	12.9	8.5	20.2	10.47	10.82	15.22	21.55	21.21	32.75	30.89	16.10	11.74
6	12.1	8.6	19.4	9.98	10.75	14.70	21.82	23.62	35.46	30.72	15.46	11.74
7	11.1	9.4	19.0	9.75	10.62	14.66	21.92	24.68	34.40	30.44	14.97	11.79
8	10.0	10.9	19.3	9.88	10.42	15.30	22.04	24.85	35.32	30.04	14.66	12.01
9	9.3	11.7	19.3	10.00	10.48	16.68	22.28	24.61	35.91	29.48	14.45	12.68
10	8.9	11.8	18.7	10.37	10.93	19.10	22.74	24.22	36.18	28.70	14.39	13.12
11	8.8	11.4	17.3	11.61	11.08	24.25	23.24	24.04	36.20	27.75	14.41	12.92
12	8.6	11.0	15.9	15.45	11.22	28.05	23.62	24.27	36.20	26.77	14.37	12.34
13	8.3	10.5	15.0	14.96	11.44	29.01	24.10	24.76	36.02	26.01	14.44	11.89
14	8.4	10.1	14.2	16.30	11.68	29.06	24.46	25.07	35.83	25.68	14.53	11.69
15	8.6	9.9	13.5	14.91	11.84	29.30	24.49	25.68	35.34	24.83	14.38	11.63
16	8.7	9.5	12.9	14.34	12.17	29.48	24.30	26.63	34.68	23.49	14.16	11.64
17	8.6	9.1	12.2	13.90	12.90	29.29	23.90	27.91	34.20	22.25	14.14	11.54
18	8.5	8.9	11.6	15.66	13.51	28.27	23.44	28.46	33.34	21.12	14.10	11.32
19	8.3	8.7	11.3	14.16	14.02	27.07	23.16	28.60	32.87	20.12	14.06	10.99
20	8.0	8.6	11.2	16.17	14.55	26.73	22.84	28.66	31.26	19.40	14.03	10.67
21	7.9	8.8	11.1	16.00	14.84	24.64	22.46	29.06	31.86	18.95	14.02	10.67
22	7.8	11.2	11.26	15.88	14.99	23.98	21.80	29.23	32.69	18.88	14.12	10.62
23	7.9	10.9	11.38	15.39	15.17	23.69	20.99	29.43	32.39	19.15	14.14	10.68
24	8.2	10.0	11.48	15.28	15.38	23.45	20.32	30.05	32.21	19.78	13.87	11.18
25	9.0	10.2	11.60	14.66	15.61	23.17	19.84	30.15	32.49	20.42	13.62	10.94
26	9.4	12.2	11.86	14.17	15.70	23.01	18.86	29.99	32.99	21.38	13.49	10.49
27	9.7	15.6	12.08	12.95	15.81	23.03	18.26	29.80	32.84	22.94	13.36	10.27
28	10.6	17.3	12.04	12.87	16.42	22.76	17.73	29.58	31.86	23.69	13.16	10.14
29	11.4	18.9	11.78	13.00	-	22.45	17.46	29.38	30.81	22.89	12.83	10.07
30	11.4	16.2	11.69	12.65	-	22.38	17.43	28.90	30.68	21.62	12.48	10.08
31	10.7	-	11.53	12.22	-	22.81	-	29.20	-	20.30	12.08	-

Note.- 7 a.m. staff-gage readings prior to Dec. 22; mean daily gage heights thereafter.

Discharge, in second-feet, of Mississippi River at Cape Girardeau, Mo.,
water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69,500	85,600	166,000	104,000	99,100	181,000	243,000	180,000	424,000	448,000	206,000	90,000
2	82,800	77,000	169,000	106,000	96,300	180,000	238,000	175,000	454,000	454,000	191,000	87,700
3	113,000	70,300	200,000	105,000	95,600	174,000	234,000	193,000	476,000	451,000	177,000	88,200
4	126,000	72,900	234,000	97,800	95,800	164,000	225,000	207,000	492,000	446,000	165,000	89,400
5	122,000	71,500	235,000	91,500	95,500	153,000	221,000	251,000	515,000	444,000	152,000	89,600
6	111,000	73,200	222,000	87,500	95,800	146,000	221,000	292,000	539,000	439,000	142,000	89,400
7	98,100	82,600	216,000	85,300	93,500	146,000	217,000	309,000	566,000	436,000	135,000	90,000
8	86,400	99,300	222,000	86,400	91,300	166,000	224,000	311,000	601,000	424,000	131,000	92,900
9	79,800	108,000	220,000	87,500	92,400	176,000	230,000	304,000	619,000	412,000	128,000	102,000
10	75,400	108,000	210,000	92,100	95,800	214,000	239,000	295,000	623,000	392,000	126,000	107,000
11	74,400	103,000	185,000	108,000	99,300	297,000	248,000	290,000	609,000	372,000	126,000	104,000
12	72,500	98,100	163,000	133,000	101,000	367,000	256,000	296,000	604,000	351,000	126,000	96,100
13	69,500	93,000	151,000	155,000	103,000	379,000	266,000	305,000	596,000	335,000	126,000	91,200
14	70,900	88,400	141,000	156,000	106,000	378,000	272,000	311,000	585,000	331,000	127,000	88,600
15	73,000	86,100	131,000	149,000	108,000	378,000	272,000	322,000	567,000	309,000	125,000	87,400
16	73,600	82,500	123,000	139,000	114,000	383,000	287,000	347,000	544,000	284,000	123,000	87,400
17	72,500	77,700	114,000	134,000	124,000	373,000	261,000	370,000	525,000	259,000	121,000	86,500
18	71,300	76,000	108,000	132,000	132,000	341,000	254,000	383,000	497,000	238,000	121,000	84,200
19	69,300	73,600	102,000	139,000	138,000	309,000	249,000	379,000	470,000	220,000	120,000	80,500
20	66,400	73,000	101,000	150,000	147,000	281,000	249,000	378,000	441,000	209,000	120,000	77,500
21	64,500	74,400	100,000	163,000	149,000	262,000	249,000	389,000	466,000	202,000	120,000	78,000
22	64,900	95,400	102,000	158,000	151,000	248,000	240,000	391,000	483,000	200,000	121,000	79,100
23	65,900	91,800	104,000	151,000	154,000	243,000	229,000	401,000	474,000	206,000	121,000	81,200
24	69,100	85,900	105,000	148,000	157,000	240,000	224,000	408,000	472,000	219,000	118,000	82,800
25	77,700	90,800	106,000	139,000	160,000	237,000	215,000	410,000	481,000	231,000	114,000	79,400
26	81,000	119,000	111,000	132,000	162,000	235,000	206,000	404,000	491,000	247,000	112,000	75,200
27	84,200	165,000	113,000	129,000	163,000	240,000	196,000	401,000	484,000	279,000	110,000	72,000
28	95,200	188,000	111,000	122,000	174,000	241,000	189,000	393,000	466,000	294,000	109,000	71,200
29	104,000	181,000	108,000	116,000	-	238,000	188,000	391,000	427,000	275,000	104,000	71,600
30	103,000	170,000	105,000	110,000	-	242,000	186,000	378,000	429,000	248,000	99,200	71,600
31	94,400	-	104,000	106,000	-	244,000	-	392,000	-	224,000	93,600	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,579,900	125,000	64,500	83,220	5,117,000		
November.....						2,960,900	188,000	70,300	98,700	5,873,000		
December.....						4,580,000	236,000	100,000	147,700	9,084,000		
Calendar year 1934.....						30,504,200	235,000	39,000	83,570	60,500,000		
January.....						3,810,100	163,000	85,300	122,900	7,557,000		
February.....						3,363,300	174,000	91,300	121,800	6,731,000		
March.....						7,846,000	383,000	146,000	253,100	15,560,000		
April.....						7,038,000	272,000	186,000	233,600	13,900,000		
May.....						10,256,000	410,000	175,000	330,800	20,340,000		
June.....						15,409,000	623,000	424,000	613,600	30,580,000		
July.....						9,879,000	454,000	200,000	318,700	19,590,000		
August.....						4,007,800	206,000	93,600	129,500	7,949,000		
September.....						2,571,700	107,000	71,200	86,720	5,101,000		
Water year 1934-35.....						74,301,700	623,000	64,500	203,600	147,400,000		

Mississippi River at Memphis, Tenn.

Location.—Water-stage recorder, lat. 35°7'37", long. 90°4'25", 50 feet below Harahan Bridge, 1.3 miles below Beale Street, and 1½ miles below mouth of Wolf River. Zero of gage is 183.91 feet above mean sea level (U. S. Coast and Geodetic Survey adjustment of 1929) and 184.21 feet above mean Gulf level (1880-81 Mississippi River Commission Survey). From Apr. 16 to Dec. 22, 1934, staff gage 1,000 feet downstream at same datum.

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

Records Available.—April 1934 to September 1935. 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. Results of discharge measurements referred to Beale Street gage made intermittently by Corps of Engineers, U. S. Army, and Mississippi River Commission since 1882, are contained in reports of Mississippi River Commission. For relation to Beale Street gage add 0.3 foot for each 10 feet of stage. All gages set to same datum.

Extremes.—Maximum discharge during year, 1,190,000 second-feet Mar. 28 (gage height, 37.2 feet); minimum observed, 120,000 second-feet Oct. 27 (gage height, 1.9 feet, former site).

1934-35: Maximum discharge, that of Mar. 28, 1935; minimum observed, 113,000 second-feet Sept. 10, 1934 (gage height, 1.5 feet, former site). Maximum stage known, 48.55 feet Apr. 9, 1913 (Beale Street gage); about 45.2 feet, present site.

Remarks.—Records good. Gage-height record furnished by U. S. Weather Bureau Oct. 1 to Dec. 21; collected in cooperation with U. S. Weather Bureau Dec. 22 to Sept. 30.

Discharge measurements, water year 1934-35

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Oct. 3	1,863	72,800	2.19	4.32	159,000
Oct. 12	1,868	73,800	2.26	5.13	187,000
Oct. 18	1,870	73,700	2.17	4.60	160,000
Oct. 24	1,852	70,500	1.84	2.78	130,000
Oct. 30	1,845	69,500	1.85	2.38	129,000
Nov. 7	1,862	72,900	2.08	3.99	152,000
Nov. 12	1,862	77,700	2.61	6.78	203,000
Nov. 22	1,877	76,500	2.28	5.60	172,000
Dec. 4	1,877	81,500	3.61	13.22	328,000
Dec. 11	1,927	94,400	4.29	*15.66	408,000
Dec. 18	1,887	81,200	2.81	18.03	228,000
Dec. 29	1,894	80,800	2.90	8.24	234,000
Jan. 2	1,907	83,800	3.17	10.07	266,000
Jan. 9	1,917	89,000	3.66	12.76	326,000
Jan. 15	1,907	86,300	3.41	11.12	294,000
Jan. 23	1,954	112,000	6.10	24.41	683,000
Feb. 3	2,041	120,000	6.82	28.22	782,000
Feb. 8	1,954	104,000	4.85	20.17	504,000
Feb. 14	1,912	89,100	3.67	12.94	327,000
Feb. 20	1,937	96,800	4.65	17.04	450,000
Feb. 23	1,954	102,000	5.04	19.55	514,000
Mar. 1	1,947	98,700	4.61	17.74	455,000
Mar. 4	1,949	99,900	4.72	18.39	472,000
Mar. 14	2,025	117,000	6.74	27.43	789,000
Mar. 16	2,080	121,000	7.05	30.10	853,000
Mar. 17	2,271	125,000	7.50	31.06	937,000
Mar. 18	2,270	128,000	7.56	31.88	966,000
Mar. 19	2,275	129,000	7.67	32.60	990,000
Mar. 20	2,282	131,000	7.70	33.39	1,010,000
Mar. 21	-	-	-	34.19	1,050,000
Mar. 22	-	-	-	35.09	1,100,000
Mar. 24	-	-	-	36.34	1,140,000
Mar. 25	-	-	-	36.67	1,170,000
Mar. 26	-	-	-	36.96	1,170,000
Mar. 27	-	-	-	37.09	1,180,000
Mar. 28	-	-	-	37.17	1,190,000
Mar. 29	-	-	-	37.04	1,150,000
Mar. 31	-	-	-	36.70	1,140,000
Apr. 1	-	-	-	36.36	1,100,000
Apr. 2	-	-	-	35.94	1,080,000
Apr. 4	-	-	-	35.33	1,060,000
Apr. 10	-	-	-	35.56	1,090,000
Apr. 16	-	-	-	36.08	1,100,000
Apr. 23	-	-	-	35.32	1,040,000
Apr. 30	1,864	116,000	5.28	28.00	613,000
May 7	1,951	104,000	4.67	19.15	475,000
May 14	2,037	120,000	6.34	28.06	761,000
May 21	2,262	126,000	6.79	30.91	855,000
May 29	2,293	133,000	7.20	33.26	957,000
June 12	2,161	124,000	6.67	29.77	827,000
June 20	2,182	126,000	6.50	30.06	819,000
June 27	2,236	124,000	6.47	29.27	802,000
July 3	2,340	124,000	6.73	30.36	848,000
July 11	2,080	116,000	5.83	24.92	742,000
July 17	1,997	107,000	4.58	20.92	490,000
July 24	1,965	92,300	3.21	13.40	296,000
Aug. 1	1,932	100,000	4.26	17.36	426,000
Aug. 9	1,970	96,200	3.38	14.09	325,000
Aug. 13	1,960	91,400	3.18	12.54	291,000
Aug. 20	1,932	101,000	4.04	16.94	408,000
Aug. 29	1,980	93,400	3.18	13.12	312,000
Sept. 9	1,945	86,600	2.50	8.67	214,000
Sept. 18	1,957	89,200	2.99	11.43	267,000
Sept. 23	1,915	76,300	1.93	5.48	147,000
Sept. 30	1,900	73,800	1.71	4.05	126,000

*U. S. Weather Bureau gage at former site for this and previous days.

†Gage at present site for this and following days.

Note.—Flow Mar. 21 to Apr. 23 was in three channels.

Gage height, in feet, of Mississippi River at Memphis, Tenn., water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	3.1	12.6	9.77	28.98	17.74	35.33	22.82	33.49	30.52	17.31	9.26
2	3.1	3.4	13.2	10.14	28.65	17.64	35.92	21.15	33.34	30.51	17.03	9.12
3	4.2	3.3	13.4	10.56	28.15	17.97	35.56	19.80	33.80	30.53	16.72	8.94
4	5.0	3.7	13.3	11.12	27.29	18.50	35.29	18.40	32.82	30.02	16.48	8.47
5	5.6	3.6	13.1	11.64	26.06	19.34	35.16	17.52	32.17	29.55	16.30	7.51
6	7.0	3.8	13.5	12.23	24.50	19.82	35.30	17.82	31.32	28.85	16.03	7.04
7	7.3	4.0	14.4	12.76	22.52	20.15	35.45	19.20	30.58	27.95	15.56	7.44
8	8.7	4.4	15.1	12.97	20.26	20.22	35.51	21.28	29.99	27.06	14.88	8.25
9	8.2	5.1	15.3	12.74	18.01	20.28	35.54	23.40	29.60	26.18	13.92	8.92
10	7.4	5.5	15.4	12.35	15.98	20.62	35.61	24.98	29.47	26.46	13.20	9.74
11	6.2	5.9	15.6	11.98	14.50	21.24	35.73	26.08	29.54	24.83	12.99	10.95
12	5.1	6.7	15.9	11.68	13.50	22.56	35.87	26.94	29.77	24.24	12.71	12.40
13	4.6	6.9	15.7	10.86	13.46	24.78	35.93	27.55	30.02	23.65	12.54	13.62
14	4.5	7.9	14.7	10.35	12.98	27.25	35.96	28.05	30.38	23.03	12.75	14.25
15	4.3	6.8	12.9	11.25	13.33	28.93	36.06	28.52	30.45	22.35	13.39	14.20
16	4.1	6.2	10.9	12.25	13.92	30.10	36.07	28.88	30.55	21.65	14.27	13.50
17	4.5	5.5	9.5	13.00	14.59	31.10	36.07	29.20	30.73	20.85	12.89	12.57
18	4.6	5.0	8.2	13.64	15.32	31.89	36.07	29.48	30.66	19.82	12.14	11.26
19	4.6	4.5	7.7	14.83	16.15	32.63	36.08	29.94	30.46	18.25	16.70	9.82
20	4.3	3.9	7.1	15.83	17.09	33.59	36.04	30.43	30.02	16.30	16.98	7.48
21	4.0	4.8	6.7	19.97	18.05	34.26	35.93	30.90	29.67	15.02	17.03	6.64
22	3.7	5.6	6.65	22.57	18.97	35.15	35.68	31.18	29.06	14.13	16.93	5.92
23	3.2	5.5	6.85	24.48	19.57	35.82	35.28	31.46	28.71	13.70	16.75	5.45
24	2.8	6.6	6.96	26.21	19.77	36.33	34.68	31.77	28.70	13.42	16.62	5.08
25	2.8	8.5	6.87	27.37	19.76	36.70	33.85	32.08	28.81	13.58	16.49	4.86
26	2.2	9.1	6.82	28.16	19.45	36.98	32.59	32.33	28.98	14.10	16.18	4.82
27	1.9	9.4	6.95	28.68	18.87	37.10	30.93	32.63	29.30	14.42	16.57	4.97
28	2.0	9.9	7.52	28.92	18.23	37.15	28.96	32.90	29.67	14.70	14.48	4.78
29	2.2	10.5	8.30	29.03	-	37.02	26.88	33.24	30.02	15.35	12.81	4.45
30	2.4	11.6	8.78	29.12	-	36.85	24.78	33.42	30.34	16.42	10.85	4.08
31	2.6	-	9.22	29.08	-	36.67	-	33.52	-	17.28	9.60	-

Discharge, in thousands of second-feet, of Mississippi River at Memphis, Tenn., water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	134	140	312	262	810	456	1,100	549	966	952	423	213
2	140	144	323	268	798	450	1,080	504	962	852	415	213
3	157	141	328	277	779	461	1,070	473	958	848	404	209
4	169	148	326	290	746	476	1,060	440	941	833	396	201
5	180	146	323	301	698	502	1,050	418	918	817	391	184
6	206	146	338	314	646	517	1,040	431	884	787	380	176
7	230	152	361	326	578	529	1,070	476	866	754	367	164
8	238	159	351	330	508	532	1,070	537	833	721	346	201
9	226	171	389	326	445	535	1,080	602	817	688	320	215
10	210	176	394	316	391	545	1,080	655	814	662	303	232
11	187	185	404	310	359	567	1,090	690	817	638	301	258
12	166	202	412	301	337	612	1,080	721	825	615	295	251
13	161	204	404	298	328	669	1,100	743	833	590	291	328
14	157	206	378	281	328	753	1,100	761	841	588	298	338
15	154	200	335	296	339	848	1,100	776	848	540	313	336
16	151	189	290	321	356	895	1,100	787	849	516	336	320
17	154	175	280	339	376	938	1,100	798	852	487	362	293
18	151	166	252	356	396	966	1,080	806	848	459	365	265
19	159	166	222	356	425	991	1,090	821	837	419	402	217
20	154	146	210	439	450	1,010	1,090	841	817	367	410	184
21	149	159	202	532	475	1,050	1,080	856	802	333	410	167
22	144	173	200	619	499	1,100	1,060	868	783	313	404	154
23	136	169	204	684	514	1,120	1,040	880	772	303	399	146
24	150	199	208	709	520	1,140	1,000	892	776	296	394	141
25	129	226	206	749	520	1,170	966	904	790	303	389	138
26	123	236	204	779	508	1,170	908	916	791	320	380	136
27	120	245	208	798	490	1,180	837	929	802	331	362	139
28	122	253	220	810	470	1,190	757	941	817	341	333	136
29	126	266	236	813	-	1,150	679	958	833	362	289	132
30	129	290	245	817	-	1,140	606	962	844	394	245	127
31	132	-	251	813	-	1,140	-	970	-	420	219	-

Month	Thousands of second-foot days	Discharge in thousands of second-feet			Run-off in thousands of acre-feet
		Maximum	Minimum	Mean	
October.....	4,934	238	120	159.2	9,786
November.....	5,562	290	140	185.4	11,030
December.....	9,003	412	200	290.4	17,860
January.....	14,450	817	262	466.1	26,480
February.....	14,066	810	328	503.1	27,940
March.....	26,861	1,190	450	833.9	51,270
April.....	30,603	1,100	606	1,020	60,700
May.....	22,906	970	772	738.9	45,430
June.....	26,313	966	772	845.8	50,210
July.....	18,728	852	296	539.5	33,180
August.....	10,959	423	219	353.5	21,740
September.....	6,264	338	127	208.8	12,420
The year.....	186,656	1,190	120	511.4	370,800

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 (measured by Mississippi River Commission).

Records available.— April 1930 to September 1935 (only gage heights prior to June 1931). 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 higher than present gage at zero gage height, the difference increasing to 2.0 feet at gage height 60.0 feet. Discharge, 1858 and intermittently since 1903 contained in reports of Mississippi River Commission.

Extremes.— Maximum discharge during year, 1,420,000 second-feet Apr. 15 (gage height, 48.75 feet); minimum, 156,000 second-feet Nov. 3 (gage height, 2.33 feet).
1930-35: Maximum discharge, that of Apr. 15, 1935; maximum gage height, 50.27 feet Feb. 29, 1932; minimum discharge, 125,000 second-feet Nov. 19, 1931; minimum gage height, 1.59 feet Aug. 18, 1934.
Maximum observed discharge (U. S. Engineer Department), 1,828,000 second-feet Apr. 30, 1922 (gage height, 52.9 feet, present gage after Weacama crevasse); maximum recorded gage height (U. S. Engineer Department), 56.6 feet May 4, 1927 (present gage). Minimum observed discharge (U. S. Engineer Department), 97,000 second-feet Oct. 28, 1895.

Remarks.— Records excellent.

Discharge measurements, water year 1934-35

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Oct. 1	2,583	74,900	2.87	5.66	215,000
Oct. 4	2,353	70,900	2.61	4.08	185,000
Oct. 8	2,363	74,200	2.94	5.30	213,000
Oct. 12	2,405	82,700	3.39	8.62	280,000
Oct. 15	2,405	79,100	2.93	6.75	232,000
Oct. 17	2,368	73,900	2.77	5.24	205,000
Oct. 20	2,363	70,500	2.61	3.82	184,000
Oct. 27	2,345	69,100	2.47	2.84	165,000
Oct. 30	2,345	66,900	2.36	2.40	158,000
Nov. 5	2,353	67,400	2.40	2.68	162,000
Nov. 13	2,368	70,500	2.57	3.91	181,000
Nov. 17	2,405	75,800	2.80	5.92	212,000
Nov. 20	2,405	76,400	2.84	6.22	217,000
Nov. 24	2,400	76,200	2.81	5.82	211,000
Nov. 28	2,405	75,100	2.87	6.89	224,000
Nov. 28	2,500	85,000	3.56	9.83	304,000
Dec. 1	2,525	96,200	4.14	14.13	395,000
Dec. 3	2,535	99,000	4.15	15.10	411,000
Dec. 6	2,535	102,000	4.46	16.64	455,000
Dec. 11	2,545	105,000	4.61	17.73	484,000
Dec. 17	2,535	106,000	4.58	18.01	486,000
Dec. 19	2,525	100,000	4.26	16.09	426,000
Dec. 22	2,515	90,500	3.72	11.37	350,000
Dec. 26	2,410	85,500	3.45	8.96	285,000
Dec. 31	2,495	83,800	3.39	9.29	284,000
Jan. 2	2,505	86,200	3.63	9.96	309,000
Jan. 4	2,505	89,900	3.72	11.20	334,000
Jan. 7	2,520	94,500	3.96	13.01	373,000
Jan. 9	2,525	96,800	4.00	13.99	387,000
Jan. 11	2,520	95,700	4.18	14.89	413,000
Jan. 14	2,520	99,000	4.11	15.11	407,000
Jan. 16	2,520	98,000	4.04	14.79	396,000
Jan. 19	2,520	98,100	4.00	14.70	392,000
Jan. 21	2,535	103,000	4.26	16.26	439,000
Jan. 24	2,525	118,000	5.48	22.64	646,000
Jan. 26	2,690	128,000	5.90	26.60	756,000
Jan. 28	2,700	137,000	6.09	29.64	834,000
Jan. 30	2,725	140,000	6.29	31.34	881,000
Feb. 1	2,725	144,000	6.55	32.44	915,000
Feb. 3	2,740	145,000	6.40	33.10	934,000
Feb. 5	2,750	144,000	6.36	33.46	916,000
Feb. 7	2,740	144,000	6.27	33.42	903,000
Feb. 9	2,745	140,000	6.21	33.01	869,000
Feb. 11	2,718	139,000	5.85	31.62	810,000
Feb. 12	2,708	132,000	5.48	28.95	731,000
Feb. 15	2,640	124,000	5.20	26.91	645,000
Feb. 16	2,625	119,000	5.17	24.30	615,000
Feb. 18	2,525	113,000	4.80	21.68	543,000
Feb. 20	2,495	109,000	4.94	20.96	539,000
Feb. 23	2,515	111,000	4.99	21.39	554,000
Feb. 25	2,525	114,000	5.31	22.89	606,000
Feb. 27	2,525	115,000	5.39	23.86	626,000
Mar. 1	2,513	117,000	5.31	24.06	621,000
Mar. 4	2,525	118,000	5.03	23.39	583,000
Mar. 7	2,525	117,000	5.06	24.00	592,000
Mar. 10	2,525	122,000	5.30	25.49	646,000
Mar. 13	2,555	126,000	5.41	27.36	682,000
Mar. 16	2,606	136,000	5.98	30.42	807,000
Mar. 18	2,786	145,000	6.29	32.94	894,000
Mar. 20	2,791	148,000	6.40	34.83	946,000
Mar. 22	2,816	152,000	6.56	36.23	996,000
Mar. 24	2,856	157,000	6.64	37.64	1,040,000
Mar. 26	2,881	159,000	6.81	38.86	1,080,000
Mar. 28	2,831	160,000	7.05	40.40	1,130,000

Discharge measurements of Mississippi River near Vicksburg, Miss., water year 1934-35--Continued

Date	Width (feet)	Area of section (square feet)	Mean velocity (feet per second)	Gage height (feet)	Discharge (second-feet)
Apr. 1	2,891	174,000	7.37	43.58	1,280,000
Apr. 3	2,943	177,000	7.59	44.69	1,540,000
Apr. 5	2,891	179,000	7.72	45.33	1,580,000
Apr. 6	3,076	179,000	7.74	45.65	1,580,000
Apr. 8	2,966	176,000	7.97	46.15	1,400,000
Apr. 9	3,146	177,000	7.72	46.22	1,370,000
Apr. 11	3,166	174,000	7.97	46.45	1,390,000
Apr. 13	3,171	174,000	8.06	46.65	1,400,000
Apr. 15	3,171	181,000	7.81	46.75	1,410,000
Apr. 18	3,171	190,000	7.12	46.68	1,350,000
Apr. 20	3,171	184,000	7.24	46.58	1,330,000
Apr. 22	3,171	179,000	7.44	46.46	1,330,000
Apr. 24	3,171	181,000	7.55	46.33	1,370,000
Apr. 25	3,171	182,000	7.22	46.27	1,310,000
Apr. 27	3,166	185,000	7.23	46.12	1,340,000
Apr. 29	3,166	188,000	7.08	45.84	1,330,000
May 1	3,111	186,000	6.82	45.26	1,270,000
May 3	2,951	176,000	6.98	44.45	1,210,000
May 4				43.91	**1,200,000
May 6	2,801	170,000	6.58	42.80	1,120,000
May 8	2,625	160,000	6.59	40.60	1,050,000
May 10	2,615	157,000	6.14	39.03	964,000
May 12	2,615	154,000	6.24	38.14	961,000
May 14	2,615	156,000	6.36	38.03	992,000
May 16	2,615	158,000	6.45	38.19	1,020,000
May 18	2,615	159,000	6.50	38.28	1,030,000
May 20	2,615	160,000	6.42	38.93	1,050,000
May 22	2,625	162,000	6.51	39.36	1,080,000
May 25	2,635	164,000	6.39	40.09	1,050,000
May 27	2,655	168,000	6.51	40.72	1,090,000
May 29	2,655	169,000	6.82	41.45	1,150,000
June 1	2,675	171,000	6.94	42.28	1,190,000
June 3	2,871	176,000	6.77	42.68	1,190,000
June 5	2,901	176,000	6.73	42.95	1,180,000
June 7				43.06	**1,200,000
June 9	2,991	176,000	6.88	43.30	1,210,000
June 10	2,991	178,000	6.45	43.36	1,150,000
June 12	2,991	175,000	6.51	43.44	1,180,000
June 14	2,991	175,000	6.46	43.46	1,130,000
June 16	2,991	174,000	6.50	43.52	1,150,000
June 18	2,991	174,000	6.66	43.64	1,180,000
June 21	2,991	175,000	6.58	43.63	1,150,000
June 22	2,991	175,000	6.72	43.73	1,180,000
June 25	2,991	175,000	6.92	43.96	1,210,000
June 27	2,991	177,000	6.86	44.16	1,210,000
June 29	3,001	180,000	6.82	44.43	1,230,000
July 1	3,001	179,000	6.94	44.56	1,240,000
July 3	3,001	180,000	6.99	44.65	1,280,000
July 5	3,001	180,000	6.93	44.85	1,250,000
July 8	2,996	178,000	6.91	44.38	1,230,000
July 10	2,991	177,000	6.81	43.97	1,210,000
July 12	2,991	176,000	6.52	43.24	1,150,000
July 13	2,991	176,000	6.36	42.76	1,120,000
July 15	2,881	172,000	6.11	41.42	1,050,000
July 17	2,871	167,000	5.90	39.87	985,000
July 19	2,841	161,000	5.77	37.47	931,000
July 21	2,731	159,000	5.52	34.61	840,000
July 23	2,749	141,000	5.12	30.71	722,000
July 24	2,741	136,000	4.88	28.39	664,000
July 25	2,729	129,000	4.65	26.04	600,000
July 26	2,669	123,000	4.50	23.77	553,000
July 27	2,644	117,000	4.55	21.91	509,000
July 28	2,644	115,000	4.37	20.35	494,000
July 29	2,639	112,000	4.24	19.35	475,000
July 31	2,625	108,000	4.16	18.38	460,000
Aug. 2	2,625	109,000	4.34	18.52	471,000
Aug. 3	2,630	110,000	4.36	18.95	480,000
Aug. 5	2,640	112,000	4.36	19.39	488,000
Aug. 9	2,625	109,000	4.26	18.44	463,000
Aug. 12	2,615	104,000	3.96	16.70	413,000
Aug. 14	2,625	101,000	3.61	15.16	355,000
Aug. 16	2,520	98,400	3.72	14.16	366,000
Aug. 19	2,520	98,800	3.72	14.26	368,000
Aug. 21	2,530	103,000	3.97	15.76	409,000
Aug. 24	2,530	107,000	4.33	17.50	463,000
Aug. 26	2,540	107,000	4.24	17.71	454,000
Aug. 28	2,535	107,000	4.25	17.67	455,000
Aug. 31	2,525	104,000	3.99	16.44	415,000
Sept. 3	2,520	94,800	3.52	12.67	334,000
Sept. 5	2,480	88,900	3.13	10.46	273,000
Sept. 7	2,470	85,700	2.96	9.26	254,000
Sept. 9	2,465	82,600	2.78	8.28	230,000
Sept. 11	2,475	83,400	2.83	8.37	236,000
Sept. 14	2,485	88,400	3.20	10.10	283,000
Sept. 16	2,515	94,500	3.57	12.35	337,000
Sept. 18	2,525	97,000	3.72	13.94	365,000
Sept. 20	2,525	97,900	3.70	13.90	362,000
Sept. 23	2,505	89,300	3.26	10.61	291,000
Sept. 25	2,473	83,100	2.84	7.72	236,000
Sept. 27	2,385	76,200	2.64	5.90	201,000
Sept. 30	2,385	74,500	2.45	4.56	182,000

*Partly estimated.

**7.6 per cent of discharge estimated.

Gage height, in feet, of Mississippi River near Vicksburg, Miss.,
water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.59	2.46	14.08	9.63	32.44	24.06	45.62	45.23	42.29	44.56	18.31	15.34
2	5.06	2.39	14.46	10.06	32.82	23.98	44.26	44.85	42.45	44.59	18.59	13.99
3	4.52	2.35	15.04	10.58	33.12	23.71	44.71	44.42	42.69	44.65	19.00	12.51
4	4.02	2.43	15.66	11.24	33.34	23.43	45.07	43.83	42.84	44.64	19.31	11.31
5	3.62	2.59	16.28	11.94	33.47	23.38	45.33	43.12	42.93	44.63	19.36	10.35
6	3.62	2.79	16.69	12.46	33.52	23.72	45.67	42.77	42.98	44.57	19.25	9.58
7	4.34	3.00	16.94	12.96	33.39	24.03	46.02	41.90	43.09	44.50	19.05	9.20
8	5.45	3.17	17.02	13.51	33.30	24.27	46.16	40.80	43.21	44.35	18.75	8.67
9	6.70	3.25	17.10	14.02	32.95	24.72	46.21	39.80	43.30	44.16	18.35	8.27
10	7.78	3.29	17.38	14.50	32.35	25.44	46.29	38.99	43.35	43.93	17.89	8.24
11	8.43	3.40	17.70	14.90	31.50	26.13	46.46	38.45	43.42	43.62	17.34	8.41
12	8.60	3.62	18.01	15.11	30.34	26.86	46.61	38.15	43.48	43.17	16.58	8.80
13	8.35	3.93	18.22	15.19	28.98	27.40	46.66	38.03	43.48	42.67	16.76	9.31
14	7.72	4.31	18.34	15.11	27.41	28.18	46.69	38.03	43.47	42.05	15.09	10.18
15	6.84	4.82	18.41	14.94	25.77	29.23	46.72	38.10	43.48	41.50	14.66	11.34
16	5.98	5.43	18.35	14.78	24.20	30.50	46.70	38.18	43.52	40.48	14.12	12.44
17	5.21	5.93	17.95	14.55	22.84	31.86	46.69	38.22	43.54	39.54	13.91	13.34
18	4.56	6.21	17.10	14.54	21.85	33.02	46.68	38.29	43.54	38.47	13.97	13.96
19	4.11	6.26	15.94	14.75	21.26	34.02	46.63	38.49	43.56	37.28	14.34	14.10
20	3.81	6.20	14.58	15.26	20.96	34.86	46.60	38.95	43.64	36.92	15.04	13.83
21	3.65	6.09	13.17	16.18	20.92	35.65	46.53	39.20	43.65	34.35	15.90	13.13
22	3.65	6.05	11.88	17.70	21.09	36.26	46.47	39.35	43.74	32.49	16.65	12.01
23	3.68	5.81	11.02	19.84	21.43	36.93	46.41	39.68	43.75	30.42	17.18	10.56
24	3.62	5.65	9.88	22.29	21.92	37.60	46.33	39.86	43.85	28.10	17.52	8.90
25	3.44	6.02	9.07	24.56	22.59	38.22	46.26	40.12	43.98	25.73	17.68	7.58
26	3.17	6.66	8.95	26.70	23.25	38.91	46.18	40.42	44.10	23.53	17.70	6.63
27	2.89	7.74	9.05	28.56	23.62	39.62	46.10	40.76	44.20	21.69	17.54	5.86
28	2.53	9.65	9.12	30.63	23.94	40.40	45.93	41.10	44.31	20.23	17.54	5.26
29	2.36	11.84	9.11	30.68	-	41.10	45.84	41.44	44.41	19.26	17.35	4.78
30	2.40	13.35	9.16	31.56	-	41.91	45.68	41.75	44.50	18.68	16.98	4.57
31	2.46	-	9.32	31.96	-	42.82	-	42.02	-	18.35	16.33	-

Discharge, in thousands of second-feet, of Mississippi River near Vicksburg, Miss.,
water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	215	159	398	297	916	622	1,280	1,260	1,180	1,250	449	391
2	204	157	402	311	925	617	1,320	1,240	1,190	1,250	478	362
3	193	157	411	322	933	601	1,350	1,210	1,190	1,250	482	330
4	184	159	428	334	922	585	1,370	1,200	1,190	1,250	487	299
5	179	162	444	349	916	583	1,380	1,140	1,180	1,250	487	275
6	184	166	455	360	913	588	1,390	1,120	1,190	1,240	485	259
7	198	168	463	371	902	593	1,400	1,090	1,200	1,240	480	292
8	220	171	465	380	893	601	1,400	1,060	1,200	1,230	470	240
9	246	171	468	389	868	619	1,370	1,010	1,210	1,220	461	229
10	267	173	475	402	840	645	1,370	965	1,150	1,200	446	233
11	281	174	482	414	807	658	1,390	962	1,160	1,180	430	237
12	279	176	492	414	771	671	1,400	962	1,160	1,140	411	248
13	267	181	497	411	731	682	1,400	991	1,140	1,110	395	261
14	252	186	500	407	688	715	1,410	991	1,130	1,080	384	285
15	235	195	502	402	643	758	1,410	1,000	1,140	1,050	373	511
16	218	204	497	395	611	809	1,390	1,020	1,140	1,020	364	358
17	204	213	485	389	572	857	1,370	1,020	1,150	983	362	356
18	195	216	458	386	542	896	1,350	1,030	1,160	956	362	369
19	188	218	423	393	540	925	1,340	1,030	1,160	925	371	369
20	184	216	393	409	540	948	1,340	1,030	1,160	882	389	360
21	181	216	362	437	540	977	1,330	1,040	1,160	832	414	345
22	181	216	335	485	544	997	1,330	1,050	1,180	774	437	320
23	181	213	322	552	557	1,020	1,340	1,050	1,180	715	453	291
24	181	211	303	635	578	1,040	1,370	1,060	1,200	656	463	258
25	178	216	289	701	606	1,060	1,310	1,060	1,210	593	456	233
26	173	224	287	759	617	1,080	1,320	1,070	1,210	547	453	215
27	168	250	287	801	624	1,100	1,340	1,100	1,220	507	453	200
28	161	299	287	835	622	1,130	1,330	1,120	1,220	432	453	191
29	157	347	287	863	-	1,160	1,320	1,150	1,230	473	446	184
30	157	380	285	882	-	1,200	1,300	1,160	1,240	458	434	183
31	159	-	285	899	-	1,240	-	1,180	-	449	411	-

Month	Thousands of second-foot days	Discharge in thousands of second-feet			Run-off in thousands of acre-feet
		Maximum	Minimum	Mean	
October.....	6,270	281	157	202.3	12,440
November.....	6,195	380	157	206.4	12,480
December.....	12,469	502	265	402.2	24,730
Calendar year 1934.....	117,885	874	142	323.0	233,800
January.....	15,383	899	297	496.2	30,510
February.....	20,161	933	540	720.0	39,980
March.....	25,977	1,240	583	838.0	51,520
April.....	40,720	1,410	1,200	1,267	80,770
May.....	33,551	1,260	962	1,078	65,150
June.....	35,430	1,240	1,150	1,181	70,370
July.....	29,212	1,260	449	942.3	57,940
August.....	13,434	487	362	453.4	26,650
September.....	8,424	391	183	280.8	16,710
Water year 1934-35.....	247,024	1,410	167	876.8	490,000

MISSISSIPPI RIVER

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 121 miles above mouth of Mississippi River. Zero of gage is at mean Gulf level.

Drainage area.- 1,243,600 square miles (from reports of Mississippi River Commission).

Records available.- November 1934 to September 1935 (only gage heights). Daily gage heights from U. S. Engineer Department gage, 1½ miles 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 from U. S. Engineer Department gage, 1½ miles downstream, since January 1923 published in reports of U. S. Weather Bureau. Discharge, 1851, 1852, and intermittently since 1879 contained in reports of Mississippi River Commission.

Extremes.- Maximum gage height during period, 17.43 feet July 5; minimum, 1.00 foot Nov. 24.

Maximum recorded gage height, 21.3 feet Apr. 25, 1922; minimum, -1.6 feet Dec. 27, 1872. Both maximum and minimum observations were made 1½ miles downstream on U. S. Engineer Department gage with zero at -0.13 foot mean Gulf level (U. S. Engineer Department datum).

Remarks.- Records excellent except those partly estimated Mar. 20, 22, which are good, and those estimated Mar. 21, Sept. 25-30, which are fair.

Gage height, in feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	2.19	2.10	9.55	7.55	14.64	16.97	15.67	17.20	7.41	4.28
2		-	2.44	2.09	9.83	7.79	14.63	16.96	16.01	17.28	6.81	4.12
3		-	2.80	2.18	10.13	8.06	14.86	16.92	16.99	17.30	6.31	3.84
4		-	2.61	2.51	10.36	8.29	15.07	16.91	16.08	17.54	5.98	3.41
5		-	3.06	2.50	10.59	8.45	15.24	16.86	16.20	17.33	5.84	2.96
6		-	3.13	2.51	10.68	8.79	15.55	17.08	16.35	17.35	5.82	2.51
7		-	3.24	2.60	10.86	8.87	15.73	17.22	16.43	17.36	5.80	2.36
8		-	3.26	2.76	11.06	9.25	15.87	16.97	16.55	17.37	5.78	2.08
9		-	3.24	2.81	11.19	9.37	16.06	16.79	16.41	17.36	5.64	2.10
10		-	3.16	2.82	11.15	9.39	16.29	16.56	16.68	17.34	5.50	1.97
11		-	3.12	2.90	11.38	9.46	16.42	16.25	16.76	17.28	5.32	1.80
12		-	3.16	3.06	11.34	9.42	16.48	16.95	16.76	17.22	5.15	1.67
13		-	3.29	3.18	11.16	9.32	16.58	16.70	16.83	17.13	4.94	1.62
14		-	3.50	3.18	10.92	9.42	16.65	16.50	16.85	17.09	4.58	1.61
15		-	3.70	3.28	10.56	9.69	16.72	16.31	16.90	16.99	4.22	2.04
16		-	3.75	3.36	10.18	10.13	16.74	15.12	16.91	16.83	3.78	2.18
17		-	3.74	3.40	9.56	10.52	16.78	15.03	16.90	16.66	3.46	2.52
18		-	3.95	3.28	8.96	10.86	16.84	15.02	16.86	16.49	3.37	3.06
19		-	3.78	3.30	8.43	11.18	16.92	15.02	16.88	16.24	3.24	3.10
20		-	3.44	3.55	7.97	11.65	17.03	15.20	16.95	15.94	3.21	3.08
21		-	3.18	3.65	7.64	12.2	16.95	15.54	16.89	15.65	3.32	3.18
22		2.30	2.86	3.45	7.51	12.4	16.98	15.44	16.81	15.29	3.36	3.22
23		1.96	2.65	3.31	7.41	12.62	16.99	15.43	16.94	14.89	3.66	3.12
24		1.66	2.41	3.79	7.39	12.77	16.99	15.42	16.96	14.40	4.00	3.03
25		1.77	2.36	4.52	7.59	13.00	17.05	15.48	16.98	13.83	4.46	2.7
26		1.86	2.50	5.72	7.61	13.10	17.06	15.50	16.92	12.98	4.92	2.5
27		2.00	2.21	6.56	7.41	13.25	17.07	15.48	16.94	12.08	4.85	2.2
28		2.04	2.50	7.36	7.45	13.41	17.04	15.59	16.97	11.32	4.67	2.0
29		2.28	2.26	8.09	-	13.61	17.06	15.61	17.01	10.18	4.62	1.9
30		2.13	2.08	8.65	-	13.90	17.00	15.64	17.08	9.04	4.49	1.9
31		-	2.15	9.23	-	14.26	-	15.71	-	8.10	4.37	-

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 Railroad bridge and 2½ miles north of Steelville. Zero of gage is 680.45 feet above mean sea level.

Drainage area.- 830 square miles.

Records available.- December 1922 to September 1935.

Average discharge.- 12 years (1923-35), 611 second-feet.

Extremes.- Maximum discharge during year, 47,800 second-feet June 26 (gage height, 23.39 feet); minimum discharge, 148 second-feet Nov. 27, 28; minimum gage height, 0.80 foot Oct. 18.
1922-35: Maximum discharge and gage height, those of June 26, 1935; 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 good. Discharge estimated Aug. 29-31, Sept. 19-24.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	793	272	2,350	985	306	288	363	363	484	1,410	464	212
2	625	240	1,190	706	306	288	363	1,170	1,180	1,560	422	198
3	506	419	734	575	268	288	363	2,080	3,240	1,340	362	198
4	443	1,980	800	484	268	288	344	1,560	2,760	1,120	382	212
5	382	855	464	422	288	575	363	1,480	1,260	1,060	402	198
6	344	625	382	382	272	600	443	3,770	793	985	382	198
7	306	464	344	363	255	855	1,970	2,360	652	855	363	198
8	288	382	306	506	255	920	1,560	1,410	600	793	344	198
9	272	324	288	652	255	734	1,190	985	575	734	324	198
10	255	288	255	575	255	1,520	920	764	506	652	306	198
11	240	255	240	506	240	11,800	793	625	1,100	575	288	198
12	226	240	225	443	240	26,300	575	552	3,570	552	288	198
13	225	225	212	402	272	7,530	575	484	1,700	528	306	184
14	212	212	198	363	484	2,420	528	652	1,340	484	625	184
15	198	198	198	344	552	1,700	484	528	2,080	484	363	184
16	198	198	198	1,040	484	1,340	443	528	2,560	443	306	184
17	184	184	184	1,700	422	1,120	443	606	4,260	402	288	171
18	184	184	184	1,260	382	920	552	443	3,080	382	575	168
19	288	184	198	1,120	363	793	734	552	3,030	402	575	168
20	344	171	198	1,340	324	678	678	1,050	3,050	422	344	168
21	272	171	198	1,120	306	600	575	1,340	20,400	382	288	168
22	255	171	240	855	306	552	506	985	17,900	382	255	166
23	240	164	402	678	288	528	464	734	3,280	422	255	166
24	240	158	464	552	272	506	443	600	2,180	1,130	240	166
25	2,080	154	764	484	324	506	402	484	1,850	2,980	225	166
26	985	154	734	464	344	464	382	443	23,200	2,590	225	171
27	652	151	600	422	344	443	363	402	24,000	1,410	225	168
28	484	151	484	402	306	422	344	484	4,340	985	212	166
29	402	156	464	363	-	382	363	625	2,520	793	212	168
30	344	1,160	1,190	344	-	363	363	652	1,850	652	212	198
31	306	-	1,260	324	-	363	-	506	-	552	212	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	12,772	2,080	184	412	0.496	0.57	25,330
November.....	10,480	1,980	151	349	.420	.47	20,790
December.....	16,728	2,350	184	507	.611	.70	31,200
Calendar year 1934.....	153,921	12,300	76	422	.508	6.88	305,300
January.....	20,176	1,700	324	651	.784	.90	40,020
February.....	9,021	552	240	322	.388	.40	17,890
March.....	66,086	26,300	288	2,132	2.67	2.96	131,100
April.....	17,992	1,970	344	600	.753	.81	36,490
May.....	29,097	3,770	363	939	1.13	1.30	67,710
June.....	139,310	24,000	484	4,644	5.60	6.25	276,300
July.....	27,451	2,980	382	886	1.07	1.23	54,450
August.....	10,290	625	212	332	.400	.46	20,410
September.....	5,518	212	166	184	.222	.25	10,940
Water year 1934-35.....	363,921	26,500	151	997	1.20	16.30	721,800

Meramec River near Eureka, Mo.

Location.- Wire-weight gage, lat. 38°30'20", long. 90°35'30", in SE $\frac{1}{4}$ 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.

Drainage area.- 3,800 square miles.

Records available.- August 1903 to July 1906, October 1921 to September 1935.

Average discharge.- 14 years (1921-35), 3,052 second-feet.

Extremes.- Maximum discharge during year, 62,200 second-feet Mar. 14 (gage height, 30.89 feet); minimum, 560 second-feet Sept. 24 (gage height, 1.12 feet).

1921-35: Maximum discharge observed, 64,000 second-feet Apr. 3, 1927; maximum gage height, that of Mar. 14, 1935; minimum discharge, 217 second-feet Aug. 15, 1934; minimum gage height, 0.33 foot Oct. 2, 3, 1932, at former site and datum.

Maximum stage known, 40.2 feet (revised), present datum, Aug. 22, 1915 (discharge, about 175,000 second-feet).

Remarks.- Records fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,650	1,560	8,900	8,900	1,900	1,900	2,430	2,610	4,710	8,300	2,430	835
2	6,800	1,400	13,200	6,200	1,820	1,820	3,280	6,800	3,390	6,350	2,250	798
3	3,280	1,400	10,300	4,570	1,820	1,740	2,880	14,800	2,980	6,500	1,990	872
4	2,620	2,610	5,600	3,500	1,820	1,650	2,520	15,700	4,710	6,800	2,080	835
5	2,160	3,870	4,180	2,980	1,740	1,990	2,340	11,100	9,050	5,150	1,990	835
6	1,900	8,300	3,620	2,700	1,550	2,080	2,520	15,600	6,200	4,570	1,900	910
7	1,740	4,150	2,880	2,450	1,650	5,900	4,150	16,800	4,010	3,870	1,740	856
8	1,560	2,700	2,520	3,180	1,850	4,710	5,150	16,300	3,080	3,280	1,650	798
9	1,400	2,160	2,250	3,870	1,560	4,290	8,000	11,900	2,700	2,980	1,480	1,230
10	1,310	1,900	2,160	6,350	1,560	6,950	6,500	6,950	5,900	2,700	1,400	835
11	1,230	1,650	1,900	4,710	1,560	16,800	5,000	5,150	22,600	2,430	1,310	798
12	1,150	1,480	1,740	3,620	1,480	31,700	4,150	4,290	24,300	6,350	1,310	760
13	1,030	1,510	1,560	2,980	1,650	55,600	3,740	4,710	18,100	10,300	1,400	760
14	850	1,150	1,480	2,610	2,520	80,600	3,590	7,100	11,700	5,900	1,480	720
15	910	1,070	1,400	2,430	2,880	46,400	3,180	9,050	8,750	4,010	1,990	690
16	910	1,150	1,310	2,340	3,620	13,100	2,880	8,300	8,000	2,790	1,740	690
17	872	1,070	1,310	2,790	3,280	6,500	3,080	6,650	9,200	2,620	1,650	660
18	872	1,030	1,230	5,450	2,880	5,150	6,200	5,000	11,700	2,250	1,400	820
19	872	990	1,230	6,950	2,620	4,430	8,150	5,300	16,500	2,250	1,510	820
20	835	990	1,230	6,200	2,340	3,740	7,550	8,000	10,600	2,080	1,400	820
21	910	950	1,230	6,800	2,080	3,390	5,150	17,400	20,700	5,300	1,480	590
22	1,030	950	1,230	6,950	1,900	3,180	4,010	19,300	33,300	8,000	1,310	590
23	1,150	990	1,480	5,150	1,820	2,790	3,390	15,400	33,300	8,600	1,310	590
24	1,230	1,230	1,900	3,620	1,740	2,700	2,980	7,400	47,500	11,100	1,150	590
25	4,430	1,150	5,600	3,390	1,650	2,790	2,700	5,150	34,300	10,100	1,030	820
26	5,150	1,070	6,500	2,790	1,740	3,180	2,430	4,150	12,600	11,400	950	690
27	8,150	990	6,800	2,610	1,820	2,700	2,340	3,390	17,600	10,700	990	910
28	5,750	2,160	5,000	2,340	1,990	2,610	2,160	3,870	23,200	7,700	950	1,070
29	2,700	1,820	3,740	2,250	-	2,430	2,250	4,290	36,400	4,850	910	1,070
30	2,160	4,710	4,150	2,080	-	2,250	2,520	7,700	31,000	3,500	872	1,070
31	1,820	-	6,060	1,990	-	2,430	-	8,300	-	2,790	835	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	74,631	8,150	835	2,407	0.633	0.73	148,000
November.....	57,960	8,300	950	1,932	.508	.57	115,000
December.....	113,650	13,200	1,230	3,666	.965	1.11	226,400
Calendar year 1934.....	759,084	26,000	217	2,080	.547	7.44	1,506,000
January.....	124,730	8,900	1,990	4,024	1.06	1.22	247,400
February.....	56,640	3,620	1,480	2,023	.532	.65	112,300
March.....	305,500	60,600	1,650	9,555	2.59	2.99	606,000
April.....	117,020	8,150	2,160	3,901	1.03	1.15	232,100
May.....	278,280	19,300	2,610	8,976	2.36	2.72	551,900
June.....	480,080	47,500	2,700	16,000	4.21	4.70	962,800
July.....	178,450	11,400	2,080	5,659	1.49	1.72	347,900
August.....	45,697	2,430	835	1,474	.388	.45	90,620
September.....	23,511	1,230	590	784	.206	.23	46,630
Water year 1934-35.....	1,853,089	60,600	590	5,077	1.34	18.14	3,675,000

Bourbeuse River at Union, Mo.

Location.- Wire-weight gage, lat. 38°26'45", long. 90°59'30", in SW $\frac{1}{4}$ sec. 26, T. 43 N., R. 1 W., at bridge on U. S. Highway 50 about 800 feet above Flat Creek and half a mile (revised) east of Union. Zero of gage is 491.95 feet above mean sea level.

Drainage area.- 767 square miles.

Records available.- June 1921 to September 1935.

Average discharge.- 14 years, 673 second-feet.

Extremes.- Maximum discharge during year, 15,400 second-feet June 23 (gage height, 16.00 feet, from flood marks); minimum, 41 second-feet Sept. 23, 24 (gage height, 0.57 foot).

1921-35: Maximum discharge, 22,500 second-feet Apr. 3, 1927 (gage height, 19.10 feet); minimum discharge, 17 second-feet Nov. 5, 1931, July 22, 1932; minimum gage height, 0.39 foot Aug. 11, 12, 15, 1934.

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

Remarks.- Records good except those for days of rapidly changing stage, which are poor. Gage-height records collected in cooperation with the U. S. Weather Bureau.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
Shifting-control method used Sept. 15-30

0.5	30	1.2	133	2.4	472	4.5	1,790	8.0	5,300	13.0	11,800
.6	40	1.4	174	2.8	638	5.0	2,250	9.0	6,400	14.0	12,500
.7	51	1.6	222	3.2	835	5.5	2,720	10.0	7,580	15.0	13,900
.8	64	1.8	275	3.6	1,060	6.0	3,200	11.0	8,780	16.0	15,400
1.0	95	2.0	332	4.0	1,350	7.0	4,250	12.0	10,000		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,410	381	3,410	3,520	222	289	683	1,270	1,350	833	222	59
2	1,610	332	5,410	1,700	210	248	638	1,060	833	730	197	61
3	833	289	1,880	999	210	222	472	2,440	638	1,350	186	59
4	593	941	1,200	683	210	210	381	3,620	3,830	1,130	164	59
5	453	5,090	1,130	550	197	235	348	2,060	2,820	638	153	56
6	364	4,880	886	472	197	1,060	303	4,140	941	491	133	54
7	318	1,200	638	398	197	1,790	880	7,100	635	398	121	52
8	275	730	491	638	197	1,060	1,790	8,660	472	332	113	50
9	248	550	434	3,300	197	1,200	2,720	2,250	398	275	109	54
10	222	453	364	3,200	197	1,700	1,520	1,200	5,200	248	102	51
11	210	381	332	1,610	186	6,290	941	833	2,340	222	102	51
12	197	332	303	999	197	10,500	730	638	3,010	1,270	99	50
13	186	289	275	730	197	13,200	730	941	2,440	1,200	117	49
14	174	262	248	550	289	8,900	638	999	1,970	318	117	48
15	164	248	235	472	886	1,970	550	1,350	1,200	222	96	49
16	153	222	222	434	1,200	1,200	472	3,620	941	210	89	48
17	153	210	222	472	730	833	364	1,520	2,820	197	99	47
18	153	197	210	2,540	550	638	730	1,700	6,400	186	79	46
19	153	197	222	1,520	434	550	3,620	1,880	4,140	174	76	44
20	143	174	222	1,350	364	472	2,160	2,060	1,980	197	76	43
21	153	174	222	3,010	318	416	1,200	7,580	4,780	730	73	44
22	364	174	235	1,520	275	381	880	9,500	8,780	1,060	117	43
23	332	164	318	880	248	348	593	3,830	14,200	638	102	41
24	275	153	1,880	550	235	318	472	1,610	7,700	1,200	79	41
25	1,790	153	2,720	416	222	303	398	1,130	1,130	4,560	73	44
26	5,960	153	3,100	381	222	332	348	990	1,790	2,160	70	56
27	5,960	143	2,540	332	248	332	303	593	5,630	4,040	82	73
28	1,440	332	1,350	289	275	303	275	880	10,100	886	73	67
29	880	303	833	262	-	275	289	2,630	6,520	472	70	89
30	550	1,440	833	248	-	275	303	5,300	1,520	332	64	121
31	453	-	3,100	235	-	303	-	4,460	-	275	61	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	30,169	5,960	143	973	1.27	1.46	59,840
November.....	20,547	5,090	143	685	.893	1.00	40,750
December.....	35,466	5,410	210	1,144	1.49	1.72	70,340
Calendar year 1934.....	231,580	12,600	20	634	.827	11.22	459,300
January.....	34,260	3,520	235	1,105	1.44	1.66	67,950
February.....	9,110	1,200	186	325	.424	.44	18,070
March.....	56,153	13,200	210	1,811	2.36	2.72	111,400
April.....	26,731	3,620	275	868	1.12	1.25	51,040
May.....	87,754	9,500	593	2,830	3.69	4.28	174,000
June.....	106,456	14,200	398	3,549	4.63	5.17	211,200
July.....	26,774	4,360	174	864	1.13	1.30	53,110
August.....	3,313	222	61	107	.140	.16	6,570
September.....	1,649	121	41	55.0	.072	.08	3,270
Water year 1934-35.....	437,361	14,200	41	1,198	1.56	21.21	867,500

Big River at Byrnesville, Mo.

Location.- Wire-weight gage, lat. 38°21'45", long. 90°39'5", 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 (U. S. Coast and Geodetic Survey adjustment of 1929). Chain gage at same location and datum prior to Nov. 7, 1934.

Drainage area.- 892 square miles.

Records available.- May 1922 to September 1935.

Average discharge.- 13 years, 809 second-feet.

Extremes.- Maximum discharge during year, 28,800 second-feet Mar. 12 (gage height, 24.65 feet); minimum, 132 second-feet Sept. 24 (gage height, 2.40 feet).
1922-35: Maximum discharge and gage height, those of Mar. 12, 1935; minimum discharge, 34 second-feet July 18, 1931; minimum gage height, 1.50 feet Aug. 14, 1934.
Maximum stage known, 30.2 feet in August 1915 (discharge, about 80,000 second-feet).

Remarks.- Records fair. Flow slightly regulated by gristmills above.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	910	217	4,680	1,560	440	415	950	616	720	1,840	494	202
2	552	202	2,900	1,080	440	351	1,450	4,400	650	1,210	440	188
3	415	217	1,350	830	466	358	1,030	7,400	830	1,730	391	188
4	324	304	990	685	466	391	850	4,590	1,300	1,400	494	202
5	285	391	790	584	466	584	790	2,900	1,080	990	552	304
6	250	391	650	522	415	616	950	6,980	755	990	415	267
7	217	345	552	466	391	1,160	1,610	4,400	650	755	368	217
8	202	285	466	830	391	1,050	1,960	2,400	552	720	324	202
9	188	250	415	870	391	910	1,900	1,660	552	616	235	522
10	188	235	391	950	391	2,280	1,350	1,300	720	522	285	188
11	175	217	345	755	391	8,390	1,160	1,080	9,820	466	267	202
12	162	202	324	650	391	20,700	1,030	1,030	12,400	1,960	304	162
13	150	202	285	552	584	23,000	990	1,030	5,750	2,900	285	175
14	144	188	285	494	990	7,510	850	4,130	2,900	2,750	494	175
15	144	188	285	466	1,260	2,750	755	3,210	2,140	1,080	345	162
16	144	175	267	522	990	1,720	685	1,720	1,610	755	285	162
17	144	162	267	1,120	755	1,350	755	1,300	1,450	584	368	162
18	138	162	250	2,080	650	1,120	2,610	1,030	3,530	522	285	162
19	138	162	267	1,400	584	950	2,750	1,660	4,970	685	267	162
20	144	150	250	2,400	522	910	1,780	6,050	2,210	584	250	150
21	150	162	250	2,140	466	830	1,210	10,400	11,900	2,470	285	150
22	162	175	267	1,900	415	755	950	8,250	15,200	1,610	285	144
23	188	304	345	1,120	391	720	930	2,340	10,300	5,350	324	138
24	175	494	616	990	368	685	720	1,720	2,610	7,510	250	138
25	304	391	1,400	970	391	685	650	1,210	1,660	5,650	217	162
26	345	324	1,720	650	466	790	584	990	5,080	3,960	217	202
27	522	285	1,400	584	552	790	552	1,030	6,660	1,660	217	415
28	415	584	990	552	466	720	522	790	2,640	1,120	217	391
29	324	494	790	522	-	650	616	990	1,560	830	202	304
30	267	2,400	1,300	466	-	616	830	1,400	1,260	685	202	285
31	250	-	2,340	440	-	685	-	950	-	584	202	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	8,116	910	138	262	0.294	0.54	16,100
November.....	10,256	2,400	160	342	.383	.43	20,340
December.....	27,427	4,680	250	895	.992	1.14	54,400
Calendar year 1934.....	162,362	5,450	42	445	.499	6.77	322,000
January.....	29,060	2,400	440	937	1.06	1.21	57,680
February.....	14,889	1,260	368	532	.596	.62	29,530
March.....	84,521	23,000	368	2,728	3.06	3.53	187,600
April.....	33,629	2,760	522	1,121	1.26	1.41	66,700
May.....	86,966	10,400	616	2,806	3.14	3.62	172,500
June.....	113,239	16,200	552	3,775	4.23	4.72	254,600
July.....	54,538	7,510	466	1,759	1.97	2.27	108,200
August.....	9,816	552	202	317	.355	.41	19,470
September.....	6,509	522	138	217	.243	.27	12,910
Water year 1934-35.....	478,946	23,000	138	1,312	1.47	19.97	950,000

Castor River at Zalma, Mo.

Location.— Wire-weight gage, lat. 37°8'45", long. 90°4'30", in SE¼ sec. 29, T. 29 N., R. 9 E., at bridge on State Highway 51 in Zalma. Zero of gage is 350.55 feet above mean sea level (U. S. Coast and Geodetic Survey adjustment of 1929). Chain gage at same site and datum prior to Oct. 27, 1934.

Drainage area.— 395 square miles.

Records available.— September 1921 to September 1935.

Average discharge.— 14 years, 527 second-feet.

Extremes.— Maximum discharge during year, 40,000 second-feet Mar. 11 (gage height, 28.20 feet); minimum, 57 second-feet Sept. 25 (gage height, 1.71 feet).
1921-35: Maximum discharge and gage height, those of Mar. 11, 1935; minimum discharge, 27 second-feet Aug. 9, 1934; minimum gage height, 1.06 feet Sept. 21, 30, 1931.

Remarks.— Records fair. Discharge estimated Aug. 7, 9.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
Shifting-control method used Oct. 1-20, Mar. 13-18

1.7	57	2.8	161	5.0	513	9.0	1,450	15.0	3,350	21.0	6,250
1.8	64	3.0	189	5.5	606	10.0	1,720	16.0	3,730	22.0	7,100
2.0	78	3.4	247	6.0	704	11.0	2,000	17.0	4,130	23.0	8,700
2.2	94	3.8	309	6.5	817	12.0	2,300	18.0	4,560	24.0	12,200
2.4	113	4.2	375	7.0	940	13.0	2,620	19.0	5,050	25.0	17,500
2.6	136	4.6	441	8.0	1,190	14.0	2,970	20.0	5,600	26.0	24,000

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	189	477	606	325	189	2,760	203	568	459	217	86
2	168	118	459	513	309	175	590	203	568	390	113	78
3	142	113	424	441	277	175	1,140	407	1,640	341	168	74
4	124	277	424	407	247	161	317	1,140	1,040	309	148	78
5	108	325	390	357	247	203	704	1,830	704	262	136	71
6												
7	98	309	357	325	232	203	684	6,060	1,020	309	130	64
8	90	262	325	309	217	247	1,120	3,430	568	277	130	68
9	74	217	293	309	217	277	990	1,780	1,810	247	130	68
10	74	203	277	247	217	277	747	1,240	625	203	120	71
11	74	189	262	309	325	606	625	1,020	1,720	203	108	217
12	74	168	232	309	357	19,400	587	684	1,140	175	90	176
13	74	154	217	293	341	20,800	549	341	3,120	154	68	113
14	71	136	189	277	341	6,660	513	495	2,090	154	189	103
15	48	130	189	262	459	3,080	459	441	5,160	148	277	94
16	64	124	175	247	513	1,600	424	407	4,800	124	357	86
17	64	118	168	531	495	1,220	390	373	2,620	124	217	82
18	64	113	154	940	459	990	407	325	5,270	118	189	74
19	74	108	148	793	424	841	357	309	5,270	108	148	71
20	94	108	203	1,610	390	747	341	325	4,800	142	136	68
21	94	103	262	3,500	357	587	390	664	2,240	130	124	68
22	90	770	247	4,810	325	531	341	6,060	4,390	495	124	64
23	74	1,780	232	4,340	277	644	309	3,120	4,850	477	108	64
24	78	1,690	232	2,000	277	606	277	747	2,120	684	98	60
25	74	963	217	1,220	262	568	277	990	1,500	357	94	60
26	136	625	232	865	247	568	262	684	1,400	644	78	57
27	142	513	247	625	232	549	247	513	793	940	92	60
28	148	459	247	549	203	513	232	441	1,480	495	90	90
29	142	441	262	477	189	477	217	390	513	373	124	130
30	124	424	277	424	-	441	217	965	477	309	232	118
31	118	407	373	390	-	407	203	1,640	424	262	94	103
32	113	-	549	357	-	3,120	-	1,670	-	247	78	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	3,179	247	64	103	0.261	0.30	6,510
November.....	11,738	1,890	103	391	.990	1.10	23,280
December.....	8,740	549	148	282	.714	.82	17,540
Calendar year 1934.....	32,170	2,560	27	225	.570	7.73	163,000
January.....	28,442	4,610	247	917	2.32	2.68	56,410
February.....	8,761	513	189	313	.792	.82	17,380
March.....	66,662	20,800	161	2,150	5.44	6.27	132,200
April.....	17,456	2,760	203	582	1.47	1.64	34,620
May.....	38,897	6,060	203	1,265	3.18	3.67	77,150
June.....	64,520	6,270	424	2,151	5.45	6.08	128,000
July.....	9,660	940	103	312	.790	.91	19,160
August.....	4,397	357	68	142	.359	.41	8,720
September.....	2,615	217	67	87.2	.221	.25	5,190
Water year 1934-35.....	265,067	20,300	57	726	1.84	24.95	525,800

South Fork of Obion River near Greenfield, Tenn.

Location.- Staff gage, lat. $36^{\circ}7'$, long. $88^{\circ}49'$, at bridge on State Highway 43, $2\frac{1}{2}$ 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 1935.

Extremes.- Maximum discharge during year, 21,100 second-feet Jan. 21 (gage height, 17.1 feet, from flood marks); minimum discharge (estimated), 98 second-feet Sept. 26, 1929-35; Maximum discharge, that of Jan. 21, 1935; minimum discharge, that of Sept. 26, 1935; minimum gage height, 1.5 feet several days in August and September 1930.

Remarks.- Records good for October to May and fair thereafter.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to May 6						Table for May 7 to Sept. 30					
2.0	85	8.0	978	13.0	3,400	16.5	17,880	2.0	69		
2.5	129	9.0	1,161	13.5	4,520	17.0	20,540	2.5	115		
3.0	187	10.0	1,368	14.0	5,400	17.5	23,300	3.0	174		
4.0	320	11.0	1,690	14.5	6,560	18.0	26,150	4.0	314		
5.0	466	11.5	1,880	15.0	10,620	18.5	29,140	5.0	466		
6.0	628	12.0	2,170	15.5	12,920	19.0	32,260				
7.0	798	12.5	2,670	16.0	15,340						

Note.- Above 5.0 feet, same as table for Oct. 1 to May 6.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	906	764	292	1,800	362	252	3,240	140	149	155	120	105
2	334	292	200	1,030	320	239	3,780	140	168	242	115	105
3	175	292	406	466	306	226	4,000	942	1,200	161	115	*115
4	161	662	348	320	278	213	3,400	520	1,010	256	*115	*242
5	140	226	265	239	252	2,250	2,800	2,100	389	161	*110	*137
6	140	163	226	239	239	1,590	2,440	2,550	187	149	*110	115
7	129	151	213	226	239	713	2,170	2,550	168	155	110	105
8	124	140	187	265	348	334	2,170	2,340	168	149	110	105
9	119	140	*187	466	662	265	1,980	1,440	161	145	105	110
10	140	134	187	520	1,280	1,180	781	404	149	137	105	115
11	140	134	163	265	498	2,940	546	256	2,340	137	105	105
12	124	129	151	213	391	3,580	436	200	2,340	132	105	105
13	119	129	163	213	1,200	3,780	334	174	2,170	132	*110	105
14	119	129	163	187	1,590	4,000	292	228	1,840	132	*130	105
15	119	129	163	187	1,240	3,580	265	798	1,590	126	*125	105
16	119	129	163	376	578	906	228	404	1,240	126	120	105
17	119	129	163	1,010	391	1,100	213	200	1,310	120	115	105
18	124	134	163	546	292	530	226	174	594	120	115	105
19	124	129	292	4,860	252	362	226	299	359	115	126	105
20	187	129	292	9,740	226	391	265	662	228	115	120	105
21	134	1,060	213	*20,500	187	306	292	404	1,050	299	110	*100
22	154	3,080	200	*18,900	213	1,100	292	214	374	226	105	*100
23	124	2,170	187	*12,400	213	1,140	213	200	228	530	105	*100
24	119	1,010	175	5,600	187	662	187	200	200	256	105	*98
25	129	376	187	3,580	436	578	175	168	174	*180	105	*98
26	124	252	213	1,220	1,050	421	163	161	174	*150	105	*96
27	119	239	187	1,050	376	348	252	149	161	*130	105	110
28	114	252	175	628	265	1,030	165	137	344	*115	105	126
29	114	252	200	562	-	466	187	242	200	115	105	115
30	119	334	376	456	-	942	175	200	161	115	105	115
31	151	-	348	391	-	3,080	-	161	-	120	105	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	5,033	906	114	162	0.376	0.43
November.....	13,279	3,080	129	443	1.03	1.15
December.....	6,848	406	151	221	.613	.59
Calendar year 1934.....	117,415	3,990	105	322	.747	10.13
January.....	88,245	20,500	187	2,847	6.61	7.62
February.....	13,871	1,590	187	495	1.15	1.20
March.....	38,504	4,000	213	1,242	2.88	3.32
April.....	31,991	4,000	163	1,066	2.47	2.76
May.....	18,457	2,550	137	595	1.38	1.59
June.....	20,826	2,340	149	694	1.61	1.80
July.....	5,201	530	115	168	.390	.45
August.....	3,445	130	105	111	.258	.50
September.....	3,362	242	96	112	.260	.29
Water year 1934-35.....	249,063	20,500	96	682	1.58	21.50

*Estimated.

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 of Obion River. Zero of gage is 261.23 feet above mean Gulf level.

Drainage area.- 1,880 square miles.

Records available.- July 1929 to September 1935.

Extremes.- Maximum discharge observed during year, 46,500 second-feet Jan. 23 (gage height, 21.96 feet); minimum, 378 second-feet Aug. 10, 11, Sept. 25, 26; minimum gage height, 0.62 foot Aug. 10, 11.

1929-35: Maximum observed discharge, 47,000 second-feet Jan. 11, 1930; maximum observed gage height, that of Jan. 23, 1935; minimum discharge, 311 second-feet several days during August and September 1930; minimum gage height, 0.22 foot, Sept. 21, 1931.

Remarks.- Records poor. Discharge estimated Aug. 7-9. Some possibility of backwater from Mississippi River during extremely high stages on both rivers.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,190	721	3,760	2,470	3,540	1,380	4,600	772	891	1,090	493	406
2	2,420	1,340	3,260	2,560	3,190	1,200	10,400	670	908	1,050	495	392
3	2,760	1,560	3,030	2,930	2,800	1,030	12,200	1,240	1,340	997	448	406
4	2,980	2,000	2,840	3,580	2,470	997	12,700	1,430	2,030	925	434	493
5	2,930	2,110	2,680	3,460	2,110	1,920	12,700	1,700	2,140	891	434	572
6	2,620	2,300	2,590	3,250	1,650	2,620	12,200	2,500	2,160	789	420	572
7	2,030	2,440	2,440	2,930	1,400	4,100	15,000	2,880	2,190	653	410	540
8	1,430	2,500	2,140	2,660	1,180	6,260	15,800	5,200	2,060	620	400	463
9	772	2,420	1,700	2,440	1,800	5,550	15,400	7,000	1,550	556	390	434
10	620	1,950	1,240	2,330	1,980	5,200	12,700	4,900	891	506	378	448
11	925	1,320	961	2,140	2,190	9,100	9,550	5,200	997	476	378	478
12	961	840	772	1,900	2,330	21,700	7,000	4,100	1,750	463	406	478
13	704	653	687	1,560	2,560	26,800	4,900	3,310	3,310	463	434	448
14	556	588	670	1,200	2,760	27,300	3,760	2,720	8,650	448	943	434
15	524	556	670	1,120	2,980	26,200	3,260	2,190	9,100	448	1,240	406
16	478	540	670	1,260	3,310	19,200	2,860	1,630	7,800	434	1,280	406
17	463	540	670	1,880	3,460	14,500	2,560	1,340	7,000	434	1,160	392
18	463	540	704	2,160	3,460	10,900	2,160	1,120	6,250	434	979	392
19	508	540	1,520	2,930	3,190	6,200	2,140	1,240	6,250	434	789	392
20	806	540	2,140	7,400	2,840	5,900	2,420	1,850	5,900	448	738	392
21	908	943	2,270	24,200	2,470	3,910	2,530	2,110	5,550	524	572	392
22	789	3,350	2,350	35,600	1,900	3,480	2,620	2,420	4,330	823	493	392
23	670	10,900	2,300	45,900	1,380	3,130	2,620	2,840	3,640	1,620	434	392
24	588	16,700	2,080	44,700	1,070	2,980	2,500	3,030	3,310	1,680	420	392
25	540	17,700	1,780	38,300	961	2,930	2,140	2,840	2,980	1,450	420	378
26	524	15,000	1,730	29,000	1,050	2,840	1,650	2,560	2,530	1,340	420	378
27	524	11,400	1,960	21,700	1,340	2,800	1,560	1,900	1,650	1,180	406	392
28	540	9,100	2,050	16,300	1,430	2,680	1,280	1,220	1,400	957	406	406
29	478	8,200	2,050	11,800	-	2,550	1,180	961	1,100	572	406	434
30	463	4,900	2,000	7,800	-	2,560	961	925	1,020	493	406	434
31	463	-	2,140	5,200	-	3,190	-	943	-	493	406	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	33,627	2,980	463	1,085	0.577	0.67
November.....	126,241	18,700	540	4,208	2.24	2.50
December.....	57,844	3,760	670	1,866	.993	1.14
Calendar year 1934.....	662,073	19,700	368	1,814	.965	13.10
January.....	332,450	45,900	1,120	10,720	5.70	6.58
February.....	62,801	3,540	961	2,221	1.18	1.23
March.....	232,087	27,300	997	7,487	3.98	4.59
April.....	183,161	15,800	961	6,105	3.25	3.65
May.....	74,741	7,000	670	2,411	1.28	1.48
June.....	100,897	9,100	891	3,363	1.79	2.00
July.....	23,395	1,580	434	755	.402	.46
August.....	17,456	1,280	378	562	.299	.34
September.....	12,934	572	378	431	.229	.26
Water year 1934-35.....	1,257,014	46,900	378	3,444	1.83	24.88

Rutherford Fork of Obion River near Bradford, Tenn.

Location.-- Chain gage, lat. 36°4', long. 88°54', at bridge on old 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 1935.

Extremes.-- Maximum discharge observed during year, 8,460 second-feet Jan. 21 (gage height, 19.12 feet); minimum, 20 second-feet Aug. 31 and Sept. 26; minimum gage height, 1.18 feet Feb. 24 and Sept. 26.

1929-35: Maximum observed discharge, that of Jan. 21, 1935; minimum discharge, 13 second-feet several days during October 1931 and August 1934; minimum gage height, 0.83 foot June 22, 26, 1932.

Remarks.-- Records good except those for periods Mar. 5 to Apr. 5 and July 13-20, which are fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	207	48	88	760	106	94	814	32	32	56	50	21
2	88	32	65	234	94	82	1,650	30	31	53	28	22
3	61	106	234	156	81	74	2,370	465	965	47	27	22
4	46	76	148	94	72	72	791	325	305	47	27	245
5	44	49	100	71	65	1,110	685	2,060	205	42	26	94
6	40	42	75	58	59	375	2,420	2,420	76	40	26	32
7	38	38	60	55	56	259	1,380	1,080	48	90	26	27
8	36	32	52	127	113	154	645	445	43	36	24	24
9	35	32	48	156	855	147	405	225	38	36	24	30
10	48	30	46	94	294	2,100	225	125	36	35	24	28
11	36	30	43	66	134	589	265	85	4,120	34	24	28
12	35	30	39	54	88	4,240	205	66	3,620	32	24	26
13	33	29	39	46	1,280	1,340	145	56	685	*32	26	26
14	32	30	38	42	479	426	103	47	525	*32	30	25
15	30	29	36	44	375	256	94	125	325	*31	26	24
16	30	28	38	54	274	197	75	175	235	*31	26	24
17	30	28	38	334	175	409	61	91	910	*30	24	24
18	30	28	38	120	140	212	60	73	305	*30	26	24
19	31	28	106	6,170	113	175	86	108	145	*29	25	23
20	30	27	77	7,170	94	168	63	245	125	*29	26	23
21	30	1,650	66	8,460	88	168	116	145	116	325	24	28
22	29	3,440	59	7,010	82	861	88	91	66	205	24	22
23	29	334	52	2,060	76	589	59	85	47	205	24	21
24	28	198	44	536	64	324	47	85	45	96	23	21
25	29	106	58	334	409	242	42	64	41	39	22	21
26	27	82	50	314	290	358	37	49	39	35	22	20
27	27	70	48	334	161	307	61	37	37	33	22	40
28	26	94	46	225	100	645	55	36	43	31	21	37
29	27	72	50	189	-	290	42	48	365	30	21	31
30	27	106	69	134	-	1,140	35	44	79	48	21	28
31	55	-	254	120	-	3,440	-	37	-	34	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	1,295	207	26	41.8	0.220	0.25
November.....	6,922	3,440	27	231	1.22	1.36
December.....	2,206	254	38	71.2	.375	.45
Calendar year 1934.....	52,176	3,440	13	143	.753	10.21
January.....	35,621	8,460	42	1,149	6.05	6.98
February.....	6,227	1,260	56	222	1.17	1.22
March.....	20,845	4,240	72	672	3.54	4.08
April.....	13,324	2,420	35	444	2.34	2.61
May.....	8,998	2,420	30	290	1.53	1.76
June.....	13,670	4,120	31	456	2.40	2.68
July.....	1,975	325	29	60.5	.518	.37
August.....	761	30	20	24.5	.129	.15
September.....	1,045	245	20	34.8	.183	.20
Water year 1934-35.....	112,789	8,460	20	309	1.63	22.09

*Estimated.

North Fork of Obion River near Union City, Tenn.

Location.- Staff gage, lat. 36°24', long. 89°, 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 1935.

Extremes.- Maximum discharge observed during year, 20,300 second-feet Jan. 22 (gage height, 19.2 feet); minimum discharge, 102 second-feet Aug. 27-31, Sept. 1, 2 (gage height, 4.1 feet).
1929-35: Maximum discharge (estimated), about 23,600 second-feet (revised) Jan. 10, 1930 (gage height, estimated, 19.7 feet); minimum, 85 second-feet Aug. 10, 1931.

Remarks.- Records good.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Mar. 12, June 12 to Sept. 30						Table for Mar. 13 to June 11					
4.0	96	7.5	458	12.0	2,070	16.0	5,250	4.0	135	7.5	578
4.5	126	8.0	552	13.0	2,550	16.5	6,310	4.5	172	8.0	686
5.0	162	8.5	682	13.5	2,840	17.0	7,970	5.0	216	8.5	816
5.5	208	9.0	844	14.0	3,170	17.5	10,350	5.5	268	9.0	960
6.0	262	9.5	1,030	14.5	3,540	18.0	13,000	6.0	330	9.5	1,110
6.5	322	10.0	1,230	15.0	3,990	19.0	19,000	6.5	402	10.0	1,275
7.0	386	11.0	1,630	15.5	4,540	20.0	25,700	7.0	484	11.0	1,645

Note.- Above 11.0 feet same as table Oct. 1 to Mar. 12 and June 12 to Sept. 30.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,460	1,760	492	5,170	334	198	4,870	226	198	154	120	102
2	1,150	810	274	1,270	322	198	3,710	246	226	414	120	102
3	347	400	552	576	310	188	1,960	1,480	844	282	120	120
4	240	2,600	1,350	373	298	188	1,340	520	484	322	133	126
5	179	2,020	442	274	274	5,090	686	1,800	236	179	126	126
6	170	576	334	251	262	3,170	6,890	2,780	207	154	120	120
7	162	334	274	240	251	1,390	6,890	1,840	207	147	120	120
8	154	251	251	442	240	492	7,220	960	207	147	120	108
9	154	218	251	682	296	322	1,890	466	198	147	120	140
10	1,150	188	229	414	1,390	1,610	710	280	189	147	114	133
11	682	188	208	286	1,030	8,650	1,110	236	5,090	133	114	126
12	274	179	198	240	414	17,100	990	226	4,190	126	114	126
13	179	179	198	208	1,310	15,800	402	216	1,510	126	776	114
14	162	170	198	188	1,940	10,800	372	207	1,030	126	712	108
15	154	170	198	179	1,180	1,840	330	207	442	126	654	114
16	154	170	198	2,550	386	900	304	207	298	120	179	114
17	147	170	198	5,310	322	2,200	280	207	1,270	120	147	114
18	154	170	198	1,630	274	1,080	268	198	682	120	140	114
19	1,190	170	2,600	5,250	261	539	268	236	414	154	240	114
20	576	170	1,350	9,350	229	450	2,350	2,550	386	126	218	114
21	347	274	654	15,900	208	418	640	2,960	310	140	147	114
22	179	10,800	400	20,300	208	1,020	402	1,110	414	153	133	114
23	170	10,400	298	15,600	208	558	316	358	251	458	120	114
24	154	5,430	251	5,430	198	539	260	268	218	218	120	114
25	162	1,350	334	1,800	198	618	256	216	162	198	108	114
26	162	600	2,600	1,310	218	520	292	216	154	154	108	114
27	154	386	1,610	992	240	450	366	207	154	140	102	120
28	147	1,550	552	682	198	358	372	207	147	133	102	126
29	147	992	386	492	-	316	236	198	162	126	102	120
30	147	576	2,600	400	-	280	226	358	162	120	102	120
31	147	-	1,270	373	-	5,830	-	207	-	120	102	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	11,744	2,460	147	379	0.773	0.89
November.....	43,251	10,600	170	1,442	2.94	3.28
December.....	20,845	2,600	198	673	1.37	1.66
Calendar year 1934.....	192,913	10,800	111	529	1.08	14.67
January.....	92,162	20,300	179	2,973	6.07	7.00
February.....	12,961	1,940	198	463	.945	.98
March.....	53,312	17,100	188	2,687	5.48	6.32
April.....	46,066	6,890	226	1,536	3.13	3.49
May.....	21,393	2,960	198	690	1.41	1.63
June.....	20,442	5,090	147	681	1.39	1.55
July.....	5,290	458	120	171	.349	.40
August.....	5,753	776	102	186	.380	.44
September.....	5,525	140	102	118	.241	.27
Water year 1934-35.....	366,747	20,300	102	1,006	2.05	27.83

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 1935.

Extremes.- Maximum discharge observed during year, 35,800 second-feet Jan. 21 (gage height, 22.88 feet); minimum discharge, 90 second-feet Sept. 25, 28; minimum gage height, 2.92 feet May 2.
1929-35: Maximum observed discharge, that of Jan. 21, 1935; minimum discharge, that of Sept. 25, 26, 1935; minimum gage height, 1.58 feet July 9, 1929.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	470	610	526	2,650	456	478	2,480	222	234	250	124	96
2	293	214	356	1,350	436	344	1,330	222	222	764	117	96
3	258	247	1,970	640	416	328	850	1,320	3,270	250	110	974
4	204	1,910	1,600	582	396	284	820	360	2,840	974	110	974
5	204	970	610	498	344	3,630	570	2,360	522	314	117	292
6	247	610	392	356	344	2,120	6,290	1,970	360	270	110	165
7	184	554	317	341	328	1,460	7,060	1,630	298	292	103	132
8	165	293	293	444	396	630	4,820	646	416	230	103	124
9	165	247	270	700	1,240	522	2,550	456	312	210	103	124
10	498	214	317	444	1,970	1,380	2,180	378	270	201	96	220
11	258	204	317	341	1,320	910	1,100	344	3,270	192	96	132
12	204	184	317	293	1,210	4,420	674	328	4,330	192	96	124
13	174	184	270	270	2,650	4,510	546	298	1,070	163	96	117
14	156	184	226	247	1,910	4,420	478	1,000	2,360	174	96	110
15	156	184	226	236	1,560	3,510	416	2,330	2,150	166	210	110
16	156	174	225	236	674	1,100	360	674	820	165	132	110
17	147	174	247	282	594	1,040	344	416	4,420	165	148	110
18	147	174	236	1,100	456	594	328	344	3,420	165	183	103
19	156	174	526	3,010	378	850	328	328	1,680	156	700	103
20	156	174	470	14,300	344	790	328	1,940	668	156	183	103
21	366	582	293	35,200	312	500	702	890	438	250	148	96
22	317	3,990	270	17,800	312	3,910	416	456	492	902	148	96
23	165	2,580	225	7,760	298	2,620	312	378	314	230	132	96
24	165	2,150	225	4,510	284	2,000	284	344	270	201	124	96
25	174	1,790	258	2,540	522	1,970	270	298	250	156	117	90
26	174	670	1,040	1,660	1,730	1,210	258	270	230	140	110	90
27	165	498	910	1,630	1,240	1,380	298	258	220	140	110	96
28	147	760	444	940	646	1,630	344	246	314	132	110	132
29	147	760	444	880	-	730	270	246	250	132	96	103
30	156	1,180	498	546	-	940	246	270	270	124	103	96
31	258	-	610	522	-	3,840	-	246	-	140	103	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off in inches	
October.....	6,632		498		147		214		0.373		0.43	
November.....	22,639		3,990		174		755		1.32		1.47	
December.....	14,947		1,970		225		482		.840		.97	
Calendar year 1934.....	206,023		5,730		99		564		.983		13.37	
January.....	102,318		35,200		236		3,301		5.75		6.63	
February.....	22,766		2,650		284		813		1.42		1.48	
March.....	54,040		4,510		284		1,743		3.04		3.51	
April.....	37,672		7,080		246		1,266		2.19		2.44	
May.....	21,438		2,360		222		692		1.21		1.40	
June.....	35,880		4,420		230		1,199		2.09		2.33	
July.....	9,015		974		124		259		.451		.52	
August.....	4,334		700		96		140		.244		.28	
September.....	5,310		974		90		177		.308		.34	
Water year 1934-35.....	336,091		35,200		90		921		1.60		21.80	

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 1935.

Extremes.- Maximum discharge during year, 33,300 second-feet Jan. 22 (gage height, 22.3 feet, from flood marks); minimum discharge, 138 second-feet Aug. 10-12; minimum gage height, 8.82 feet Oct. 19-20.

1929-35: Maximum discharge, that of Jan. 22, 1935; minimum discharge, 108 second-feet Sept. 11, 1934; minimum gage height, 3.2 feet Aug. 5-13, 1930.

Remarks.- Records poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,180	260	1,270	2,310	1,020	1,070	2,700	376	292	592	192	159
2	1,300	402	920	2,460	920	820	3,740	334	306	820	170	159
3	735	500	1,270	2,620	724	678	4,180	920	1,700	724	159	159
4	545	1,060	1,700	2,310	678	634	5,400	1,480	1,920	592	159	592
5	420	1,540	1,760	1,270	592	3,270	4,360	2,170	2,310	634	148	634
6	365	1,420	1,270	820	552	2,960	4,960	3,160	2,700	440	148	408
7	360	1,010	772	676	512	3,500	6,120	4,360	1,920	378	148	306
8	305	735	592	634	512	3,740	7,800	5,640	670	363	148	266
9	260	590	512	920	1,270	3,160	8,440	5,180	552	334	148	240
10	275	460	475	970	2,040	2,870	6,440	3,160	475	320	138	228
11	402	365	408	772	2,310	3,380	7,800	1,120	440	306	138	228
12	335	335	363	634	2,380	5,180	6,360	634	1,270	292	138	216
13	305	320	348	552	2,310	5,640	4,540	475	1,640	279	159	216
14	275	320	348	475	2,310	6,120	2,100	475	2,780	266	170	216
15	248	305	348	440	2,620	5,640	970	724	2,870	253	240	204
16	235	290	334	408	2,780	5,180	724	1,170	3,500	253	240	192
17	222	275	334	408	2,240	5,180	634	970	5,880	253	216	192
18	222	275	348	408	1,320	4,960	552	878	5,180	253	216	192
19	210	275	1,420	2,310	920	3,680	552	870	4,540	253	279	192
20	210	275	1,270	7,900	772	2,100	512	1,420	4,540	253	348	192
21	222	2,390	1,020	*20,900	634	1,270	512	1,920	4,180	292	253	170
22	320	6,680	724	*32,100	592	1,700	634	1,980	3,060	634	228	170
23	260	7,280	592	*32,700	512	2,240	592	1,270	1,170	970	216	170
24	235	8,190	475	*29,100	512	2,960	512	724	592	592	192	170
25	248	7,500	440	*23,100	820	4,020	440	512	440	348	161	159
26	248	6,120	475	15,600	1,590	4,740	408	440	378	279	170	159
27	246	4,540	724	11,000	1,860	4,540	440	378	348	228	159	181
28	235	3,620	634	8,120	1,700	3,500	512	348	363	204	159	181
29	222	1,920	634	6,120	-	2,460	512	363	440	161	159	192
30	222	1,590	678	3,060	-	1,980	440	348	378	170	159	181
31	222	-	1,070	1,640	-	2,620	-	334	-	161	148	-
Month	Second-foot-days				Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....	12,101				2,180	210	390	0.361	0.42			
November.....	60,862				8,190	260	2,029	1.88	2.10			
December.....	25,528				1,760	354	759	.703	.81			
Calendar year 1934.....	330,231				8,190	106	905	.838	11.36			
January.....	212,639				32,700	408	6,859	6.35	7.32			
February.....	36,902				2,780	512	1,318	1.22	1.27			
March.....	101,992				6,120	634	3,290	3.05	3.51			
April.....	85,906				8,440	408	2,864	2.65	2.96			
May.....	43,935				5,640	354	1,437	1.31	1.51			
June.....	57,034				5,880	292	1,901	1.76	1.96			
July.....	11,937				970	170	385	.356	.41			
August.....	5,726				348	138	185	.171	.20			
September.....	6,924				634	170	251	.214	.24			
Water year 1934-35.....	659,486				32,700	138	1,807	1.67	22.71			

*Estimated.

Middle Fork of Forked Deer River near Alamo, Tenn.

Location.- Staff gage, lat. 35°52', long. 89°4', at highway bridge on State Highway 54, 5 miles north of Alamo, Crockett County, and 15 miles above confluence with North Fork of Forked Deer River.

Drainage area.- 410 square miles.

Records available.- July 1929 to September 1935.

Extremes.- Maximum discharge observed during year, 19,500 second-feet Jan. 21 (gage height, 15.48 feet); minimum, 91 second-feet Sept. 26; minimum gage height, 1.68 feet Oct. 30.
1929-35: Maximum observed discharge, that of Jan. 21, 1935; minimum discharge, 71 second-feet several days in August 1930; minimum gage height, 1.26 feet July 1, 11, 17, 1931.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	765	186	340	3,290	295	266	1,320	170	114	130	99	96
2	340	151	300	910	280	253	1,020	163	114	180	96	96
3	300	134	1,140	420	280	253	996	2,730	3,520	146	99	99
4	134	480	765	213	266	253	6,060	710	1,280	254	99	216
5	126	186	300	168	266	5,160	1,370	2,490	925	198	99	254
6	134	151	151	186	240	1,150	7,820	7,060	1,150	138	99	106
7	134	118	142	168	240	1,150	8,220	2,610	273	216	99	99
8	110	110	134	280	240	445	6,060	1,280	146	146	99	93
9	110	103	126	610	392	325	1,720	732	130	130	99	106
10	360	103	126	320	884	3,790	578	273	130	122	99	114
11	186	103	118	232	427	2,520	512	216	130	114	99	114
12	151	118	142	204	325	7,430	412	180	1,760	114	99	99
13	126	118	142	186	1,780	5,450	393	146	1,530	114	99	99
14	118	110	134	160	1,050	2,390	317	146	2,010	114	106	99
15	110	103	134	142	928	1,120	298	828	900	114	99	99
16	103	103	134	142	730	433	262	373	1,050	114	99	96
17	103	103	151	151	501	788	244	163	2,610	114	99	99
18	110	103	151	142	296	395	244	146	975	114	114	99
19	103	118	565	3,950	266	322	244	216	708	114	122	99
20	103	110	340	10,500	253	340	244	1,100	235	114	106	99
21	103	1,140	222	19,500	240	305	244	353	180	146	99	96
22	103	10,500	186	15,000	240	3,650	336	216	163	975	99	96
23	103	3,520	160	9,540	240	1,500	227	502	138	216	99	96
24	103	1,280	151	6,380	240	1,400	210	198	130	198	99	93
25	118	745	151	1,100	1,450	1,200	194	163	122	146	99	93
26	110	241	204	708	840	1,070	194	138	122	122	99	91
27	103	186	260	624	266	452	355	122	130	106	96	93
28	103	380	186	501	266	722	280	114	130	99	98	130
29	103	300	168	463	-	358	194	207	146	99	99	114
30	103	380	222	392	-	305	178	146	130	99	99	99
31	110	-	260	341	-	3,420	-	138	-	99	99	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches			
October.....				4,888	765	103	158	0.385	0.44			
November.....				21,483	10,500	103	716	1.77	1.95			
December.....				7,705	1,140	118	249	.607	.70			
Calendar year 1934.....				128,420	10,500	86	352	.859	11.65			
January.....				76,923	19,500	142	2,481	6.05	6.98			
February.....				13,720	1,780	240	490	1.20	1.25			
March.....				48,615	7,430	253	1,568	3.82	4.40			
April.....				40,746	8,220	178	1,358	3.31	3.69			
May.....				24,029	7,060	114	775	1.89	2.18			
June.....				21,081	3,520	114	703	1.71	1.91			
July.....				5,106	975	99	165	.402	.46			
August.....				3,114	122	96	100	.244	.28			
September.....				3,282	254	91	109	.266	.30			
Water year 1934-35.....				270,691	19,500	91	742	1.81	24.54			

Hatchie River at Bolivar, Tenn.

Location.- Staff gage, lat. 35°16', long. 88°59', at new highway 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 1935.

Extremes.- Maximum discharge observed during year, 43,400 second-feet Jan. 20 (gage height, 20.00 feet); minimum, 190 second-feet Aug. 31, Sept. 1, 2; minimum gage height, 1.66 feet Sept. 1, 2.
1929-35: Maximum observed discharge, that of Jan. 20, 1935; minimum, 134 second-feet Aug. 12-14, 1930 (gage height, 1.1 feet).

Remarks.- Records good.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Apr. 10

1.0	153	7.0	1,150	14.0	5,760
1.5	217	8.0	1,560	14.5	7,510
2.0	288	9.0	1,810	15.0	9,400
2.5	358	10.0	1,890	15.5	11,950
3.0	442	11.0	2,195	16.0	14,800
3.5	524	12.0	2,600	17.0	21,000
4.0	609	12.5	2,960	18.0	27,800
5.0	780	13.0	3,620	19.0	35,300
6.0	960	13.5	4,570	20.0	43,400

Table for Apr. 11 to Sept. 30

1.5	164	9.0	1,390
2.0	231	10.0	1,590
2.5	303	11.0	1,900
3.0	350	12.0	2,370
4.0	540	12.5	2,750
5.0	700	13.0	3,300
6.0	870	13.5	4,120
7.0	1,040	14.0	5,420
8.0	1,210	14.5	7,220

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,270	394	5,020	2,870	6,320	3,620	3,970	1,110	734	1,010	288	190
2	1,560	660	4,360	3,510	5,760	3,790	3,970	921	751	1,140	288	203
3	1,270	1,340	4,360	3,620	5,260	4,160	3,970	1,180	1,070	1,350	288	330
4	768	1,640	4,160	3,620	4,790	4,570	3,970	1,410	1,440	1,820	259	785
5	524	1,910	3,790	3,790	4,160	6,030	4,160	2,100	1,980	1,350	245	1,180
6	442	2,120	3,460	4,160	3,620	5,760	4,570	2,370	2,150	1,010	245	1,190
7	394	2,200	3,310	4,360	2,870	5,260	6,320	2,370	2,250	751	245	904
8	394	1,850	2,960	4,570	2,380	5,020	6,030	2,250	2,310	700	259	540
9	394	1,310	2,500	4,360	2,420	4,790	6,960	2,200	2,060	870	231	390
10	442	960	1,970	3,620	3,180	5,260	6,960	2,200	1,750	836	217	348
11	524	694	1,480	2,960	3,970	5,260	6,820	2,150	1,480	668	203	364
12	643	541	1,150	2,460	3,970	10,400	6,080	2,020	1,280	492	203	348
13	643	507	979	2,060	5,020	12,000	5,420	1,670	1,060	428	190	348
14	507	490	870	1,640	6,320	9,880	4,580	1,480	1,260	396	203	318
15	410	474	852	1,310	7,680	9,400	4,120	1,300	1,430	348	231	303
16	378	458	834	1,150	7,680	10,400	3,300	1,230	1,410	318	348	273
17	348	458	834	1,090	7,310	9,880	2,580	1,180	1,900	318	636	245
18	333	442	924	1,060	6,960	8,500	2,020	1,090	2,200	303	700	245
19	333	442	1,170	1,760	6,320	7,310	1,540	1,010	2,310	288	768	231
20	333	442	1,380	37,700	5,760	6,030	1,280	1,300	1,590	273	636	231
21	333	798	1,480	41,700	4,790	5,510	1,320	1,700	1,140	396	540	231
22	333	2,660	1,360	35,500	3,620	6,650	1,480	2,200	972	540	428	231
23	333	5,510	1,230	25,000	2,720	4,790	1,750	2,580	889	870	303	231
24	363	4,160	1,090	19,700	2,420	3,790	1,750	2,840	1,090	1,010	273	217
25	363	3,620	924	16,000	2,860	2,870	1,540	3,050	887	717	259	217
26	348	3,790	979	13,600	2,790	2,340	1,300	2,840	684	476	231	203
27	348	4,360	1,410	11,400	3,310	1,970	1,120	2,680	556	380	231	231
28	363	5,260	1,680	9,390	3,460	2,060	1,110	1,980	524	364	231	259
29	348	5,510	2,090	8,600	-	2,300	1,300	1,390	700	364	203	273
30	333	5,260	2,230	7,680	-	2,600	1,300	1,140	853	333	203	288
31	333	-	2,380	6,960	-	3,620	-	870	-	303	190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	15,738	1,560	333	508	0.355	0.41
November.....	60,260	5,510	394	2,009	1.40	1.57
December.....	63,416	5,020	834	2,046	1.43	1.65
Calendar year 1934.....	542,395	13,000	234	1,486	1.04	14.10
January.....	287,190	41,700	1,060	9,264	6.48	7.47
February.....	127,120	7,680	2,260	4,540	3.17	3.31
March.....	175,800	12,000	1,970	5,671	3.97	4.67
April.....	102,560	6,960	1,110	3,418	2.39	2.67
May.....	55,651	3,050	870	1,795	1.26	1.45
June.....	40,790	2,310	624	1,360	.951	1.06
July.....	20,222	1,620	273	652	.456	.63
August.....	9,775	768	190	315	.220	.26
September.....	11,397	1,190	190	380	.266	.30
Water year 1934-35.....	969,899	41,700	190	2,657	1.86	25.24

HATCHIE RIVER BASIN

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 287.34 feet above mean Gulf level.

Drainage area.- 1,940 square miles.

Records available.- July 1929 to September 1935.

Extremes.- Maximum discharge observed during year, 59,000 second-feet Jan. 22 (gage height, 20.35 feet); minimum, 321 second-feet Sept. 26, 27, 28; minimum gage height, 2.24 feet Sept. 28.
1929-35: Maximum observed discharge, that of Jan. 22, 1935; minimum, 308 second-feet Aug. 12-15, 1930 (gage height, 2.1 feet).

Remarks.- Records fair.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

Table for Oct. 1 to Dec. 6

2.0	325	9.0	1,586	12.5	3,110
2.5	400	9.0	1,810	13.0	3,420
3.0	478	9.5	1,940	13.5	3,770
3.5	564	10.0	2,090	14.0	4,150
4.0	660	10.5	2,240	14.5	4,600
5.0	864	11.0	2,415	15.0	5,720
6.0	1,084	11.5	2,610		
7.0	1,316	12.0	2,830		

Table for Dec. 7 to Sept. 30

2.0	295	9.0	1,720	12.5	3,110	16.0	11,300
3.0	430	9.5	1,870	13.0	3,420	16.5	15,400
4.0	585	10.0	2,020	13.5	3,770	17.0	19,900
5.0	760	10.5	2,170	14.0	4,150	17.5	24,800
6.0	960	11.0	2,370	14.5	4,600	18.0	30,100
7.0	1,190	11.5	2,580	15.0	5,720	19.0	41,400
8.0	1,440	12.0	2,850	15.5	7,960	20.0	53,800

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	620	462	3,770	2,630	7,860	3,910	4,070	1,800	2,830	840	505	347
2	820	446	3,910	3,050	7,330	3,700	3,840	1,330	2,210	940	490	334
3	974	478	4,150	3,050	6,850	3,770	2,020	2,210	1,040	460	347	
4	1,220	620	4,420	3,050	6,420	3,490	3,840	2,630	2,680	1,220	430	398
5	1,320	800	4,680	3,050	6,040	4,070	3,960	2,780	2,290	1,360	416	505
6	1,240	1,110	4,840	3,110	5,450	5,020	6,040	2,880	2,020	1,540	416	670
7	930	1,360	4,640	3,230	5,020	5,450	7,330	3,700	1,980	1,660	402	860
8	760	1,560	4,420	3,350	4,840	6,420	6,420	3,630	2,050	1,490	398	1,040
9	640	1,710	4,230	3,490	5,020	6,040	6,040	3,560	2,170	1,140	374	980
10	582	1,760	4,070	3,700	5,450	6,040	6,040	3,490	2,250	940	374	820
11	582	1,780	3,840	3,840	5,020	6,040	5,720	3,350	2,370	920	374	653
12	600	1,550	3,700	3,990	4,680	7,330	6,040	3,110	2,490	960	360	553
13	620	1,170	3,560	4,070	4,640	7,860	6,420	2,990	2,590	900	360	490
14	660	930	3,230	4,070	4,680	9,090	6,420	2,680	2,830	760	360	475
15	680	780	2,450	4,070	4,680	11,300	5,720	2,780	2,930	670	360	460
16	680	700	1,840	3,770	5,020	9,780	5,220	2,680	2,930	602	360	430
17	620	660	1,340	3,490	5,720	9,090	5,020	2,450	3,420	553	388	416
18	546	640	1,190	3,050	6,850	9,090	4,680	2,110	4,230	521	416	402
19	510	620	1,260	2,830	7,330	9,780	4,320	1,630	4,150	505	460	374
20	478	600	1,290	11,300	6,850	8,450	4,070	2,970	3,910	490	565	374
21	462	1,130	1,320	48,600	6,420	7,860	3,840	2,630	3,700	490	706	360
22	478	3,050	1,460	56,400	6,040	8,450	3,560	2,140	3,420	537	724	347
23	446	3,700	1,570	47,400	5,720	7,860	3,050	2,020	3,050	940	653	347
24	446	3,910	1,670	34,600	5,220	7,860	2,530	2,020	2,490	1,390	585	334
25	446	3,770	1,540	24,800	5,020	7,330	2,250	2,140	1,780	1,440	521	354
26	446	3,700	1,520	20,800	4,840	5,720	2,140	2,250	1,420	1,220	460	321
27	478	3,650	1,540	18,000	4,420	5,020	2,210	2,370	1,290	990	430	321
28	462	3,700	1,520	14,600	4,150	4,680	2,410	2,530	1,090	780	388	334
29	462	3,700	1,600	12,100	-	4,420	2,080	2,780	900	636	374	334
30	462	3,770	1,810	9,780	-	4,150	1,840	2,930	840	569	360	334
31	462	-	2,060	9,090	-	4,070	-	2,930	-	521	360	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	20,132	1,320	446	649	0.335	0.39
November.....	55,806	3,910	446	1,794	.925	1.03
December.....	84,230	4,840	1,190	2,717	1.40	1.61
Calendar year 1934.....	659,815	12,900	355	1,808	.932	12.63
January.....	372,160	56,400	2,530	12,010	6.19	7.14
February.....	157,480	7,860	4,150	5,624	2.90	3.02
March.....	202,930	11,300	3,490	6,546	3.37	3.89
April.....	130,920	7,330	1,840	4,364	2.25	2.51
May.....	81,010	3,700	1,600	2,613	1.55	1.56
June.....	74,590	4,230	940	2,480	1.28	1.43
July.....	28,554	1,660	490	921	.474	.55
August.....	15,839	724	360	446	.230	.27
September.....	14,284	1,040	321	476	.245	.27
Water year 1934-35.....	1,233,755	56,400	321	3,380	1.74	23.67

Wolf River at Rossville, Tenn.

Location.- Chain gage, lat. 35°4', 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 1935.

Extremes.- Maximum discharge during year, 31,000 second-feet Jan. 20 (gage height, 13.75 feet, from flood marks); minimum, 130 second-feet Aug. 29 to Sept. 2; minimum gage height, 3.18 feet Oct. 18, 19, 21, 22.
1929-35: Maximum discharge, that of Jan. 20, 1935; minimum discharge, 125 second-feet Oct. 1-27, 1931; minimum gage height, 2.24 feet Aug. 12-14, 1930.

Remarks.- Records good below and fair above 500 second-feet.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	330	345	462	2,300	563	1,580	1,180	285	211	285	148	130
2	315	360	422	2,300	462	1,020	1,090	244	223	285	148	130
3	270	360	608	1,780	402	563	970	800	1,020	575	139	600
4	205	420	840	1,780	565	402	800	735	1,090	720	139	875
5	193	375	707	1,420	347	2,020	542	1,020	1,020	417	139	790
6	181	360	608	890	314	2,300	1,580	1,180	875	314	139	575
7	181	405	608	502	299	2,300	2,020	1,180	790	235	139	526
8	181	390	585	402	422	2,300	2,600	1,090	755	200	139	346
9	181	330	383	522	1,180	1,580	2,300	970	299	178	139	211
10	181	244	299	502	2,300	1,180	1,580	681	299	178	139	223
11	218	218	257	462	2,600	970	1,180	482	272	168	139	223
12	231	218	244	422	3,250	1,580	840	314	235	168	139	211
13	193	218	231	347	2,920	2,920	563	271	235	158	139	200
14	181	218	231	299	2,600	5,050	482	244	259	158	148	189
15	169	218	231	271	2,020	2,600	462	347	259	158	526	168
16	169	218	231	257	1,420	1,420	347	383	259	148	1,180	168
17	169	218	257	257	1,090	890	299	347	1,020	148	526	168
18	169	218	330	257	880	585	285	285	1,180	148	211	158
19	169	218	347	1,420	800	462	285	271	1,180	148	168	158
20	169	231	383	*21,600	422	422	285	735	1,180	148	189	158
21	169	436	347	*27,200	347	542	383	970	970	148	189	158
22	169	2,020	330	*18,400	514	1,180	422	840	360	158	168	158
23	169	8,510	299	6,260	299	926	422	1,020	235	247	148	148
24	169	6,690	257	3,250	285	735	442	1,420	235	189	148	148
25	181	3,940	257	2,500	735	542	355	1,290	211	178	148	148
26	181	2,300	522	1,580	970	365	271	790	200	168	139	148
27	181	1,290	482	1,290	1,180	314	330	299	189	158	139	168
28	181	900	522	1,090	1,420	299	353	247	211	158	139	200
29	169	502	585	925	-	330	383	223	211	148	130	200
30	181	482	542	800	-	365	347	223	211	148	130	211
31	218	-	707	707	-	1,020	-	223	-	148	130	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off in inches
October.....	6,023	330	169	194	0.365	0.42
November.....	32,752	8,510	218	1,092	2.06	2.30
December.....	13,114	840	231	423	.797	.92
Calendar year 1934.....	183,272	8,510	157	502	.945	12.85
January.....	100,782	27,200	287	3,251	6.12	7.06
February.....	30,206	3,250	245	1,079	2.03	2.12
March.....	38,751	5,050	299	1,250	2.35	2.71
April.....	23,438	2,600	271	781	1.47	1.64
May.....	19,409	1,420	223	626	1.18	1.36
June.....	15,714	1,180	189	524	.987	1.10
July.....	6,785	720	148	219	.412	.48
August.....	6,381	1,180	130	206	.388	.46
September.....	7,894	875	148	263	.495	.55
Water year 1934-35.....	301,249	27,200	130	825	1.55	21.11

*Estimated.

St. Francis River near Patterson, Mo.

Location.- Wire-weight gage, lat. $37^{\circ}11'40''$, long. $90^{\circ}30'10''$, in $\frac{1}{4}$ sec. 16, T. 29 N., R. 5 E., at bridge on State Highway 34, 3 miles east of Patterson. Zero of gage is 372.70 feet above mean sea level (U. S. Coast and Geodetic Survey adjustment of 1929). Chain gage at same location and datum prior to Oct. 25, 1934.

Drainage area.- 956 square miles.

Records available.- June 1921 to September 1935.

Average discharge.- 14 years, 1,153 second-feet.

Extremes.- Maximum discharge during year, 79,200 second-feet Mar. 11 (gage height, 28.70 feet); minimum, 40 second-feet Sept. 25 (gage height, 0.77 foot).
1921-35: Maximum discharge and gage height, those of Mar. 11, 1935; minimum, 15 second-feet Aug. 11, 12, 1934.
Maximum stage known, 31.8 feet in August 1915.

Remarks.- Records fair except those for days of rapidly changing stage, which are poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,340	316	5,200	2,060	660	348	6,570	260	1,100	1,410	274	70
2	850	302	3,550	1,480	617	332	2,850	260	1,880	1,100	234	67
3	617	287	1,800	1,220	617	316	1,970	7,900	5,500	1,280	197	67
4	456	438	1,710	1,000	617	287	1,560	4,320	2,650	900	185	68
5	383	2,160	1,410	860	617	456	1,280	15,100	2,060	1,220	162	67
6	332	1,280	1,160	800	575	900	1,220	10,200	1,340	900	162	59
7	287	1,050	1,000	752	535	1,160	1,480	4,200	1,630	752	135	55
8	234	752	850	752	495	2,250	2,160	2,750	1,630	660	151	53
9	209	617	660	1,340	617	1,560	1,800	1,970	1,880	478	124	55
10	197	515	660	1,560	660	1,710	1,410	1,560	2,060	348	116	260
11	174	401	575	1,410	752	75,500	1,280	1,280	12,600	316	109	197
12	162	383	515	1,100	705	48,600	1,340	1,050	10,000	287	105	110
13	151	332	438	950	752	8,440	1,160	900	3,660	274	98	101
14	134	287	401	800	1,050	4,200	1,050	800	13,700	1,280	1,970	70
15	126	260	366	1,410	1,710	2,850	900	705	4,090	800	535	91
16	118	247	332	2,060	1,340	2,060	752	1,050	4,090	495	316	68
17	110	234	316	3,870	1,180	1,480	705	800	4,090	348	247	61
18	126	197	302	2,750	1,000	1,340	617	705	13,700	274	197	54
19	140	185	456	3,980	850	1,160	1,880	660	7,560	260	151	53
20	174	185	752	9,400	800	1,050	1,050	23,000	3,260	222	126	49
21	197	348	800	10,200	660	1,410	900	20,400	25,400	617	118	47
22	209	8,260	800	5,360	617	1,050	752	4,800	12,300	800	107	49
23	234	3,870	950	2,550	575	950	617	2,650	3,260	2,450	98	43
24	222	2,160	1,050	1,560	515	900	535	1,850	2,550	1,970	86	41
25	274	1,480	1,100	1,340	495	850	495	1,480	1,880	1,630	80	40
26	1,710	1,160	1,160	1,160	456	800	476	1,100	1,560	900	75	47
27	1,160	1,000	1,220	1,050	419	850	438	950	8,080	850	110	234
28	752	950	1,050	950	383	752	332	900	2,350	660	99	87
29	575	800	950	800	-	617	316	1,800	1,480	495	89	80
30	456	1,340	1,100	752	-	575	274	1,560	1,970	401	80	70
31	383	-	3,050	660	-	575	-	1,410	-	332	75	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				12,492	1,710	110	403	0.422	0.49	24,780		
November.....				31,796	8,260	185	1,060	1.11	1.24	63,070		
December.....				35,683	5,200	302	1,151	1.20	1.38	70,780		
Calendar year 1934.....				222,153	9,200	15	609	.637	8.64	440,600		
January.....				65,926	10,200	660	2,127	2.22	2.56	130,800		
February.....				20,249	1,710	363	723	.756	.79	40,160		
March.....				168,323	75,500	287	5,333	5.58	6.43	327,900		
April.....				38,169	6,570	274	1,272	1.33	1.48	75,710		
May.....				118,400	23,000	260	3,819	3.99	4.60	234,800		
June.....				159,280	25,400	1,100	5,309	5.55	6.19	315,800		
July.....				24,707	2,450	222	797	.834	.96	49,010		
August.....				6,659	1,970	75	215	.225	.26	13,210		
September.....				2,413	260	40	80.4	.084	.09	4,790		
Water year 1934-35.....				681,102	75,500	40	1,866	1.95	26.47	1,351,000		

St. Francis River at Fisk, Mo.

Location.-- Wire-weight gage, lat. 36°46'50", long. 90°12'10", in SW $\frac{1}{4}$ 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 (U. S. Coast and Geodetic Survey adjustment of 1929). Prior to Oct. 27, 1934, chain gage at same location and datum.

Drainage area.-- 1,370 square miles.

Records available.-- October 1927 to September 1935.

Extremes.-- Maximum discharge during year, 34,600 second-feet Mar. 13 (gage height, 28.80 feet); minimum discharge, 185 second-feet Sept. 24-26; minimum gage height, 2.51 feet Sept. 25, 26.

1927-35: Maximum discharge, 41,900 second-feet May 15, 1933 (gage height, 26.69 feet, from flood mark); minimum discharge, 125 second-feet Aug. 5, 7-13, 1930, and Aug. 4-13, 1934; minimum gage height, 1.35 feet Aug. 6, 1934.

Maximum stage known, 26.0 feet Apr. 18, 1927 (discharge, about 50,000 second-feet).

Remarks.-- Records fair. Discharge estimated Oct. 25, Nov. 21, Dec. 22.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,470	650	1,760	2,100	1,590	710	4,680	804	1,660	1,900	624	243
2	1,270	605	2,590	2,050	1,460	680	6,080	780	1,820	1,820	552	234
3	1,070	740	3,090	1,660	1,340	655	5,970	952	1,960	1,700	494	234
4	1,030	770	2,680	1,760	1,240	620	4,280	3,090	3,380	1,530	480	225
5	830	765	2,300	1,560	1,180	830	3,140	6,060	3,580	1,430	417	225
6	680	1,260	2,130	1,390	1,110	970	2,570	7,800	2,840	1,340	395	217
7	590	1,400	1,600	1,230	1,070	1,130	2,530	8,600	2,180	1,310	373	209
8	494	1,270	1,610	1,150	986	1,440	2,790	8,600	2,180	1,200	351	209
9	442	1,150	1,460	1,190	986	1,610	2,840	7,500	2,020	1,110	351	225
10	403	986	1,210	1,310	1,210	2,160	2,700	5,540	1,900	1,000	330	252
11	365	860	1,060	2,970	1,240	5,000	2,490	3,720	1,880	900	310	417
12	341	755	954	3,010	1,210	22,200	2,160	2,650	4,040	840	300	384
13	319	680	860	1,420	1,240	34,600	2,020	2,260	6,520	780	300	330
14	299	605	725	1,270	1,440	27,900	1,900	1,940	7,500	828	300	280
15	289	548	725	1,160	1,540	18,900	1,760	1,920	7,800	1,240	744	252
16	269	507	665	1,260	1,370	10,400	1,630	1,800	7,800	1,160	780	243
17	259	429	620	1,640	1,390	7,200	1,530	1,760	7,800	975	636	225
18	249	455	590	2,500	1,440	5,670	1,410	1,600	7,800	840	505	217
19	259	416	710	3,450	1,490	3,200	1,430	1,400	8,200	720	417	209
20	269	403	922	5,360	1,350	2,570	1,440	1,800	8,600	684	362	209
21	289	650	970	7,220	1,240	2,260	1,520	5,140	8,200	660	330	201
22	309	1,640	1,000	8,570	1,160	2,160	1,440	8,200	8,600	816	310	193
23	329	2,890	1,070	8,570	1,060	2,070	1,340	9,400	10,400	939	290	193
24	329	3,940	1,080	7,500	970	1,980	1,260	8,200	9,900	1,270	280	185
25	350	3,450	1,210	5,360	890	1,960	1,160	5,930	8,600	1,530	270	185
26	403	2,750	1,320	3,690	830	1,940	1,070	3,650	5,930	1,530	252	185
27	468	2,210	1,370	2,970	785	1,840	1,000	2,450	4,230	1,380	252	209
28	922	1,900	1,400	2,470	740	1,740	952	2,000	4,950	1,190	261	234
29	1,020	1,780	1,460	2,210	-	1,650	888	1,980	4,440	1,030	261	243
30	890	1,660	1,510	1,880	-	1,620	852	2,160	2,790	900	261	261
31	590	-	1,740	1,730	-	2,840	-	2,190	-	732	252	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				17,096	1,470	249	551	0.402	0.46	33,910		
November.....				38,044	3,940	403	1,268	.926	1.03	75,460		
December.....				42,611	3,090	590	1,375	1.00	1.15	84,520		
Calendar year 1934.....				296,429	5,460	125	812	.593	8.04	587,900		
January.....				91,930	8,570	1,150	2,965	2.16	2.49	182,800		
February.....				35,647	1,590	740	1,198	.874	.91	66,540		
March.....				170,685	34,600	620	5,506	4.02	4.64	338,500		
April.....				66,512	6,060	852	2,217	1.48	1.61	131,900		
May.....				121,676	9,400	780	3,925	2.66	3.30	241,500		
June.....				189,810	10,400	1,820	5,327	3.89	4.34	317,000		
July.....				36,317	1,900	680	1,139	.851	.96	70,060		
August.....				12,010	780	252	387	.282	.33	25,820		
September.....				7,128	417	185	238	.174	.19	14,140		
Water year 1934-35.....				796,366	34,600	185	2,182	1.59	21.61	1,579,000		

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., 4 miles below mouth of Little River, at highway bridge in Marked Tree. Zero of gage is 196.44 feet above mean sea level (U. S. Weather Bureau bench mark). Prior to Jan. 18, 1935, staff gage 300 feet upstream at same datum.

Records available.- July 1934 to September 1935. Miscellaneous measurements were made at this point in February 1918 and September 1927 to May 1931.

Extremes.- Maximum discharge observed during period ending Sept. 30, 1934, 1,200 second-feet Aug. 30, 31 (gage height, 3.8 feet, former site); minimum, 280 second-feet Aug. 17 (gage height, 0.9 foot, former site).

Maximum discharge during year ending Sept. 30, 1935, 4,150 second-feet Mar. 26 (gage height, 10.56 feet); maximum gage height, 13.19 feet Apr. 7; minimum discharge, 373 second-feet Sept. 15, 16 (gage height, 1.43 feet).

Remarks.- Records good. Gage-height record furnished by U. S. Weather Bureau July 1, 1934, to Jan. 17, 1935; collected in cooperation with U. S. Weather Bureau Jan. 18 to Sept. 30, 1935. 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 the vicinity of Parkin, Ark.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										1,120	585	1,160
2										1,080	585	1,160
3										1,080	585	1,160
4										1,020	585	1,120
5										1,020	555	1,080
6										980	525	945
7										1,160	495	910
8										1,080	465	910
9										1,050	465	910
10										980	465	875
11										945	465	840
12										805	305	525
13										770	305	495
14										770	305	525
15										770	305	525
16										770	305	525
17										770	280	555
18										735	305	910
19										735	305	1,050
20										735	305	1,020
21										735	305	1,020
22										735	330	980
23										705	330	980
24										705	355	945
25										585	380	945
26										585	1,020	910
27										585	1,120	910
28										585	1,160	1,080
29										585	1,160	1,120
30										585	1,200	1,160
31										585	1,200	-
Month						Second-foot-days	Maximum	Minimum		Mean	Run-off in acre-feet	
October.....						-	-	-		-	-	
November.....						-	-	-		-	-	
December.....						-	-	-		-	-	
Calendar year												
January.....						-	-	-		-	-	
February.....						-	-	-		-	-	
March.....						-	-	-		-	-	
April.....						-	-	-		-	-	
May.....						-	-	-		-	-	
June.....						-	-	-		-	-	
July.....						25,350	1,120	585		815	50,280	
August.....						17,025	1,200	280		549	33,770	
September.....						27,250	1,160	495		908	54,050	
The period						-	-	-		-	138,100	

St. Francis River at Marked Tree, Ark.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,240	525	2,080	2,000	2,720	2,300	3,820	2,260	2,000	2,080	1,440	770
2	1,080	645	2,120	2,040	2,670	2,260	3,860	2,170	2,040	2,080	1,440	770
3	1,200	705	2,220	2,040	3,020	2,220	3,560	2,170	2,590	2,120	1,440	770
4	1,200	735	2,300	2,040	3,020	2,210	3,890	2,170	2,750	2,120	1,400	770
5	1,200	735	2,350	2,000	3,020	2,380	4,060	2,350	2,860	2,080	1,470	805
6	1,200	705	2,350	2,000	2,970	2,530	4,070	2,440	2,770	2,040	1,640	770
7	1,200	770	2,350	2,000	2,920	2,550	3,950	2,720	2,630	2,040	1,680	770
8	1,160	805	2,350	2,000	2,820	2,500	4,010	2,770	2,550	2,000	1,640	770
9	1,120	805	2,350	2,000	2,820	2,470	4,020	2,570	2,410	1,960	1,600	770
10	1,120	1,480	2,350	2,040	2,770	2,530	4,110	2,610	2,320	1,920	1,600	770
11	1,090	1,440	2,120	2,040	2,820	2,850	4,140	2,630	2,230	1,880	1,600	770
12	1,080	1,440	2,040	2,040	2,770	3,130	3,930	2,530	2,140	1,840	1,560	770
13	805	1,440	2,000	2,000	2,820	3,280	4,030	2,360	2,100	1,800	1,560	690
14	840	1,440	2,000	2,000	2,820	3,370	3,750	2,250	2,160	1,760	1,560	495
15	910	1,400	2,000	1,960	2,870	3,420	3,860	2,300	2,210	1,720	1,510	388
16	980	1,400	1,760	1,960	2,820	3,410	3,660	2,300	2,260	1,680	1,510	373
17	990	1,080	1,680	1,960	2,770	3,330	3,510	2,260	2,490	1,640	1,510	479
18	945	1,080	1,680	1,880	2,720	3,400	3,370	2,260	2,670	1,640	1,510	558
19	910	1,080	1,720	1,820	2,620	3,430	3,280	2,350	2,680	1,600	1,510	750
20	910	1,080	1,720	2,120	2,570	3,430	3,180	2,440	2,590	1,600	1,490	704
21	910	1,200	1,720	2,660	2,530	3,470	3,040	2,440	2,450	1,560	1,490	750
22	840	1,600	1,680	2,810	2,530	3,640	2,940	2,480	2,340	1,560	1,440	735
23	735	1,680	1,680	2,800	2,440	3,780	2,830	2,440	2,190	1,520	1,440	704
24	675	1,760	1,920	2,850	2,440	3,950	2,690	2,350	2,210	1,560	1,440	660
25	705	1,680	1,880	2,610	2,400	4,040	2,670	2,300	2,120	1,560	1,390	630
26	585	1,800	1,840	2,860	2,400	4,150	2,720	2,260	2,120	1,540	1,350	630
27	585	1,480	1,840	2,900	2,350	4,040	2,620	2,170	2,060	1,540	1,200	690
28	585	1,560	1,840	2,800	2,350	4,020	2,480	2,120	2,080	1,510	1,080	720
29	525	1,960	1,880	2,810	-	4,070	2,390	2,080	2,080	1,480	1,010	735
30	525	2,040	1,880	2,710	-	3,700	2,500	2,040	2,080	1,480	685	770
31	525	-	1,880	2,740	-	3,760	-	2,000	-	1,480	605	-
Month	Second-foot-days											
Month	Maximum											
Month	Minimum											
Month	Mean											
Month	Run-off in acre-feet											
October.....	28,555	1,240	525	915	56,240							
November.....	37,750	2,040	525	1,268	74,880							
December.....	61,580	2,550	1,680	1,988	122,100							
Calendar year												
January.....	70,690	2,900	1,620	2,280	140,200							
February.....	75,990	3,020	2,350	2,714	150,700							
March.....	99,602	4,150	2,210	3,214	197,600							
April.....	102,740	4,140	2,500	3,425	203,800							
May.....	75,590	2,770	2,000	2,342	144,000							
June.....	70,200	2,660	2,000	2,340	139,200							
July.....	54,590	2,120	1,480	1,755	107,900							
August.....	44,208	1,680	805	1,426	87,690							
September.....	20,837	805	373	695	41,330							
Water year 1934-35.....	738,950	4,150	373	2,025	1,466,000							

St. Francis River floodway near Marked Tree, Ark.

Location.- Staff gage, lat. 35°36', long. 90°27', in SE $\frac{1}{4}$ sec. 10, T. 11 N., R. 6 E., at dam of Poinsett County Drainage District No. 7, 3 miles north of Marked Tree.

Records available.- September 1927 to September 1931, July 1934 to September 1935.

Extremes.- Maximum discharge observed during year ending Sept. 30, 1935, 36,200 second-feet Mar. 25-27 (gage height, 29.2 feet); no flow Oct. 1 to Nov. 5, Nov. 13-19, Aug. 22 to Sept. 30.

1927-31, 1934-35: Maximum discharge, that of Mar. 25-27, 1935; no flow at times in 1934 and 1935.

Remarks.- Records good. No flow July to September 1934. Gage-height record furnished by Poinsett County Drainage District No. 7. Record of water diverted out of St. Francis River and bypassing Marked Tree; water returns to St. Francis River near Parkin, Ark.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	1,730	2,390	19,400	5,250	29,000	6,550	5,250	16,000	1,430	
2		0	2,080	2,390	19,900	4,850	27,300	6,100	5,650	16,000	1,370	
3		0	2,550	2,390	19,900	4,050	25,600	5,650	7,450	16,600	1,370	
4		0	2,930	2,390	19,400	3,400	24,400	4,850	6,400	16,600	1,310	
5		0	4,050	2,390	19,400	3,700	24,400	4,850	8,900	16,000	1,310	
6		40	4,850	2,550	18,800	3,400	24,400	4,450	9,400	15,500	1,190	
7		200	5,650	2,930	17,700	3,150	24,400	4,450	9,900	14,400	1,070	
8		300	6,550	3,150	16,600	2,930	23,900	4,450	9,900	13,400	950	
9		350	6,100	3,400	15,500	2,930	23,300	4,850	9,400	12,400	800	
10		200	6,100	3,700	14,400	3,400	22,700	5,250	8,900	10,400	650	
11		80	6,100	3,700	13,400	3,700	22,200	5,650	8,400	9,400	500	
12		40	6,100	3,700	12,400	4,050	21,600	5,650	7,900	8,400	350	
13		0	5,650	3,700	11,900	5,250	21,100	6,100	7,450	7,000	300	
14		0	5,650	4,050	11,400	7,450	21,100	6,550	7,000	6,100	250	
15		0	5,250	4,050	10,400	10,400	20,500	7,450	7,450	4,850	200	
16		0	5,250	4,050	9,900	12,900	19,400	8,400	7,450	4,050	200	
17		0	5,250	4,050	9,400	16,600	18,800	9,400	8,400	3,150	120	
18		0	4,850	4,050	9,400	18,800	18,300	10,400	8,400	2,730	120	
19		0	4,850	4,050	8,900	21,100	17,700	10,900	8,400	2,650	120	
20		40	4,050	4,450	8,400	23,300	17,200	11,400	8,400	2,250	80	
21		160	3,700	5,650	8,400	26,700	16,000	11,400	8,400	2,130	40	
22		200	3,400	6,550	7,900	30,200	15,000	11,900	8,400	1,940	0	
23		300	3,150	8,400	7,450	32,600	14,400	11,400	7,900	1,940	0	
24		400	2,730	10,400	7,450	35,000	13,400	10,400	8,400	1,860	0	
25		500	2,550	12,900	7,000	36,200	12,400	9,900	9,400	1,790	0	
26		750	2,550	14,400	6,550	36,200	11,400	8,900	10,400	1,730	0	
27		950	2,390	16,600	6,100	36,200	10,400	8,400	12,400	1,670	0	
28		1,190	2,250	17,800	5,650	35,000	9,400	7,450	13,400	1,610	0	
29		1,810	2,250	17,700	-	33,800	8,400	6,550	14,400	1,610	0	
30		1,490	2,130	18,300	-	31,400	7,450	6,100	15,500	1,490	0	
31		-	2,130	18,800	-	30,200	-	5,650	-	1,490	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0	0	0	0	0
November.....	8,800	1,610	0	293	17,450
December.....	124,770	6,550	1,730	4,025	247,500
Calendar year					
January.....	214,430	18,800	2,390	6,917	428,500
February.....	343,000	19,900	5,650	12,250	680,300
March.....	524,110	36,200	2,930	16,910	1,040,000
April.....	565,550	29,000	7,450	18,850	1,122,000
May.....	231,400	11,900	4,450	7,465	459,000
June.....	271,000	16,800	5,250	9,035	537,500
July.....	217,040	16,600	1,490	7,001	430,500
August.....	13,750	1,430	0	443	27,230
September.....	0	0	0	0	0
Water year 1934-35.....	2,513,830	36,200	0	6,887	4,987,000

Little River Ditch 81 near Kennett, Mo.

Location.- Wire-weight gage, lat. $36^{\circ}14'10''$, long. $89^{\circ}58'55''$, in NE $\frac{1}{4}$ 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. Chain gage at same site and datum prior to Oct. 30, 1934.

Records available.- October 1926 to September 1935.

Extremes.- Maximum discharge during year, 2,610 second-feet Mar. 15, 16; maximum gage height, 12.11 feet Mar. 15; minimum discharge, 58 second-feet Sept. 23, 24; minimum gage height, 2.66 feet Nov. 2.

1926-35: Maximum discharge, 2,760 second-feet 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 except those for period of backwater Mar. 18-28, which are poor.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Nov. 22, Mar. 18-28)

2.5	45	2.9	79	3.6	158	4.8	315	6.5	631	9.0	1,400
2.6	52	3.0	89	3.8	182	5.2	371	7.0	760	10.0	1,770
2.7	60	3.2	111	4.0	208	5.6	431	7.5	899	11.0	2,160
2.8	69	3.4	134	4.4	260	6.0	510	8.0	1,050	12.0	2,570

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	64	357	329	343	182	1,470	182	195	260	106	74
2	89	60	315	329	315	182	1,510	182	273	281	100	74
3	84	69	301	301	287	182	1,580	221	357	195	100	74
4	84	100	357	260	273	170	1,260	260	431	182	100	74
5	79	106	329	247	260	247	966	329	343	182	94	69
6	74	94	287	221	247	315	1,020	899	273	170	94	69
7	74	89	260	208	234	273	966	1,020	247	158	89	69
8	69	84	208	221	221	247	870	899	273	158	89	69
9	69	79	234	315	234	234	733	656	301	146	89	69
10	69	79	221	315	371	247	606	488	260	146	84	74
11	69	74	208	287	401	2,040	510	386	247	140	84	69
12	69	74	195	260	343	2,360	431	329	260	140	84	69
13	69	74	182	234	329	2,450	386	287	247	140	84	69
14	69	74	170	221	488	2,490	343	260	247	134	100	64
15	69	69	170	208	533	2,610	315	247	315	128	100	64
16	69	69	158	208	431	2,610	287	234	329	128	94	64
17	64	69	158	260	343	2,570	260	221	301	122	84	64
18	64	69	152	247	301	2,200	260	208	401	122	84	60
19	69	69	195	448	273	1,850	247	234	510	122	84	60
20	69	69	260	1,510	260	1,330	260	301	488	122	79	60
21	69	122	329	2,040	234	1,050	247	371	467	122	79	60
22	64	706	234	1,890	234	1,020	234	343	606	128	79	59
23	64	841	208	1,470	221	899	221	287	488	140	79	58
24	64	656	208	1,150	208	733	221	280	371	140	79	58
25	69	488	195	928	208	760	208	234	301	128	79	60
26	69	386	221	814	208	706	208	221	260	128	74	60
27	64	315	273	681	195	631	208	208	247	122	74	79
28	64	371	260	631	195	556	195	208	234	116	79	74
29	64	431	234	556	-	488	195	208	208	116	74	69
30	64	401	234	467	-	401	182	234	208	111	79	69
31	64	-	301	401	-	1,190	-	208	-	111	79	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,190	100	64	70.6	4,340		
November.....						6,251	841	60	208	12,400		
December.....						7,414	357	152	239	14,710		
Calendar year 1934.....						54,017	1,470	40	148	107,200		
January.....						17,657	2,040	208	570	35,020		
February.....						8,190	533	195	292	16,240		
March.....						33,223	2,610	170	1,072	65,900		
April.....						16,439	1,680	182	548	32,610		
May.....						10,625	1,020	182	343	21,070		
June.....						9,688	806	195	323	19,220		
July.....						4,478	260	111	144	8,880		
August.....						2,676	106	74	86.3	5,310		
September.....						2,004	79	58	66.8	3,970		
Water year 1934-35.....						120,835	2,610	58	331	239,700		

Little River Ditch 1 near Kennett, Mo.

Location.- Wire-weight gage, lat. 36°14'10", long. 89°58'50" in NE $\frac{1}{4}$ 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. Chain gage at same site and datum prior to Oct. 30, 1934.

Records available.- October 1926 to September 1935.

Extremes.- Maximum discharge during year, 4,800 second-feet Mar. 17 (gage height, 16.22 feet); minimum, 22 second-feet Sept. 26 (gage height, 2.77 feet).
1926-35: Maximum discharge recorded, 7,520 second-feet Apr. 25, 1927 (gage height, 16.56 feet); 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, Mar. 18-25, which are poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	40	1,080	910	978	324	2,560	264	356	458	91	48
2	83	35	910	944	846	309	2,600	264	422	388	91	48
3	76	46	814	814	720	309	2,600	294	534	356	85	46
4	70	89	944	662	662	294	2,370	340	1,050	324	79	45
5	66	105	944	560	584	356	2,060	405	814	294	79	42
6	65	98	814	496	538	584	2,330	1,680	584	264	75	42
7	58	93	690	458	496	608	2,230	1,920	476	249	73	41
8	58	82	584	458	458	720	1,970	1,760	458	234	71	41
9	56	72	538	690	458	440	1,760	1,440	608	204	68	41
10	53	69	496	944	978	440	1,520	1,260	608	189	67	45
11	50	65	458	814	1,290	2,600	1,400	1,080	538	182	64	41
12	48	61	405	662	1,080	3,860	1,290	846	538	174	63	40
13	45	59	388	560	878	4,250	1,150	634	496	166	64	39
14	45	62	372	476	1,360	4,500	1,010	538	496	152	79	37
15	45	57	340	440	1,480	4,650	846	476	538	145	74	36
16	40	56	324	422	1,260	4,700	662	440	720	145	69	35
17	40	54	309	538	978	4,800	538	405	814	138	69	31
18	36	54	294	634	782	4,600	458	372	910	131	65	30
19	40	56	324	944	662	4,300	440	388	1,220	124	63	29
20	40	58	476	2,560	560	3,900	440	496	1,260	117	59	28
21	37	113	720	3,080	496	3,510	440	978	1,440	117	58	28
22	37	1,330	538	3,220	476	3,120	422	846	1,640	117	56	25
23	36	2,010	476	3,170	440	2,790	388	690	1,440	124	56	25
24	35	2,010	440	2,880	405	2,280	356	560	1,220	124	54	25
25	42	1,760	422	2,600	388	2,140	340	476	1,080	124	53	23
26	35	1,440	422	2,140	372	1,970	324	422	910	124	54	22
27	32	1,150	538	1,800	356	1,600	309	372	750	117	54	45
28	35	1,080	608	1,680	324	1,360	294	356	634	110	55	37
29	35	1,260	538	1,480	-	1,110	294	340	516	104	50	32
30	35	1,180	516	1,330	-	978	279	340	458	104	54	29
31	33	-	690	1,150	-	1,880	-	356	-	98	49	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,486	83	32	47.9	2,950		
November.....						14,644	2,010	35	488	29,050		
December.....						17,412	1,080	294	562	34,640		
Calendar year 1934.....						96,939	2,770	12	266	192,300		
January.....						39,516	3,220	422	1,275	78,580		
February.....						20,306	1,480	324	725	40,270		
March.....						69,272	4,800	294	2,235	137,400		
April.....						33,680	2,600	279	1,123	66,800		
May.....						20,938	1,920	264	675	41,530		
June.....						23,628	1,640	356	788	46,870		
July.....						5,697	458	98	184	11,300		
August.....						2,041	91	49	65.8	4,050		
September.....						1,076	48	22	36.9	2,130		
Water year 1934-35.....						249,695	4,800	22	684	495,300		

Little River Ditch 66 near Kennett, Mo.

Location.- Wire-weight gage, lat. 36°14'10", long. 89°58'45", in NE $\frac{1}{4}$ 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. Chain gage at same site and datum prior to Oct. 31, 1934.

Records available.- October 1926 to September 1935.

Extremes.- Maximum discharge during year, 3,070 second-feet Mar. 15, 1926 (gage height, 18.36 feet); minimum discharge, 18 second-feet Sept. 24-26; minimum gage height, 2.70 feet Sept. 24.

1926-35: Maximum discharge, 3,650 second-feet Apr. 25, 1927 (gage height, 17.70 feet, from graph based on gage readings); minimum discharge, 18 second-feet Aug. 11, 1934, Sept. 24, 1935; minimum gage height, 2.50 feet Aug. 11, 1934.

Remarks.- Records good for discharges above 200 second-feet and fair below. Little River Ditch 66-A is an auxiliary to Ditch 66, the two ditches being separated by a low narrow bank and interconnected by cut-offs. Above stage of 6.4 feet part of the flow is carried by Ditch 66-A, and above stage of 13 feet the two ditches in the vicinity of the gage unite to form one continuous body of water. For the purpose of determining the discharge of each ditch, the division between them is taken as the top of the bank which separates them during low stages.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Nov. 22, July 19 to Sept. 30)

2.5	17	2.9	44	3.6	120	5.2	346	7.8	784	11.0	1,440	15.0	2,600
2.6	22	3.0	54	4.0	172	5.8	438	8.6	940	12.0	1,690	16.0	2,930
2.7	28	3.2	75	4.4	228	6.4	534	9.4	1,100	13.0	1,970		
2.8	35	3.4	97	4.8	286	7.0	640	10.2	1,260	14.0	2,270		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	46	1,080	784	748	301	2,000	286	454	554	128	41
2	108	44	920	840	678	315	2,500	286	406	458	128	40
3	86	64	784	748	622	301	2,270	301	406	391	108	40
4	75	92	748	604	586	286	2,180	331	438	346	102	39
5	63	145	748	502	550	316	2,000	518	422	316	92	34
6	61	271	694	454	518	502	1,970	1,200	391	286	92	34
7	55	228	604	422	470	534	2,080	1,680	361	256	80	34
8	55	145	534	422	454	502	2,030	1,680	346	242	80	33
9	51	114	496	502	438	518	1,940	1,590	470	214	75	34
10	47	102	454	676	534	502	1,800	1,490	534	200	70	36
11	45	92	406	676	802	1,200	1,660	1,370	466	200	70	34
12	43	80	376	586	766	2,530	1,490	1,040	458	188	62	35
13	42	80	361	502	694	2,860	1,240	766	454	172	61	29
14	42	80	346	454	712	3,000	960	586	640	165	75	29
15	40	76	316	406	940	3,040	802	502	802	168	75	27
16	40	70	316	391	940	3,040	658	470	1,040	152	86	26
17	39	70	301	502	784	3,040	568	422	1,100	145	108	24
18	39	64	286	748	640	2,930	518	391	1,310	138	86	22
19	38	64	301	820	586	2,830	486	391	1,640	126	75	22
20	43	64	438	1,560	502	2,670	496	391	1,620	126	64	22
21	45	97	550	2,240	454	2,400	470	486	1,690	152	61	20
22	43	568	550	2,530	422	2,240	454	558	1,800	138	58	20
23	41	1,640	454	2,600	391	2,120	422	766	1,770	145	54	19
24	40	1,910	438	2,400	361	1,910	406	694	1,720	214	51	18
25	43	1,830	406	2,090	346	1,750	376	568	1,640	242	49	18
26	43	1,640	391	1,860	346	1,620	346	454	1,540	214	47	18
27	45	1,420	454	1,690	316	1,460	346	376	1,400	186	45	29
28	61	1,240	518	1,540	316	1,240	331	346	1,200	200	45	27
29	49	1,200	486	1,310	-	1,040	316	331	1,020	165	42	26
30	45	1,180	470	1,200	-	900	301	331	748	152	43	25
31	42	-	568	880	-	1,140	-	470	-	138	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,580	108	38	51.0	3,130
November.....	14,715	1,910	44	490	29,190
December.....	15,784	1,080	286	509	31,510
Calendar year 1934.....	88,798	2,020	18	243	176,100
January.....	32,939	2,600	391	1,063	65,530
February.....	15,896	940	316	568	31,530
March.....	49,038	3,040	286	1,582	97,270
April.....	33,186	2,300	301	1,106	65,820
May.....	21,161	1,690	286	683	41,970
June.....	28,186	1,800	346	940	55,910
July.....	6,737	554	126	217	15,360
August.....	2,251	126	42	72.6	4,460
September.....	853	41	18	28.4	1,690
Water year 1934-35.....	222,326	3,040	18	609	441,000

Little River Ditch 66-A near Kennett, Mo.

Location.- Chain gage, lat. $36^{\circ}14'10''$, long. $89^{\circ}58'45''$, in NE $\frac{1}{4}$ sec. 4, 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.

Records available.- January 1927 to September 1935.

Extremes.- Maximum discharge during year, 885 second-feet Mar. 15 (gage height, 16.31 feet); no flow on many days.

1927-35: Maximum discharge, 2,340 second-feet Apr. 25, 1927 (gage height, 17.8 feet, from graph based on gage readings); no flow on many days.

Remarks.- Records poor. See "Remarks" under Little River Ditch 66.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

6.4	0	7.0	13	8.0	42	9.6	124	11.5	280	15.0	705
6.5	2	7.2	18	8.4	58	10.0	148	12.0	335	16.0	840
6.6	4	7.4	24	8.8	78	10.5	183	13.0	460		
6.8	8	7.6	30	9.2	100	11.0	230	14.0	575		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	100	34	27	0	450	0	0			
2		0	58	44	16	0	575	0	0			
3		0	34	27	8	0	575	0	0			
4		0	27	8	5	0	536	0	0			
5		0	28	0	0	0	450	0	0			
6		0	18	0	0	0	450	156	0			
7		0	6	0	0	0	474	313	0			
8		0	0	0	0	0	462	335	0			
9		0	0	0	0	0	426	291	0			
10		0	0	15	0	0	568	250	0			
11		0	0	18	21	136	313	204	0			
12		0	0	5	30	666	240	88	0			
13		0	0	0	18	812	148	32	0			
14		0	0	0	21	855	68	6	9			
15		0	0	0	63	885	36	0	58			
16		0	0	0	68	885	14	0	88			
17		0	0	0	34	870	2	0	112			
18		0	0	28	12	840	0	0	172			
19		0	0	42	2	784	0	0	260			
20		0	0	270	0	718	0	0	291			
21		0	0	549	0	627	0	0	335			
22		4	0	679	0	549	0	14	379			
23		302	0	692	0	498	0	32	368			
24		414	0	614	0	414	0	20	335			
25		390	0	498	0	346	0	3	302			
26		302	0	402	0	291	0	0	270			
27		212	0	324	0	230	0	0	204			
28		148	0	260	0	148	0	0	142			
29		136	0	180	-	88	0	0	88			
30		136	0	106	-	58	0	0	28			
31		-	0	52	-	118	-	0	-			
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						2,044	414	0	68.1	4,050		
December.....						271	100	0	8.74	538		
Calendar year 1934.....						4,505	630	0	12.3	8,930		
January.....						4,845	692	0	156	9,810		
February.....						325	68	0	11.6	645		
March.....						10,818	885	0	349	21,460		
April.....						5,587	575	0	186	11,080		
May.....						1,724	335	0	55.6	3,420		
June.....						3,421	379	0	114	6,790		
July.....						0	0	0	0	0		
August.....						0	0	0	0	0		
September.....						0	0	0	0	0		
Water year 1934-35.....						29,035	885	0	79.6	57,590		

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. Chain gage at same site and datum prior to Oct. 30, 1934.

Records available.- November 1926 to September 1935.

Extremes.- Maximum discharge during year, 5,010 second-feet Mar. 16 (gage height, 16.40 feet); minimum discharge, 94 second-feet Oct. 24, Nov. 2; minimum gage height, 2.74 feet Sept. 16-19.

1926-35: Maximum discharge, 6,510 second-feet Apr. 24, 25, 1927 (gage height, 17.67 feet); minimum, 52 second-feet Sept. 5-8, 1930 (gage height, 2.10 feet).

Remarks.- Records good.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1-27)

2.7	82	3.7	248	5.5	680	10.0	2,040	15.0	4,130
2.8	94	4.0	315	6.0	810	11.0	2,390	16.0	4,750
2.9	108	4.3	385	7.0	1,090	12.0	2,760	16.4	5,010
3.1	139	4.6	457	8.0	1,390	13.0	3,160		
3.4	189	5.0	555	9.0	1,710	14.0	3,610		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	189	101	1,880	1,450	1,430	630	3,250	680	922	1,080	315	147
2	258	94	1,950	1,550	1,330	630	3,660	655	838	950	315	147
3	198	131	1,450	1,390	1,240	630	3,660	680	838	866	292	147
4	172	189	1,590	1,180	1,180	605	3,520	758	922	810	269	147
5	165	315	1,420	1,010	1,120	680	3,250	1,030	922	706	258	139
6	164	505	1,500	894	1,060	1,060	3,200	2,080	866	655	246	139
7	139	433	1,180	838	978	1,120	3,340	2,760	784	805	238	139
8	131	292	1,030	858	922	1,050	3,500	2,600	1,030	580	227	131
9	123	258	978	1,010	922	1,030	3,160	2,650	950	530	218	131
10	123	208	922	1,500	1,060	1,010	2,960	2,500	1,060	505	208	139
11	108	189	838	1,300	1,350	2,220	2,720	2,320	978	481	198	139
12	108	172	758	1,150	1,390	4,020	2,500	1,780	922	457	198	131
13	101	164	758	1,010	1,300	4,680	2,110	1,450	922	453	189	131
14	108	164	706	894	1,360	4,680	1,740	1,210	1,210	409	218	131
15	101	155	655	810	1,650	5,010	1,550	1,090	1,450	385	218	123
16	101	147	630	784	1,680	5,010	1,360	1,010	1,780	385	238	123
17	101	147	605	978	1,420	4,940	1,240	950	1,910	361	260	116
18	101	139	580	1,330	1,240	4,820	1,150	866	2,220	361	238	116
19	101	139	630	1,490	1,120	4,560	1,090	866	2,540	358	208	116
20	101	139	810	2,650	1,010	4,250	1,060	866	2,650	338	198	108
21	101	208	1,060	3,550	922	3,860	1,060	1,010	2,760	361	198	108
22	101	1,360	1,030	4,130	894	3,560	1,010	1,270	2,960	361	180	108
23	101	2,800	894	4,130	838	3,430	978	1,590	2,920	361	172	108
24	94	3,120	838	3,810	784	3,120	922	1,500	2,800	457	172	101
25	101	3,040	784	3,380	758	2,880	866	1,120	2,690	530	164	101
26	101	2,720	784	3,040	706	2,690	810	950	2,540	457	164	101
27	108	2,430	922	2,800	680	2,460	784	810	2,320	433	164	139
28	123	2,140	1,010	2,580	655	2,140	758	732	2,040	467	164	131
29	108	2,080	950	2,250	-	1,810	732	706	1,780	409	155	123
30	101	2,040	922	1,910	-	1,650	706	706	1,560	361	155	123
31	101	-	1,120	1,580	-	2,040	-	950	-	338	147	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,803	238	94	123	7,540
November.....	25,999	3,120	94	867	51,570
December.....	30,464	1,880	580	983	60,460
Calendar year 1934.....	175,546	3,540	64	481	348,200
January.....	57,026	4,130	784	1,840	113,100
February.....	30,969	1,680	655	1,106	61,430
March.....	82,455	5,010	605	2,660	183,500
April.....	58,446	3,560	706	1,948	115,900
May.....	39,945	2,800	655	1,289	79,230
June.....	49,884	2,960	838	1,663	98,940
July.....	15,770	1,090	538	509	31,260
August.....	6,606	315	147	213	13,100
September.....	3,783	147	101	128	7,500
Water year 1934-35.....	405,170	5,010	94	1,110	803,600

Little River Ditch 259 near Kennett, Mo.

Location.- Wire-weight gage, lat. $36^{\circ}14'10''$, long. $89^{\circ}58'35''$, in NW $\frac{1}{4}$ 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. Chain gage at same site and datum prior to Oct. 30, 1934.

Records available.- November 1926 to September 1935.

Extremes.- Maximum discharge during year, 1,150 second-feet Mar. 14, 15; maximum gage height, 11.30 feet Mar. 15; minimum discharge, 0.3 second-foot Sept. 23-28; minimum gage height, 1.89 feet Sept. 24.
1926-35: Maximum discharge, 4,140 second-feet Apr. 29, 1927 (gage height, 15.57 feet); minimum discharge, 0.1 second-foot Aug. 4, 5, Oct. 22 to Nov. 17, 1931, Sept. 18-19, 1932; minimum gage height, 1.33 feet Aug. 29, 30, Sept. 4-8, 19, 20, 22, 23, 1930.

Remarks.- Records poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	0.8	581	337	238	50	686	38	43	56	6	1.2
2	4.9	.7	510	363	178	46	701	38	40	46	6	1.1
3	4.6	1.0	468	311	144	46	732	50	118	40	5	1.4
4	4.0	4.0	441	235	128	43	748	60	274	38	4.2	1.3
5	4.0	4.3	376	178	113	166	701	98	236	34	3.8	1.0
6	3.1	29	311	144	96	262	656	262	166	30	3.6	1.0
7	2.7	6	250	128	88	238	566	324	123	27	3.1	.9
8	2.6	5	202	178	84	190	496	298	103	25	2.9	.9
9	2.4	3.5	166	324	88	138	376	238	93	21	2.6	1.0
10	2.2	2.8	144	337	128	178	274	190	68	20	2.4	1.2
11	1.9	2.1	123	286	133	956	226	202	76	18	2.4	1.0
12	1.6	1.7	108	226	118	1,060	214	166	76	18	2.1	.9
13	1.6	1.6	98	178	128	1,100	190	133	72	14	2.0	.8
14	1.6	1.4	88	133	226	1,150	155	108	84	13	2.0	.8
15	1.6	1.2	80	113	226	1,160	128	88	128	12	3.6	.7
16	1.4	1.2	76	128	190	1,100	108	80	155	11	3.1	.6
17	1.3	1.2	68	178	144	976	93	72	155	10	3.1	.6
18	1.3	1.2	64	178	123	880	84	64	166	9	2.7	.5
19	1.3	1.0	93	496	103	732	80	80	228	8	2.5	.5
20	1.4	1.2	155	829	88	561	84	103	226	8	2.1	.4
21	1.3	1.4	166	956	80	482	84	118	202	7	2.1	.5
22	1.2	611	144	996	72	566	76	108	190	7	2.0	.4
23	1.1	656	118	1,020	68	552	68	93	190	10	1.8	.3
24	1.1	671	103	1,040	60	524	64	84	166	11	1.7	.3
25	1.4	671	103	1,020	60	524	56	72	144	11	1.6	.3
26	1.0	641	155	956	56	482	53	56	128	12	1.2	.3
27	1.0	611	238	846	53	402	53	50	113	10	1.5	1.3
28	1.0	701	226	748	50	296	50	46	98	10	1.4	1.1
29	1.0	656	190	611	-	226	46	43	84	9	1.3	1.0
30	1.0	641	190	454	-	178	43	43	68	8	1.3	.8
31	.8	-	214	311	-	641	-	46	-	7	1.2	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						62.0	4.9	0.8	2.00	123		
November.....						5,943.9	701	.7	198	11,790		
December.....						6,249	581	64	202	12,390		
Calendar year 1934.....						32,315.1	1,160	.3	88.5	64,090		
January.....						14,241	1,040	113	459	28,250		
February.....						5,265	238	50	117	6,480		
March.....						15,916	1,150	43	613	31,670		
April.....						7,891	748	43	263	15,650		
May.....						3,451	324	38	111	6,840		
June.....						4,033	274	40	134	8,000		
July.....						558	56	7	18.0	1,110		
August.....						82.2	6	1.2	2.65	163		
September.....						24.1	1.4	.3	.80	48		
Water year 1934-35.....						61,716.2	1,150	.3	169	122,400		

White River at Beaver, Ark.

Location.— Wire-weight gage, lat. 36°28'20", long. 93°45'55", in sec. 20, T. 21 N., R. 28 W., at Missouri & North Arkansas Railway bridge a quarter of a mile east of Beaver. Zero of gage is 883.44 feet (revised to U. S. Coast and Geodetic Survey adjustment of 1929) above mean sea level. Chain gage at same site and datum prior to Oct. 6, 1934.

Drainage area.— 1,270 square miles.

Records available.— July 1909 to December 1910, May 1923 to September 1935.

Average discharge.— 12 years (1923-35), 1,750 second-feet.

Extremes.— Maximum discharge recorded during year, 41,100 second-feet June 19 (gage height, 27.55 feet); minimum discharge, 57 second-feet Sept. 24, 25; minimum gage height, 2.49 feet Nov. 19.
1909-10, 1923-35: Maximum discharge recorded, 85,000 second-feet Apr. 18, 1927 (gage height, 37.0 feet); minimum discharge, 33 second-feet Sept. 10, 1925; minimum gage height, 1.55 feet, present datum, Oct. 1-8, 1903.

Remarks.— Records fair prior to June 30, and poor thereafter.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,040	100	1,860	660	1,040	514	8,780	1,470	2,480	2,600	243	93
2	1,780	96	2,480	600	975	486	5,140	1,320	3,840	1,950	234	90
3	1,250	109	3,210	571	910	458	3,710	1,280	13,800	1,540	217	87
4	975	147	3,710	514	814	1,320	3,080	1,590	31,400	1,540	200	84
5	514	144	3,080	486	751	6,180	2,600	6,180	14,200	1,780	191	82
6	660	129	2,280	458	720	12,400	2,280	18,700	5,720	1,470	175	79
7	542	144	1,780	458	660	5,140	2,600	10,300	12,400	1,250	171	78
8	458	133	1,470	945	560	4,220	5,870	6,020	21,900	1,040	171	79
9	404	115	1,320	1,700	630	2,600	4,090	4,220	20,100	910	159	103
10	352	109	1,180	1,480	630	8,440	3,080	3,540	7,300	845	181	103
11	313	109	1,040	1,860	630	21,800	2,600	3,960	5,280	782	144	221
12	279	96	910	1,540	530	28,100	2,600	2,720	5,570	845	175	243
13	243	90	814	1,320	630	28,100	2,280	2,040	4,480	782	195	171
14	225	84	720	1,180	660	8,440	1,950	2,560	4,350	720	183	137
15	208	84	660	1,040	690	5,720	1,700	14,800	4,200	751	159	122
16	187	84	630	975	782	4,480	1,540	11,300	4,870	660	144	103
17	165	84	571	910	782	3,340	1,470	5,000	17,600	600	147	93
18	175	84	571	845	781	2,960	1,320	3,710	38,100	542	144	84
19	171	84	845	975	690	2,480	1,470	4,870	38,800	514	137	74
20	159	2,720	2,560	2,560	660	2,140	1,620	7,790	11,300	514	129	66
21	151	12,200	2,040	4,220	630	1,950	1,780	9,630	9,970	486	122	69
22	144	12,000	1,820	7,940	600	1,860	1,540	5,720	6,820	431	119	69
23	133	9,290	1,590	4,740	571	3,460	1,390	4,220	4,610	431	115	62
24	129	4,480	1,180	3,210	514	16,000	1,250	3,080	3,460	404	109	59
25	159	2,840	1,040	2,360	871	19,400	1,180	2,360	2,720	378	103	59
26	144	2,040	975	1,950	542	11,200	1,180	1,950	2,360	327	103	74
27	175	1,700	910	1,700	542	6,820	1,700	1,700	2,140	317	103	84
28	155	1,470	845	1,540	514	4,740	2,040	1,860	2,360	303	90	84
29	122	1,250	782	1,390	-	3,710	1,620	2,960	1,860	289	103	74
30	119	1,470	720	1,250	-	2,960	1,470	5,280	3,840	279	96	69
31	109	-	690	1,110	-	3,840	-	4,740	-	243	96	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off Inches	Run-off Acre-feet
October.....	12,958	2,040	109	418	0.329	0.38	25,700
November.....	53,485	12,200	84	1,783	1.40	1.56	106,100
December.....	43,863	3,710	871	1,408	1.11	1.28	86,600
Calendar year 1934.....	398,691	12,200	46	1,092	.880	11.66	790,800
January.....	53,187	7,940	458	1,716	1.35	1.56	105,500
February.....	19,179	1,040	514	685	.539	.56	38,040
March.....	225,258	28,100	458	7,266	5.72	6.60	446,800
April.....	74,890	8,780	1,180	2,496	1.97	2.20	148,500
May.....	158,560	18,700	1,180	5,018	3.95	4.56	308,500
June.....	305,850	38,100	1,980	10,200	8.03	8.96	608,600
July.....	25,523	2,600	243	823	.648	.75	50,320
August.....	4,628	243	90	149	.117	.13	9,180
September.....	2,896	243	59	96.5	.076	.08	5,740
Water year 1934-35.....	977,077	38,100	59	2,677	2.11	28.62	1,938,000

White River at Forsyth, Mo.

Location.- Water-stage recorder, lat. 36°40'55", long. 93°6'5", 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 640.32 feet above mean sea level.

Drainage area.- 4,610 square miles.

Records available.- January to September 1926, February 1930 to September 1935.

Extremes.- Maximum discharge during year, 127,000 second-feet Mar. 11 (gage height, 35.23 feet); minimum, 58 second-feet Oct. 20 (gage height, 1.35 feet); minimum daily discharge, 100 second-feet Sept. 22.

1926, 1930-35: Maximum discharge and gage height, those of Mar. 11, 1935; minimum, 36 second-feet July 14, 1934 (gage height, 1.20 feet); minimum daily discharge, 39 second-feet July 26, 1934.

Maximum stage known, 45.36 feet, from flood mark, Apr. 16, 1927 (discharge, about 160,000 second-feet).

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

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,650	626	5,260	1,050	3,080	1,370	15,400	3,690	14,700	10,700	988	*184
2	2,130	459	*4,980	1,010	2,250	1,650	16,600	2,580	*14,200	8,780	871	619
3	1,920	1,080	6,510	1,810	*2,090	*862	12,100	3,350	44,700	7,850	1,300	1,040
4	2,370	*389	7,530	2,360	2,920	3,990	9,680	3,900	65,300	8,950	534	616
5	1,950	890	8,390	2,350	2,690	11,100	8,680	*4,900	53,400	8,180	716	525
6	2,190	1,000	7,600	*1,200	2,670	17,400	9,090	13,000	29,000	6,880	1,210	565
7	*922	898	6,180	1,730	1,580	19,100	*11,100	25,800	50,700	*5,890	1,120	573
8	1,020	1,060	5,200	4,340	2,870	12,200	11,900	17,200	68,800	4,770	1,220	*654
9	1,130	1,280	*4,100	4,910	2,100	9,110	13,900	11,200	*55,700	3,770	1,180	777
10	1,160	1,000	3,260	5,040	*558	*26,800	11,500	9,370	36,900	2,390	1,080	1,140
11	1,200	*312	2,520	6,110	1,490	99,000	9,740	9,900	20,600	3,490	*253	576
12	1,000	827	5,600	1,390	1,390	123,000	8,520	*10,300	24,200	3,010	555	608
13	486	599	3,110	*4,680	1,830	94,200	7,650	8,760	22,400	3,010	626	609
14	*227	464	2,650	4,900	2,080	48,700	*6,780	7,160	17,200	*2,880	644	584
15	1,040	465	1,470	4,320	1,620	24,100	8,210	11,600	19,000	2,900	1,610	*496
16	381	587	*632	4,160	2,350	17,300	5,650	23,600	*32,000	2,850	1,090	782
17	474	663	1,750	2,460	*1,470	*13,300	4,770	15,200	45,100	2,480	1,090	710
18	572	*377	1,910	3,650	1,650	11,000	4,490	9,940	71,800	1,760	*657	728
19	270	504	3,720	5,540	2,040	9,300	4,740	*10,000	79,900	2,020	1,540	614
20	424	553	4,210	*4,030	1,790	7,780	4,400	16,900	60,800	2,050	727	629
21	*243	4,280	4,890	7,730	1,530	8,690	2,640	19,700	30,800	*1,620	955	496
22	1,150	13,300	3,420	11,300	1,810	5,350	4,920	20,200	28,300	2,270	757	*100
23	802	15,200	*3,620	13,700	2,340	5,580	4,770	15,600	*18,500	1,710	700	517
24	449	12,300	3,780	9,650	*820	*18,000	3,390	11,500	13,800	1,170	721	583
25	1,890	*7,820	2,470	7,420	1,620	49,300	3,930	9,040	11,100	1,600	*651	375
26	693	6,030	3,190	6,150	1,720	42,100	3,970	*7,130	9,360	2,170	228	195
27	1,310	5,240	2,990	*5,310	2,040	26,800	3,380	6,460	8,550	1,380	4,270	961
28	*1,560	4,000	3,120	4,710	1,980	16,900	*2,360	5,520	7,640	*655	1,570	1,070
29	836	2,170	2,310	4,330	-	12,400	3,560	11,100	7,550	1,820	617	*298
30	975	5,710	*2,250	3,890	-	10,000	3,620	15,600	*8,390	1,560	774	612
31	972	-	2,680	3,310	-	*12,600	-	17,900	-	946	674	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	33,388	2,370	227	1,077	0.234	0.27	66,220
November.....	90,663	15,200	312	3,002	.651	.73	178,800
December.....	118,732	8,390	682	3,830	.831	.96	235,500
Calendar year 1934.....	945,074	20,100	39	2,589	.562	7.62	1,874,000
January.....	149,170	13,700	1,010	4,812	1.04	1.80	295,900
February.....	53,978	3,080	568	1,928	.418	.44	107,100
March.....	756,262	123,000	862	24,400	5.29	6.10	1,500,000
April.....	219,560	16,800	2,380	7,319	1.59	1.77	435,500
May.....	358,300	25,800	2,580	11,560	2.51	2.89	710,700
June.....	968,820	79,900	7,650	32,290	7.00	7.81	1,922,000
July.....	111,481	10,700	655	3,696	.783	.90	221,100
August.....	30,628	4,370	228	985	.214	.25	60,550
September.....	18,228	1,140	100	608	.132	.15	36,150
Water year 1934-35.....	2,908,518	123,000	100	7,969	1.73	23.47	5,769,000

*Sunday.

White River near Flippin, Ark.

Location.- Staff gage, lat. 36°19', long. 92°34', in NW $\frac{1}{4}$ sec. 9, T. 19 N., R. 15 W. 2 $\frac{1}{2}$ miles north of Flippin. Zero of gage is 420.92 feet above mean sea level (White River Power Co. bench mark).

Drainage area.- 6,170 square miles.

Records available.- October 1928 to September 1935.

Extremes.- Maximum discharge observed during year, 164,000 second-feet Mar. 12 (gage height, 38.1 feet); minimum, 183 second-feet Sept. 25 (gage height, 4.60 feet).
1928-35: Maximum discharge observed, that of Mar. 12, 1935; minimum discharge, 134 second-feet Dec. 18, 1932, July 31, Aug. 8, 1934; minimum gage height, 4.08 feet Dec. 18, 1932.

Maximum stage known, 46.6 feet Apr. 16, 1927.

Remarks.- Records good.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,360	1,190	8,090	2,360	4,050	2,210	26,300	4,050	19,000	10,000	1,930	970
2	1,600	920	9,090	2,870	2,880	2,070	20,500	3,680	27,100	12,400	1,800	820
3	2,360	725	6,850	2,070	3,680	2,360	18,300	3,330	38,700	10,900	1,800	725
4	2,070	725	7,580	2,070	3,680	2,360	14,400	7,090	61,400	11,200	1,360	527
5	2,870	1,480	7,830	1,930	3,860	11,200	11,800	10,600	76,400	10,900	1,540	770
6	2,510	1,080	8,620	2,990	3,330	15,800	11,800	11,500	80,400	9,450	1,190	635
7	2,510	970	7,830	2,360	3,160	23,900	14,100	21,700	51,000	8,080	770	452
8	2,870	1,480	8,150	2,360	2,870	23,900	16,200	27,900	90,800	7,090	1,240	635
9	1,800	635	4,840	3,500	2,510	15,800	16,200	23,600	84,600	6,610	1,140	680
10	1,540	1,360	4,640	5,480	2,510	16,900	16,900	15,800	64,400	5,480	1,140	820
11	1,540	1,540	4,640	5,480	1,930	71,200	14,400	12,800	41,900	4,240	1,300	635
12	1,540	1,190	2,990	7,330	1,240	146,000	12,100	10,000	23,900	4,640	1,030	1,420
13	1,930	770	3,500	6,850	1,240	185,000	11,200	9,170	27,100	4,440	1,020	1,140
14	2,070	680	3,330	5,820	2,070	111,000	10,000	15,100	22,800	3,500	635	920
15	1,240	970	2,510	5,700	3,500	53,500	8,990	10,600	16,500	3,160	725	870
16	1,020	635	2,830	5,050	3,160	35,100	7,580	14,400	28,700	2,830	635	725
17	870	635	2,870	5,220	2,670	21,700	6,380	23,900	51,600	1,930	1,930	725
18	635	635	1,090	4,050	2,830	17,200	5,920	17,200	62,900	1,670	1,930	770
19	546	590	2,360	4,860	2,870	13,900	6,150	12,100	91,600	1,930	1,020	725
20	590	556	3,860	10,000	2,360	12,100	5,700	12,800	92,800	2,210	635	680
21	518	725	4,050	10,000	2,210	10,600	5,700	19,400	67,400	1,930	1,670	590
22	590	920	5,490	11,200	2,670	10,000	5,700	21,700	50,800	2,210	1,190	572
23	563	13,800	5,480	13,400	2,830	8,890	6,150	20,100	26,300	2,070	1,080	546
24	509	15,800	4,050	16,500	2,510	22,700	5,920	17,200	20,500	2,210	820	527
25	536	12,400	4,240	11,800	2,210	52,500	5,480	11,800	15,500	1,930	725	246
26	554	8,090	2,510	10,300	1,930	58,900	4,840	10,600	12,800	2,360	590	527
27	509	6,380	2,360	8,090	2,510	48,100	4,440	9,170	11,800	2,210	635	635
28	870	5,050	3,330	7,090	2,990	27,500	3,500	7,580	10,000	2,670	590	590
29	1,930	4,240	2,510	6,150	-	23,900	3,500	9,170	10,600	1,930	3,500	563
30	1,800	3,860	2,070	6,610	-	20,500	3,500	15,100	10,300	1,020	1,540	563
31	1,360	-	1,930	5,280	-	20,100	-	17,200	-	2,210	820	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	43,809	2,670	509	1,413	0.229	0.86	26,890
November.....	80,011	15,800	536	3,000	.486	.54	178,500
December.....	138,300	8,620	1,080	4,461	.723	.85	274,300
Calendar year 1934.....	1,172,340	22,700	134	3,212	.521	7.05	2,325,000
January.....	197,340	16,500	1,930	6,366	1.03	1.19	391,400
February.....	76,840	4,050	1,240	2,744	.445	.46	152,400
March.....	1,056,790	155,000	2,070	34,090	5.53	6.38	2,096,000
April.....	303,550	26,300	3,500	10,120	1.64	1.83	602,100
May.....	426,340	27,900	3,330	13,750	2.23	2.57	845,800
June.....	1,239,500	92,800	10,000	41,320	6.70	7.48	2,459,000
July.....	145,420	12,400	1,020	4,691	.780	.88	288,400
August.....	37,720	3,500	590	1,217	.197	.23	74,820
September.....	21,002	1,420	246	700	.113	.13	41,660
Water year 1934-35.....	3,776,622	155,000	246	10,360	1.68	22.78	7,491,000

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 21 miles above mouth of Cache River. Zero of gage is 152.67 feet above mean sea level.

Drainage area.- 23,800 square miles (revised).

Records available.- December 1927 to September 1935.

Extremes.- Maximum discharge during year, 132,000 second-feet Mar. 19 (gage height, 28.04 feet); minimum, 4,630 second-feet Oct. 29 (gage height, 3.42 feet).
1927-35: Maximum discharge observed, 140,000 second-feet June 28, 29, 1928 (gage height, 28.5 feet); minimum, 3,440 second-feet Aug. 12, 16, 1934 (gage height, 2.18 feet).

Maximum stage known, 34.6 feet Apr. 23, 1927.

Remarks.- Records good. At stages above 27 feet, overflow occurs in the region of Des Arc and Augusta, bypassing some of the flow of White River in Cache River.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,840	4,900	14,200	15,800	44,900	15,900	96,600	30,400	49,100	69,400	19,800	7,480
2	7,720	5,080	14,300	15,900	44,100	15,300	93,800	28,500	48,100	64,100	18,700	7,600
3	7,720	5,260	16,700	15,900	43,400	14,600	90,800	29,500	49,100	59,300	17,500	8,080
4	7,600	5,360	19,100	15,800	42,000	14,600	86,500	27,700	49,100	54,200	16,600	8,080
5	7,480	5,360	21,200	15,300	40,000	15,100	82,200	29,400	49,100	51,000	15,600	7,840
6	7,240	5,360	22,700	15,000	38,200	18,200	80,700	36,600	49,100	49,100	14,500	7,600
7	7,120	5,360	22,900	14,600	35,500	22,300	77,800	40,600	51,000	46,600	13,700	7,360
8	7,000	5,260	22,500	14,500	32,700	26,200	73,400	44,100	52,000	45,700	13,000	7,240
9	6,880	5,170	22,100	14,900	30,900	29,000	69,400	48,100	53,000	44,100	12,200	7,120
10	7,000	5,080	21,200	15,100	28,000	32,300	66,700	53,000	56,500	44,100	11,800	7,240
11	7,000	5,080	20,400	16,200	26,400	36,000	65,400	56,500	58,800	43,400	11,300	7,120
12	6,880	4,990	18,900	16,900	25,200	40,000	62,800	58,800	62,800	42,700	10,700	7,000
13	6,760	5,080	17,700	17,500	24,700	42,000	60,100	60,100	65,400	42,000	10,400	7,000
14	6,400	5,080	16,600	18,000	24,700	44,100	57,600	60,100	68,000	40,600	10,200	7,120
15	6,060	5,170	15,400	18,000	24,700	51,000	55,500	60,100	70,700	40,000	10,200	7,240
16	5,860	5,170	14,300	18,000	25,000	77,800	54,200	58,800	72,000	38,800	10,200	7,240
17	5,660	5,170	13,600	17,500	25,200	107,000	52,000	56,500	73,400	37,600	10,200	7,240
18	5,560	5,080	13,000	17,000	25,000	126,000	51,000	55,300	73,400	36,600	10,000	7,120
19	5,460	4,990	12,500	17,500	24,700	132,000	49,100	55,300	73,400	35,600	9,880	7,000
20	5,260	4,900	11,900	22,100	24,000	132,000	48,100	55,300	74,900	30,700	9,460	6,880
21	5,260	5,080	11,400	29,400	23,100	130,000	47,300	54,200	76,400	28,200	9,160	6,760
22	5,080	5,170	11,300	35,000	22,300	127,000	45,700	54,200	77,800	26,200	9,040	6,640
23	5,080	5,460	11,600	40,000	20,800	122,000	44,900	54,200	80,700	24,700	8,900	6,640
24	4,990	6,400	12,200	42,700	19,700	118,000	44,100	55,300	83,600	24,300	8,760	6,520
25	4,990	8,080	13,000	44,900	18,600	114,000	43,400	54,200	85,000	24,300	8,480	6,400
26	4,810	9,040	13,700	45,700	17,900	112,000	42,000	54,200	86,500	24,300	8,340	6,280
27	4,810	11,300	14,000	45,700	17,000	108,000	40,000	52,000	86,500	23,800	8,200	6,160
28	4,720	14,000	14,200	45,700	16,400	106,000	37,600	51,000	85,000	23,100	7,960	6,400
29	4,630	15,000	14,200	45,700	-	101,000	35,000	51,000	80,700	22,300	7,840	6,520
30	4,720	14,800	14,000	45,700	-	99,600	32,700	50,100	74,900	21,600	7,720	7,000
31	4,720	-	14,300	45,700	-	98,100	-	49,100	-	20,600	7,600	-

	Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
							Inches	Acres-feet
October.....		188,310	7,840	4,630	6,075	0.255	0.29	375,500
November.....		197,250	15,000	4,900	6,574	.276	.31	391,200
December.....		495,100	22,900	11,300	15,970	.672	.77	982,000
Calendar year 1934.....		5,508,080	63,600	3,440	15,090	.635	8.70	10,930,000
January.....		798,600	45,700	14,500	25,760	1.08	1.25	1,584,000
February.....		784,200	44,900	16,400	28,010	1.18	1.23	1,555,000
March.....		2,228,100	132,000	14,600	71,870	3.02	3.48	4,419,000
April.....		1,786,200	96,600	32,700	59,640	2.50	2.79	3,543,000
May.....		1,623,200	60,100	27,700	49,140	2.07	2.39	3,021,000
June.....		2,014,000	86,500	48,100	67,130	2.32	3.15	3,996,000
July.....		1,174,500	69,400	29,000	37,890	1.59	1.83	2,330,000
August.....		347,960	19,800	7,500	11,220	.472	.54	690,200
September.....		212,280	8,080	6,280	7,076	.298	.33	421,100
Water year 1934-35.....		11,749,680	132,000	4,630	32,190	1.35	18.36	23,500,000

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 923.588 feet above mean sea level (revised to U. S. Coast and Geodetic Survey adjustment of 1929). Chain gage at same site and datum prior to Feb. 27, 1935.

Drainage area.- 1,000 square miles.

Records available.- October 1921 to September 1935.

Average discharge.- 13 years (1922-35), 1,041 second-feet.

Extremes.- Maximum discharge during year, 60,400 second-feet Mar. 11 (gage height, 27.05 feet); minimum, 107 second-feet Oct. 23 (gage height, 1.40 feet).
1921-35: Maximum discharge and gage height, those of March 11, 1935; minimum discharge, 24 second-feet Aug. 1, 2, 4, 1934; minimum gage height, 0.56 foot Sept. 6, 7, 9, 10, 1925.

Remarks.- Records good except those for days of rapidly changing stage, which are fair.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Nov. 28, Mar. 14 to Apr. 30, July 12 to Sept. 30)

1.4	98	3.2	922	5.5	2,750	9.2	7,750	14.0	16,200	23.0	43,000
1.6	144	3.6	1,200	6.0	3,250	10.0	8,950	15.0	18,300	25.0	61,500
1.8	200	4.0	1,480	6.8	4,270	11.0	10,600	17.0	22,800	27.0	60,400
2.0	266	4.5	1,880	7.6	5,390	12.0	12,300	19.0	28,400		
2.4	430	5.0	2,300	8.4	6,550	13.0	14,200	21.0	35,100		
2.8	660										

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

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	342	216	408	758	598	342	1,800	482	2,590	1,880	385	284
2	364	197	355	758	535	322	1,640	482	3,730	1,800	364	249
3	322	216	1,560	650	509	322	1,480	482	16,600	1,880	342	249
4	284	322	2,220	628	482	596	1,340	509	9,750	3,250	342	232
5	266	385	1,800	566	482	2,670	1,270	566	4,970	2,130	342	216
6	232	385	1,340	509	456	3,150	1,340	692	3,490	1,720	322	216
7	200	342	1,060	509	430	2,480	1,640	922	14,200	1,560	322	197
8	168	302	855	990	408	5,300	2,300	990	13,500	1,410	302	200
9	188	249	758	1,560	385	1,880	2,130	855	6,400	1,880	302	232
10	170	216	660	1,640	385	4,410	1,960	1,880	4,410	1,340	284	216
11	160	200	596	3,250	342	33,700	1,800	3,050	3,150	1,200	266	197
12	162	188	509	1,270	342	42,000	1,640	2,480	6,550	1,130	284	261
13	147	185	456	1,060	364	10,800	1,480	1,720	3,370	1,060	266	188
14	142	173	430	922	364	6,400	1,340	1,410	4,690	990	482	176
15	142	160	385	855	364	4,690	1,200	1,200	9,750	922	364	167
16	125	152	364	1,060	364	3,730	1,130	1,060	8,050	822	322	160
17	122	144	342	1,640	364	2,950	1,060	922	15,000	790	302	152
18	132	134	342	1,560	364	2,480	990	855	17,900	758	284	149
19	127	127	364	1,560	342	2,220	990	1,200	9,750	725	266	144
20	125	249	385	1,800	342	1,590	922	2,040	5,950	692	249	139
21	120	758	406	1,960	342	1,720	822	2,660	5,530	628	249	132
22	118	692	408	1,960	342	1,640	758	2,220	4,270	596	249	130
23	109	628	430	1,640	322	1,480	725	1,800	3,250	596	232	132
24	118	536	482	1,410	322	3,050	692	1,560	2,750	596	232	127
25	456	482	509	1,200	342	8,200	660	1,340	2,300	566	216	122
26	990	430	482	1,060	385	4,690	596	1,130	2,130	566	216	149
27	596	385	456	922	364	3,050	566	990	1,960	536	1,560	200
28	430	342	430	822	342	2,390	566	922	1,720	482	692	197
29	342	302	456	758	-	1,960	536	2,220	1,800	456	430	162
30	284	342	456	692	-	1,720	536	4,550	1,880	430	342	147
31	249	-	536	628	-	1,960	-	3,060	-	408	302	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	7,742	990	109	250	0.250	0.29	15,360
November.....	9,439	758	127	315	.315	.35	18,720
December.....	20,742	2,220	342	669	.669	.77	41,140
Calendar year 1934.....	123,617	2,220	24	339	.339	4.60	245,200
January.....	36,607	3,250	509	1,181	1.18	1.56	72,610
February.....	10,982	598	322	392	.392	.41	21,780
March.....	161,182	42,000	322	5,199	5.20	6.00	319,700
April.....	35,809	2,300	536	1,197	1.20	1.34	71,220
May.....	46,239	4,550	482	1,492	1.49	1.72	91,710
June.....	191,490	17,900	1,720	6,385	6.38	7.12	379,800
July.....	53,799	3,250	408	1,090	1.09	1.26	67,040
August.....	11,412	1,560	216	568	.568	.42	22,640
September.....	5,452	284	122	182	.182	.20	10,810
Water year 1934-35.....	570,995	42,000	109	1,564	1.56	21.24	1,133,000

Wilson Creek near Springfield, Mo.

Location.- Water-stage recorder, lat. $37^{\circ}11'35''$, long. $93^{\circ}20'20''$ in NW1/4 sec. 28, T. 29 N., R. 22 W., three-quarters of a mile below Jordan Creek and 2 miles south-west of Springfield. Zero of gage is 1,196.26 feet above mean sea level (revised to U. S. Coast and Geodetic Survey adjustment of 1929).

Drainage area.- 19.4 square miles.

Records available.- May 1932 to September 1935.

Extremes.- Maximum discharge recorded during year, 1,080 second-feet June 16 (gage height, 5.57 feet); minimum, 2.4 second-feet Oct. 29 (gage height, 0.27 foot); minimum daily discharge, 4.2 second-feet Oct. 14.
1932-35: Maximum discharge, about 2,440 second-feet June 27, 1932 (gage height, 7.62 feet); minimum discharge, 2.2 second-feet Sept. 30, 1932; minimum gage height, that of Oct. 29, 1934; minimum daily discharge, 3.2 second-feet Oct. 8, 1932.

Remarks.- Records fair except those estimated, which are poor. Sewage from Springfield enters above this station. Springfield water supply is pumped from Little Sac River Basin.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.1	4.7	13.7	15	17	10.8	25	11.2	47	40	8.1	7.4
2	7.0	4.9	27	13.7	16	10.8	24	16	264	59	7.0	7.0
3	6.7	4.1	29	11.7	16	10.3	21	10.8	160	44	7.4	6.7
4	6.7	8.8	18	11.7	16	10.6	21	21	78	32	7.0	6.4
5	5.6	7.0	16	11.2	16	46	38	26	60	28	7.8	7.8
6	5.6	6.4	15	10.3	14.3	35	38	27	66	25	7.4	6.7
7	4.9	5.1	14.3	47	13.7	*30	48	17	390	22	7.4	6.4
8	5.6	5.1	13.2	64	14.3	*20	39	16	97	22	7.0	6.0
9	5.6	5.1	11.7	*50	12.7	*18	35	13.7	69	19	7.0	11.2
10	5.3	4.7	10.8	*35	11.2	*15	39	25	64	17	6.7	7.4
11	5.3	4.5	10.3	25	12.7	*400	37	15	56	16	5.6	6.7
12	5.1	4.7	10.3	22	12.2	159	29	13.7	60	14.3	58	6.4
13	4.7	5.1	10.3	19	20	97	28	13.2	64	13.2	13.7	6.7
14	4.2	5.1	10.3	18	14.3	78	26	13.2	320	12.2	8.1	6.4
15	4.7	5.6	11.2	45	13.2	64	24	19	107	12.7	7.4	6.7
16	4.9	5.1	10.6	32	12.7	56	22	13.2	422	12.2	6.7	*7.0
17	6.3	5.1	10.8	25	12.2	48	24	11.7	*216	11.7	6.0	7.0
18	6.7	4.7	13.2	32	13.2	44	22	14.3	*170	11.2	6.0	6.0
19	5.6	10.6	14.3	49	12.2	*38	19	48	*148	10.3	6.0	6.0
20	6.0	44	12.2	*40	12.2	32	18	64	*127	10.8	7.4	5.6
21	5.1	32	12.7	*35	12.2	29	16	40	97	9.8	7.4	6.6
22	5.3	23	12.7	*50	12.2	28	16	35	69	9.3	5.3	5.3
23	5.3	10.3	10.3	*25	12.7	36	16	35	60	12.2	5.6	5.3
24	30	8.4	15	*25	21	138	15	25	51	9.3	5.6	5.3
25	10.3	7.8	11.2	22	19	47	15	22	47	8.6	5.3	5.3
26	5.6	7.4	11.2	20	11.7	35	14.3	22	62	9.3	32	*26
27	5.3	7.4	11.2	19	10.8	30	12.7	20	41	8.4	71	10.8
28	4.9	6.7	11.7	18	11.2	*30	12.2	54	66	8.1	12.7	7.8
29	5.3	9.3	24	19	-	28	16	246	46	8.1	13.7	7.0
30	4.9	12.2	17	17	-	37	11.7	78	40	8.4	10.3	7.0
31	4.9	-	16	17	-	31	-	56	-	8.1	8.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	200.5	30	4.2	6.47	0.334	0.39	398
November.....	311.8	44	4.5	10.4	.536	.60	618
December.....	435.4	29	10.3	14.0	.722	.85	864
Calendar year 1934.....	3,821.2	54	4.2	10.5	.541	7.33	7,580
January.....	823.6	64	10.3	28.6	1.37	1.58	1,630
February.....	391.9	21	10.8	14.0	.722	.75	777
March.....	1,786.9	400	10.3	57.6	2.97	3.42	3,540
April.....	721.9	48	11.7	24.1	1.24	1.38	1,430
May.....	1,042.0	246	10.8	33.6	1.73	1.99	2,070
June.....	3,564	422	40	119	6.13	6.84	7,070
July.....	541.4	68	8.1	17.5	.802	1.04	1,070
August.....	375.0	71	5.3	12.1	.624	.72	744
September.....	822.9	26	5.3	7.43	.383	.43	442
Water year 1934-35.....	10,417.3	422	4.2	28.5	1.47	19.97	20,650

*Estimated.

Buffalo River near Rush, Ark.

Location.- Staff gage, lat. $36^{\circ}7'$, long. $92^{\circ}34'$, in SE $\frac{1}{4}$ sec. 10, T. 17 N., R. 15 W., immediately above Rush Creek, 24 miles above mouth, and $1\frac{1}{2}$ miles southeast of Rush. Zero of gage is 458.70 feet above mean sea level (White River Power Co. bench mark).

Drainage area.- 1,110 square miles.

Records available.- October 1928 to September 1935.

Extremes.- Maximum discharge observed during year, 61,600 second-feet Mar. 11 (gage height, 23.8 feet); minimum, 65 second-feet Sept. 28 (gage height, 1.23 feet).
1928-35: Maximum discharge observed, 62,100 second-feet (revised) May 14, 1933 (gage height, 23.9 feet); minimum discharge, 40 second-feet Aug. 6-16, 1934; 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.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	244	88	2,720	352	695	650	4,120	830	2,580	1,240	232	104
2	408	88	1,820	356	605	560	3,280	2,320	2,720	980	232	104
3	376	88	1,460	320	560	560	2,720	3,280	19,000	980	232	97
4	320	88	1,820	306	480	560	2,190	5,470	11,800	980	220	97
5	264	88	1,400	278	472	7,820	1,940	49,500	5,300	980	220	97
6	228	88	1,080	264	456	5,150	1,940	25,300	3,840	930	202	91
7	190	82	860	264	440	3,420	4,260	9,290	6,150	785	185	91
8	170	82	740	606	416	2,320	4,260	5,640	13,500	650	175	91
9	150	82	650	2,460	364	1,700	3,140	4,260	6,320	560	165	91
10	136	86	560	1,940	416	4,870	2,450	5,300	4,400	520	155	120
11	136	86	464	1,400	560	48,000	2,190	4,860	3,560	472	145	112
12	128	86	400	1,130	520	35,000	1,940	3,840	2,320	424	145	104
13	128	86	352	930	650	12,300	1,820	3,000	4,120	2,320	150	104
14	120	86	328	785	880	5,000	1,700	3,700	2,860	1,300	202	104
15	112	86	306	695	980	3,980	1,460	9,500	2,320	740	170	104
16	104	86	285	605	930	3,420	1,240	5,640	5,800	560	155	104
17	97	86	285	560	630	2,860	1,130	4,120	45,140	440	155	104
18	97	86	285	520	755	2,190	1,030	3,280	26,700	376	145	104
19	100	86	320	1,520	695	1,700	1,030	3,840	13,000	368	136	97
20	97	86	456	3,980	650	1,520	1,400	5,980	6,850	416	136	97
21	97	108	930	8,030	560	1,520	1,820	5,000	4,850	376	136	97
22	97	145	785	5,150	520	10,700	1,700	5,000	3,560	344	128	97
23	94	1,240	695	3,280	480	13,500	1,680	4,120	2,580	344	128	91
24	91	830	605	2,320	464	13,200	1,460	3,000	1,940	328	120	91
25	97	605	560	1,920	456	10,900	1,300	2,320	1,620	313	120	91
26	97	480	480	1,350	650	6,660	1,180	1,700	1,300	285	120	85
27	91	464	464	1,180	740	4,550	1,080	1,400	1,080	271	112	124
28	85	352	416	1,080	695	3,560	980	1,180	1,080	257	112	106
29	85	352	384	1,030	-	2,860	930	3,420	1,820	244	112	94
30	86	1,030	360	930	-	2,190	880	5,640	1,940	244	112	91
31	86	-	360	795	-	3,560	-	3,840	-	244	112	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				4,607	408	85	149	0.134	0.15	9,140		
November.....				7,512	1,240	52	244	.220	.25	14,500		
December.....				22,650	2,720	285	731	.659	.76	44,930		
Calendar year 1934.....				298,071	21,000	40	817	.736	9.99	591,300		
January.....				46,195	8,030	264	1,490	1.34	1.64	91,630		
February.....				16,989	980	364	506	.546	.57	33,660		
March.....				216,780	48,000	560	6,895	6.30	7.26	430,000		
April.....				58,150	4,260	880	1,938	1.75	1.95	115,300		
May.....				193,560	49,500	830	6,244	5.63	6.49	383,900		
June.....				211,910	43,100	1,080	7,064	6.36	7.10	420,300		
July.....				19,271	2,320	244	622	.560	.65	38,220		
August.....				4,889	232	112	157	.141	.16	9,660		
September.....				2,986	124	85	99.5	.090	.10	5,920		
Water year 1934-35.....				805,259	49,500	62	2,206	1.99	26.98	1,597,000		

North Fork of White River at Tecumseh, Mo.

Location.- Wire-weight gage, lat. 36°36'16", long. 92°17'19", in NW¼ 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 548.11 feet above mean sea level (revised to U. S. Coast and Geodetic Survey adjustment of 1929). Chain gage at same site and datum prior to Nov. 2, 1934.

Drainage area.- 1,180 square miles.

Records available.- October 1921 to September 1935.

Average discharge.- 13 years (1922-35), 1,278 second-feet.

Extremes.- Maximum discharge recorded during year, 39,900 second-feet Mar. 11 (gage height, 20.53 feet); minimum, 413 second-feet Oct. 14-17, 22 (gage height, 1.01 feet). 1921-35: Maximum discharge recorded, 53,000 second-feet June 13, 1923 (gage height, 24.00 feet); minimum discharge, 343 second-feet Aug. 9-11, 1934; minimum gage height, 0.64 foot Oct. 8, 10, 1933. Maximum stage known, 31.6 feet in July 1905.

Remarks.- Records good except those for days of rapidly changing stage, which are poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	462	469	1,420	570	722	626	2,240	740	1,720	2,240	740	578
2	*462	448	980	570	704	618	1,980	785	4,850	2,110	751	562
3	462	476	680	562	668	618	1,850	785	15,600	1,720	740	586
4	462	498	830	554	659	830	1,660	830	6,240	1,980	713	562
5	448	538	830	522	642	1,590	1,530	1,720	4,250	1,590	713	546
6	448	498	740	522	618	1,950	1,590	2,110	3,350	1,470	695	538
7	434	483	695	514	602	1,530	1,590	1,930	3,160	1,360	686	546
8	434	483	642	602	618	1,250	1,720	1,720	6,720	1,420	668	538
9	441	476	626	880	618	1,140	1,660	1,470	4,400	1,590	642	586
10	434	455	594	880	586	3,070	1,530	1,420	3,500	1,250	626	830
11	434	441	554	830	578	38,500	1,470	1,300	2,930	1,200	626	626
12	434	441	538	785	562	20,600	1,420	1,250	2,650	1,140	642	586
13	427	441	522	677	704	7,040	1,300	1,200	2,240	1,080	1,030	*570
14	413	434	514	686	695	4,700	1,260	1,200	2,510	1,080	740	564
15	413	434	514	686	704	3,660	1,200	1,140	3,800	1,030	686	538
16	420	427	498	1,470	704	3,070	1,080	1,080	4,550	980	668	538
17	420	441	483	1,470	659	2,510	1,080	1,030	9,120	930	634	530
18	441	441	483	1,250	618	2,240	1,080	980	11,400	930	660	580
19	448	434	*554	2,240	626	1,980	1,030	1,030	6,560	980	659	514
20	441	434	626	2,510	594	1,850	980	1,250	4,550	980	642	522
21	427	469	602	*2,200	594	1,720	980	1,530	4,700	930	642	514
22	420	469	578	1,850	586	1,590	930	1,470	3,650	930	626	506
23	427	*448	554	1,530	570	1,470	930	1,360	2,930	880	610	514
24	427	427	562	1,300	570	2,790	880	1,250	2,650	880	594	506
25	506	427	*646	1,140	602	3,210	880	1,140	2,370	930	578	514
26	695	427	530	1,030	618	2,790	880	1,030	2,240	980	586	570
27	554	434	522	980	650	2,510	830	1,030	2,110	880	610	586
28	490	420	522	880	618	1,980	785	930	1,850	880	602	570
29	469	427	*534	830	-	1,720	785	1,140	1,850	830	610	546
30	469	930	546	785	-	1,590	785	1,200	1,980	785	602	522
31	469	-	562	740	-	2,110	-	1,140	-	785	578	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	14,131	695	413	456	0.386	0.44	28,030
November.....	14,070	930	420	469	.397	.44	27,910
December.....	19,681	1,420	483	632	.536	.62	38,540
Calendar year 1934.....	207,796	1,850	343	569	.482	6.54	412,200
January.....	32,090	2,510	514	1,036	.877	1.01	63,650
February.....	17,662	722	562	631	.536	.56	35,030
March.....	122,742	38,500	618	3,959	3.36	3.87	243,600
April.....	37,805	2,240	785	1,264	1.07	1.19	75,180
May.....	35,240	2,110	740	1,234	1.05	1.21	75,850
June.....	133,430	13,600	1,720	4,448	3.77	4.21	264,700
July.....	36,700	2,240	785	1,184	1.00	1.16	72,790
August.....	20,569	1,030	578	664	.563	.65	40,800
September.....	16,728	830	506	568	.473	.53	33,180
Water year 1934-35.....	503,848	38,500	413	1,380	1.17	15.68	999,500

*Estimated.

North Fork of White River near Henderson, Ark.

Location.- Staff gage, lat. 36°22', long. 92°14', in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 20 N., R. 12 W., 1 mile below Bennetts Bayou, 19 miles above mouth, and 1 mile southeast of Henderson.

Drainage area.- 1,640 square miles.

Records available.- July 1909 to December 1910, October 1928 to September 1935.

Extremes.- Maximum discharge observed during year, 62,900 second-feet Mar. 11 (gage height, 22.2 feet); minimum, 460 second-feet Oct. 17, 24 (gage height, 1.50 feet).
1928-35: Maximum discharge observed, that of Mar. 11, 1935; minimum, 375 second-feet Aug. 12, 1934 (gage height, 1.34 feet).
Maximum stage known, 29.5 feet in August 1915.

Remarks.- Records good.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	585	520	1,830	692	980	770	3,320	980	1,710	2,350	810	585
2	552	490	1,370	730	935	770	2,900	980	9,560	2,620	810	585
3	552	520	1,070	730	890	770	2,480	980	25,400	2,480	770	585
4	552	490	980	692	890	890	2,220	1,270	10,800	2,220	770	585
5	520	520	935	692	850	2,900	2,220	5,880	6,000	2,090	770	585
6	520	490	850	655	810	2,760	2,220	3,760	4,390	1,710	730	552
7	490	490	810	655	810	2,430	3,040	3,180	11,200	1,590	730	552
8	490	490	770	730	810	1,830	2,620	2,620	13,100	1,480	692	552
9	490	490	730	935	850	1,590	2,480	2,220	6,610	2,090	692	730
10	490	490	730	1,120	935	8,220	2,090	2,090	4,720	1,590	692	692
11	490	460	730	1,120	850	46,600	2,090	1,830	3,910	1,370	655	692
12	490	460	730	1,020	850	54,000	1,960	1,710	3,520	1,270	655	655
13	490	460	692	935	1,020	12,300	1,830	1,590	2,900	1,590	1,480	620
14	490	432	655	850	1,270	6,320	1,590	2,220	3,180	1,370	850	585
15	490	432	620	810	1,220	4,720	1,590	1,710	3,460	1,170	730	585
16	460	432	585	1,070	1,120	3,910	1,480	1,590	5,060	1,120	730	552
17	460	432	552	1,710	1,120	3,320	1,370	1,480	17,600	1,070	692	552
18	490	432	552	1,590	980	2,900	1,370	1,370	18,800	980	692	552
19	490	432	770	4,690	935	2,620	1,370	1,480	11,500	1,020	692	520
20	490	432	590	3,760	890	2,350	1,370	3,180	6,610	1,170	692	520
21	460	460	850	4,550	850	2,090	1,270	2,620	5,420	1,070	692	520
22	460	490	810	2,900	810	2,090	1,270	2,350	4,550	1,020	655	520
23	460	460	770	2,350	810	2,090	1,220	2,090	3,760	1,020	655	520
24	460	432	730	1,830	770	13,100	1,170	1,830	3,180	980	620	520
25	490	432	730	1,590	810	7,260	1,120	1,690	2,760	980	620	520
26	585	432	692	1,480	810	4,550	1,120	1,480	2,480	1,020	620	620
27	552	432	692	1,370	850	3,610	1,070	1,370	2,550	1,020	620	655
28	552	405	655	1,270	810	2,900	1,020	1,370	2,220	935	620	620
29	552	432	655	1,170	-	2,480	1,020	1,960	2,220	890	620	585
30	520	935	655	1,120	-	2,220	980	1,710	2,350	850	620	552
31	520	-	692	1,020	-	5,800	-	1,590	-	850	620	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	15,692	585	460	506	0.309	0.36	31,120
November.....	14,304	935	405	477	.291	.32	28,370
December.....	24,782	1,830	552	799	.487	.56	49,150
Calendar year 1934.....	271,607	4,720	380	744	.464	6.16	538,700
January.....	46,036	4,890	655	1,485	.905	1.04	91,310
February.....	25,535	1,270	770	912	.556	.58	50,650
March.....	211,210	54,000	770	6,813	4.15	4.78	418,900
April.....	52,870	3,320	980	1,762	1.07	1.19	104,900
May.....	62,080	5,880	980	2,003	1.22	1.41	123,100
June.....	201,120	25,400	1,710	6,704	4.02	4.56	398,900
July.....	42,985	2,620	850	1,387	.848	.98	55,260
August.....	22,295	1,480	620	719	.438	.50	44,220
September.....	17,468	730	520	582	.355	.40	34,680
Water year 1934-35.....	736,378	54,000	405	2,017	1.23	16.68	1,461,000

Black River at Leeper, Mo.

Location.- Chain gage, lat. 37°4'30", long. 90°42'35", in SW $\frac{1}{4}$ sec. 27, T. 28 N., R. 3 E., at Missouri Southern Railroad bridge at Leeper. Zero of gage is 425.22 feet above mean sea level (U. S. Coast and Geodetic Survey adjustment of 1929)

Drainage area.- 957 square miles.

Records available.- June 1921 to September 1935.

Average discharge.- 14 years, 975 second-feet.

Extremes.- Maximum discharge during year, 78,300 second-feet Mar. 11 (gage height, 19.4 feet); minimum, 247 second-feet Oct. 16, 17 (gage height, 1.62 feet).
1921-35: 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.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	675	478	4,930	1,160	735	532	3,030	615	1,000	1,870	500	275
2	588	450	2,290	1,080	705	505	2,350	585	1,060	1,840	445	292
3	532	450	1,970	940	645	505	1,800	750	2,190	1,420	472	310
4	478	478	1,580	870	615	478	1,540	910	3,320	1,480	445	310
5	450	940	1,400	800	588	588	1,360	3,050	2,190	1,260	500	330
6	400	870	1,180	735	560	835	1,310	3,770	1,670	1,050	445	330
7	378	768	1,080	875	532	1,010	1,420	2,760	1,670	910	395	310
8	355	875	940	705	532	1,080	1,540	2,060	1,670	888	395	275
9	335	615	855	905	532	1,010	1,540	1,600	1,480	750	395	420
10	315	560	645	940	532	2,480	1,420	1,480	1,310	680	350	395
11	298	505	705	905	505	52,900	1,360	1,310	3,030	680	350	330
12	280	450	645	870	505	38,100	1,310	1,200	3,320	615	350	350
13	280	425	588	768	532	8,000	1,200	1,050	2,330	2,330	420	310
14	280	400	560	735	615	4,320	1,100	1,000	1,800	1,600	528	310
15	264	378	532	705	535	3,040	1,050	1,180	1,600	1,260	500	310
16	247	355	505	905	905	2,470	1,000	1,050	1,540	1,000	445	292
17	247	355	478	1,490	870	2,190	955	955	2,190	825	420	292
18	264	335	425	1,580	835	1,800	868	868	3,770	750	395	275
19	298	335	560	2,180	768	1,600	910	910	4,090	680	372	292
20	315	335	588	3,380	705	1,480	955	3,320	3,030	715	380	275
21	378	400	588	3,380	875	1,360	910	4,410	10,500	750	350	275
22	400	870	615	2,510	645	1,310	868	3,030	7,170	788	330	275
23	400	1,400	615	1,970	588	1,200	825	2,190	3,320	750	330	275
24	378	1,080	645	1,580	560	1,260	750	1,800	2,470	680	310	275
25	450	905	705	1,320	560	1,200	715	1,540	2,060	680	292	275
26	768	800	768	1,240	532	1,150	680	1,360	3,770	715	292	275
27	870	705	855	1,080	560	1,200	680	1,200	7,580	955	395	395
28	705	675	800	1,010	560	1,050	648	1,100	3,030	825	330	445
29	615	1,010	788	940	-	955	615	1,360	2,190	715	310	445
30	560	1,160	855	835	-	910	615	1,260	1,930	555	310	420
31	505	-	1,160	768	-	1,360	-	1,100	-	555	310	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	13,308	870	247	429	0.448	0.52	26,400
November.....	19,162	1,400	335	639	.668	.75	38,010
December.....	30,650	4,930	425	989	1.03	1.19	60,790
Calendar year 1934.....	188,812	4,930	133	517	.540	7.35	374,500
January.....	38,961	3,580	675	1,257	1.31	1.51	77,280
February.....	17,731	905	505	633	.661	.69	35,170
March.....	137,759	52,900	478	4,444	4.64	5.35	273,200
April.....	35,304	3,030	615	1,177	1.23	1.37	70,020
May.....	50,713	4,410	585	1,636	1.71	1.97	100,600
June.....	88,270	10,500	1,000	2,942	3.07	3.48	176,100
July.....	30,251	2,330	555	978	1.02	1.13	60,000
August.....	11,956	528	292	387	.404	.47	23,770
September.....	9,638	445	275	321	.335	.37	19,120
Water year 1934-35.....	483,732	52,900	247	1,325	1.38	18.79	959,500

Current River near Eminence, Mo.

Location.- Water-stage recorder, lat. 37°11', long. 91°15'30", in SW¼ sec. 15 (corrected), T. 29 N., R. 3 W., 1 mile below Jacks Fork and 8 miles northeast of Eminence. Staff gage 30 feet upstream, with datum 0.06 foot higher, prior to Dec. 8, 1934. Zero of present gage is 568.8 feet above mean sea level.

Drainage area.- 1,230 square miles.

Records available.- August 1921 to September 1935.

Average discharge.- 14 years, 1,500 second-feet.

Extremes.- Maximum discharge during year, 59,800 second-foot Mar. 11 (gage height, 24.35 feet); minimum discharge, 458 second-foot Oct. 11-17; minimum gage height, 1.28 feet Oct. 16.

1921-35: Maximum discharge and gage height, those of Mar. 11, 1935; minimum discharge, 360 second-foot July 21-25, 27-31, Aug. 1-13, 1934; minimum gage height, 1.08 feet Aug. 3-10, 1934.

Remarks.- Records good. Discharge estimated Oct. 13, Nov. 27.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Mar. 13 to Apr. 6, June 4 to Sept. 8, Sept. 28-30)

1.2	405	2.3	1,170	4.2	3,060	6.5	6,250	10.0	13,200	15.0	26,300
1.4	514	2.6	1,440	4.6	3,520	7.0	7,130	11.0	15,500	16.0	29,500
1.6	635	3.0	1,620	5.0	4,000	7.5	8,050	12.0	17,900	18.0	36,200
1.8	770	3.4	2,220	5.6	4,670	8.0	9,010	13.0	20,500	20.0	43,300
2.0	920	3.8	2,620	6.0	5,420	9.0	11,000	14.0	23,300	22.0	50,500
										24.0	58,000

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	668	544	3,400	1,440	845	845	3,280	882	2,980	2,620	1,440	770
2	635	514	1,820	1,280	808	808	2,840	920	6,840	3,190	1,350	735
3	573	544	1,620	1,060	770	770	2,420	960	15,700	3,170	1,260	735
4	544	700	1,350	1,000	770	862	2,120	960	8,660	2,730	1,260	735
5	544	1,080	1,170	920	735	1,260	2,020	1,860	5,420	2,420	1,260	735
6	514	882	1,040	845	735	1,620	2,020	2,120	4,260	2,120	1,260	700
7	514	770	1,000	845	700	1,520	2,220	2,120	4,400	1,920	1,170	700
8	514	700	882	960	700	1,350	2,220	1,920	5,840	1,720	1,080	700
9	486	635	645	1,170	700	1,260	2,120	1,620	4,260	1,620	1,040	735
10	466	573	770	1,350	668	5,190	2,020	1,530	3,620	1,530	1,040	735
11	458	573	735	1,260	668	47,700	1,920	1,440	3,170	1,440	1,000	700
12	458	544	668	1,080	635	35,900	1,820	1,350	3,280	1,530	1,000	700
13	458	544	635	1,000	735	8,870	1,620	1,260	2,950	1,620	1,080	668
14	458	514	655	920	845	5,740	1,530	1,260	2,840	1,440	1,080	668
15	458	514	604	920	960	4,530	1,440	1,260	3,280	1,350	1,000	655
16	458	514	573	1,170	960	3,760	1,350	1,170	3,400	1,260	960	635
17	458	466	573	1,530	920	3,280	1,350	1,080	4,860	1,260	920	635
18	486	486	573	1,530	945	2,840	1,260	1,080	7,710	1,170	882	635
19	486	486	700	2,120	808	2,520	1,260	1,350	6,420	1,170	882	635
20	514	486	700	2,840	770	2,220	1,170	2,950	5,440	2,350	845	655
21	514	544	735	2,620	735	2,020	1,170	4,390	7,150	4,710	845	635
22	514	544	770	2,320	700	1,920	1,080	3,400	5,260	3,460	845	635
23	514	514	808	1,920	700	1,820	1,080	2,620	4,130	2,620	808	635
24	486	486	845	1,620	668	1,920	1,040	3,220	3,400	2,220	770	635
25	700	486	845	1,440	700	2,220	1,040	1,820	3,180	3,030	770	604
26	845	486	845	1,260	845	2,520	1,000	1,620	11,400	3,970	808	700
27	735	500	808	1,170	920	2,320	960	1,440	4,980	3,520	882	808
28	635	514	808	1,080	682	2,020	960	1,350	3,640	2,520	808	735
29	604	514	845	1,000	-	1,720	960	1,720	3,170	2,120	808	700
30	573	1,820	1,080	920	-	1,820	920	1,820	2,840	1,820	808	668
31	544	-	1,530	845	-	2,750	-	1,620	-	1,620	770	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	16,854	845	458	545	0.441	0.51	33,390
November.....	18,497	1,820	486	617	.502	.56	36,690
December.....	30,212	3,400	573	975	.793	.91	59,920
Calendar year 1934.....	247,065	4,670	360	677	.550	7.47	490,000
January.....	41,435	2,840	845	1,337	1.09	1.28	82,190
February.....	21,727	960	635	.776	.651	.66	43,080
March.....	155,905	47,700	770	5,029	4.09	4.72	309,200
April.....	48,210	3,280	920	1,607	1.31	1.46	95,620
May.....	55,012	4,390	862	1,710	1.39	1.60	105,100
June.....	184,080	15,700	2,840	5,126	4.13	4.66	305,800
July.....	69,240	4,710	1,170	2,234	1.82	2.09	137,300
August.....	30,751	1,440	770	.981	.806	.93	61,000
September.....	20,581	808	604	.686	.558	.62	40,800
Water year 1934-35.....	680,464	47,700	458	1,809	1.47	19.98	1,310,000

Current River at Van Buren, Mo.

Location.- Water-stage recorder, lat. 36°59', long. 91°1', in NE¼ sec. 25, T. 27 N., R. 1 W., at bridge on U. S. Highway 60 in Van Buren. Zero of gage is 445.74 feet (adjustment of 1929) above mean sea level. Wire-weight gage at same site and datum prior to Oct. 22, 1934.

Drainage area.- 1,640 square miles.

Records available.- June 1921 to September 1935 in reports of U. S. Geological Survey; September 1912 to June 1921 in reports of Missouri University and Missouri Geological Survey.

Average discharge.- 14 years (1921-35), 1,892 second-feet.

Extremes.- Maximum discharge during year, 86,600 second-feet Mar. 11 (gage height, 19.84 feet); minimum discharge, 650 second-feet Oct. 12-18; minimum gage height, 1.13 feet Sept. 23.

1921-35: Maximum discharge and gage height, those of Mar. 11, 1934; minimum, 542 second-feet Sept. 8, 9, 12, 1925. Maximum stage known, 26.0 feet Mar. 26, 1904, from flood marks.

Remarks.- Records good.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	840	742	3,720	1,950	1,230	1,140	3,420	1,140	2,190	3,420	1,710	1,090
2	840	710	3,000	1,710	1,230	1,090	3,280	1,140	5,530	3,570	1,600	1,040
3	808	742	2,320	1,600	1,180	1,090	2,860	1,180	13,800	4,340	1,600	1,040
4	775	808	1,950	1,490	1,140	1,140	2,580	1,180	12,800	3,570	1,600	1,040
5	775	1,090	1,710	1,280	1,140	1,600	2,450	2,680	6,840	3,140	1,600	1,040
6	742	1,140	1,600	1,230	1,090	1,950	2,320	2,720	5,060	2,860	1,490	1,000
7	710	1,000	1,380	1,180	1,090	2,190	2,450	2,580	5,060	2,450	1,490	1,000
8	710	915	1,280	1,280	1,040	1,950	2,580	2,320	6,160	2,320	1,380	958
9	680	878	1,180	1,490	1,090	1,830	2,450	2,070	5,280	2,070	1,380	1,000
10	680	840	1,140	1,710	1,040	3,380	2,320	1,830	4,340	1,950	1,280	1,000
11	680	808	1,040	1,710	1,040	49,200	2,320	1,710	3,870	1,830	1,280	958
12	650	775	1,040	1,490	1,000	63,000	2,190	1,600	4,020	1,830	1,230	958
13	650	742	1,000	1,880	1,040	16,000	2,070	1,600	3,870	1,950	1,380	958
14	650	742	958	1,280	1,230	8,390	1,950	1,710	3,720	1,830	1,380	915
15	650	710	915	1,280	1,360	5,720	1,830	1,600	3,870	1,710	1,280	915
16	650	710	878	1,490	1,380	4,680	1,710	1,490	4,180	1,600	1,230	878
17	650	710	878	1,830	1,380	4,020	1,710	1,380	5,280	1,490	1,180	878
18	650	710	878	2,070	1,280	3,570	1,600	1,280	7,800	1,490	1,180	878
19	655	710	1,040	2,860	1,180	3,280	1,600	1,580	8,600	1,490	1,140	878
20	680	710	1,090	3,720	1,140	3,000	1,600	3,090	6,380	1,490	1,140	878
21	680	840	1,090	3,870	1,090	2,720	1,490	4,860	8,060	3,820	1,090	840
22	680	878	1,090	3,420	1,040	2,580	1,490	4,180	6,840	3,920	1,090	840
23	680	808	1,140	2,860	1,040	2,320	1,380	3,280	5,060	2,720	1,040	840
24	680	775	1,180	2,320	1,040	2,320	1,380	2,720	4,340	2,580	1,040	840
25	808	775	1,180	2,070	1,040	2,580	1,380	2,320	3,870	2,450	1,040	840
26	915	775	1,230	1,830	1,040	2,860	1,380	2,070	8,890	3,280	1,040	878
27	958	775	1,180	1,710	1,230	2,720	1,280	1,950	9,720	3,570	1,140	1,000
28	878	775	1,140	1,600	1,180	2,450	1,230	1,830	4,500	2,860	1,140	1,040
29	808	775	1,180	1,490	-	2,320	1,180	2,070	4,180	2,320	1,090	1,000
30	775	2,190	1,380	1,380	-	2,190	1,140	2,190	3,720	2,070	1,090	958
31	742	-	1,710	1,280	-	2,860	-	2,070	-	1,950	1,090	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				22,739	958	650	734	0.448	0.52	45,040		
November.....				25,558	2,190	710	852	.520	.58	50,690		
December.....				42,497	3,720	878	1,371	.856	.96	84,290		
Calendar year 1934.....				336,107	4,180	550	921	.562	7.83	666,600		
January.....				57,860	3,870	1,180	1,866	1.14	1.31	114,800		
February.....				32,020	1,380	1,000	1,144	.698	.73	63,510		
March.....				206,140	63,000	1,090	6,650	4.05	4.67	408,900		
April.....				58,620	3,420	1,140	1,954	1.19	1.33	116,300		
May.....				65,120	4,680	1,140	2,101	1.28	1.48	129,200		
June.....				177,930	13,800	2,190	5,928	3.61	4.03	352,700		
July.....				78,120	4,540	1,490	2,520	1.54	1.78	154,900		
August.....				39,440	1,710	1,040	1,272	.776	.89	78,230		
September.....				28,378	1,090	840	946	.577	.64	56,290		
Water year 1934-35.....				834,322	63,000	650	2,286	1.39	18.92	1,655,000		

Current River at Doniphan, Mo.

Location.— Wire-weight gage, lat. 36°37', long. 90°51', in SE¼NW¼ sec. 27, T. 23 N., R. 2 E., at bridge on State Highway 42 three-quarters of a mile west of Doniphan. Zero of gage is 319.128 feet above mean sea level (U. S. Coast and Geodetic Survey adjustment of 1929). Chain gage at same site and datum prior to Nov. 1, 1934.

Drainage area.— 2,030 square miles.

Records available.— June 1921 to September 1935.

Average discharge.— 14 years, 2,847 second-feet.

Extremes.— Maximum discharge during year, 94,400 second-feet Mar. 12 (gage height, 23.89 feet); minimum discharge, 1,000 second-feet Oct. 15, 17; minimum gage height, 1.98 feet Oct. 15.

1921-35: Maximum discharge and gage height, those of Mar. 12, 1935; minimum discharge, 880 second-feet Aug. 1-14, 16, 1934; minimum gage height, 1.75 feet Aug. 4, 7, 9-11, 1934.

Maximum stage known, 28.8 feet (present datum) during March 1904 (discharge, about 130,000 second-feet, revised).

Remarks.— Records good.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Jan. 7)

1.6	820	2.8	1,670	5.0	4,050	8.0	8,300	12.0	16,300	20.0	54,600
1.8	940	3.2	2,030	5.6	4,830	9.0	9,980	14.0	21,600	22.0	74,000
2.0	1,070	3.6	2,630	6.4	5,930	10.0	11,900	16.0	27,900	24.0	96,500
2.4	1,350	4.4	3,320	7.2	7,100	11.0	14,000	18.0	37,500		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,280	1,140	3,900	2,520	2,030	1,670	5,930	2,030	3,320	4,830	2,740	1,670
2	1,280	1,140	4,570	2,320	1,940	1,590	6,070	2,120	5,090	4,830	2,630	1,590
3	1,280	1,140	3,440	2,220	1,850	1,590	5,370	2,420	9,620	6,210	2,520	1,590
4	1,210	1,210	2,740	2,030	1,760	1,670	4,700	2,520	17,300	5,370	2,420	1,590
5	1,210	1,210	2,520	1,940	1,760	1,850	4,310	8,300	13,000	4,700	2,420	1,590
6	1,210	1,510	2,220	1,760	1,670	2,320	4,180	6,960	7,850	4,180	2,320	1,590
7	1,140	1,510	2,030	1,670	1,670	2,740	4,310	5,850	6,650	3,220	1,510	
8	1,140	1,350	1,940	1,760	1,590	2,740	4,440	4,960	7,400	3,440	2,220	1,510
9	1,070	1,280	1,850	1,650	1,670	2,520	4,440	4,310	8,150	3,200	2,120	1,590
10	1,070	1,280	1,670	2,030	1,670	4,160	4,180	3,920	6,500	3,080	2,030	1,670
11	1,070	1,210	1,590	2,220	1,590	19,100	3,920	3,560	5,510	2,960	2,030	1,590
12	1,070	1,210	1,510	2,120	1,510	90,000	3,800	3,320	5,510	2,550	1,940	1,590
13	1,070	1,140	1,450	1,940	1,590	46,500	3,560	3,090	5,250	2,960	2,120	1,510
14	1,070	1,140	1,450	1,850	1,760	16,800	3,440	3,320	4,960	2,960	2,220	1,510
15	1,000	1,140	1,450	1,760	1,940	10,200	3,200	3,200	4,960	2,550	2,120	1,510
16	1,070	1,070	1,350	1,850	2,030	8,460	2,960	2,960	6,350	2,630	2,030	1,510
17	1,000	1,070	1,350	2,120	2,030	7,250	2,850	2,740	7,250	2,520	1,940	1,430
18	1,070	1,070	1,350	2,520	1,940	6,210	2,850	2,630	9,460	2,420	1,940	1,430
19	1,070	1,070	1,350	3,800	1,850	5,510	2,740	2,960	10,700	2,420	1,850	1,430
20	1,070	1,070	1,590	5,370	1,760	5,090	2,630	5,650	9,290	2,420	1,850	1,430
21	1,070	1,350	1,590	7,250	1,670	4,830	2,630	8,000	8,960	3,080	1,760	1,430
22	1,070	1,590	1,590	5,930	1,670	4,440	2,520	7,700	9,620	5,790	1,760	1,430
23	1,070	1,430	1,590	4,830	1,590	4,180	2,420	6,210	7,700	5,370	1,760	1,430
24	1,070	1,550	1,670	4,180	1,590	4,510	2,420	5,090	6,350	4,050	1,670	1,350
25	1,140	1,280	1,670	3,440	1,510	4,700	2,320	4,440	5,510	3,690	1,670	1,350
26	1,210	1,280	1,670	3,080	1,510	4,830	2,320	3,800	5,370	4,510	1,670	1,430
27	1,350	1,280	1,670	2,650	1,590	4,830	2,220	3,560	12,300	5,090	1,670	1,510
28	1,350	1,280	1,670	2,630	1,670	4,440	2,220	3,320	8,300	4,830	1,760	1,590
29	1,280	1,280	1,670	2,420	-	4,050	2,120	3,440	5,930	3,920	1,670	1,510
30	1,210	1,510	1,760	2,220	-	3,800	2,120	3,560	5,370	3,920	1,670	1,430
31	1,210	-	2,030	2,120	-	5,650	-	3,560	-	2,960	1,670	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	35,480	1,350	1,000	1,145	0.564	0.65	70,370
November.....	37,590	1,590	1,070	1,253	.617	.69	74,560
December.....	59,740	4,570	1,350	1,927	.949	1.09	118,600
Calendar year 1934.....	518,110	6,070	880	1,419	.899	9.48	1,028,900
January.....	86,600	7,250	1,670	2,794	1.38	1.59	171,800
February.....	48,410	2,030	1,510	1,729	.862	.89	96,020
March.....	287,050	90,000	1,590	9,280	4.56	5.26	569,400
April.....	103,190	6,070	2,120	3,440	1.69	1.96	204,700
May.....	129,280	9,300	2,030	4,170	2.05	2.36	266,400
June.....	229,510	17,300	3,320	7,650	3.77	4.21	455,200
July.....	116,910	6,210	2,420	3,771	1.86	2.14	231,900
August.....	62,410	2,740	1,670	2,013	.992	1.14	123,800
September.....	45,300	1,670	1,350	1,510	.744	.83	89,850
Water year 1934-35.....	1,241,470	90,000	1,000	3,401	1.68	22.80	2,462,000

Round Spring at Round Spring, Mo.

Location.- Staff gage, lat. $37^{\circ}17'$, long. $91^{\circ}28'$, in SE $\frac{1}{4}$ sec. 20, T. 30 N., R. 4 W., inside spring basin at Round Spring. Zero of gage is 885.46 feet above mean sea level. Datum lowered 1.00 foot Oct. 1, 1934.

Records available.- October 1928 to September 1935.

Extremes.- Maximum discharge during year (estimated), 450 second-feet Mar. 11, 12 (gage height, 14.59 feet from flood mark, during period of backwater from Current River); minimum, 15 second-feet Oct. 17-19, 22, 23 (gage height, 1.12 feet).
1928-35: Maximum discharge, 520 second-feet during backwater from Current River May 14, 1933; maximum gage height, that of Mar. 11, 12, 1935; minimum, 12 second-feet Aug. 8-10, 12-15, 20, 28-31, 1934.

Remarks.- Records fair except those estimated, which are poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	16	48	34	*20	22	121	31	97	70	60	*28
2	19	16	40	34	20	22	103	33	*250	92	54	26
3	19	16	45	34	20	18	92	31	*300	92	52	26
4	22	28	31	24	19	20	80	31	*250	*84	47	26
5	18	21	28	22	21	53	70	50	*220	75	46	26
6	17	20	25	22	19	43	61	58	215	65	42	26
7	17	20	23	24	19	37	70	50	215	57	42	24
8	17	19	20	30	18	33	70	48	229	55	41	24
9	16	16	23	39	19	33	65	45	187	47	41	26
10	16	16	19	35	17	180	65	40	146	46	*40	28
11	16	16	18	35	16	*450	70	39	115	44	38	26
12	16	16	19	28	16	*450	54	34	97	44	35	24
13	16	16	18	26	19	*400	53	36	86	44	38	23
14	16	16	17	22	24	*350	50	36	80	39	34	23
15	16	16	17	24	24	*300	46	34	80	39	33	24
16	16	16	22	41	24	*300	46	34	86	39	29	25
17	15	16	16	36	22	*250	40	32	*200	37	29	*24
18	15	16	17	35	20	*200	40	32	*250	37	29	23
19	16	19	23	80	20	166	39	42	*250	32	27	26
20	16	16	26	70	20	133	37	*150	*220	46	27	24
21	16	20	26	60	19	115	37	*120	*250	159	27	23
22	15	18	28	57	*18	103	36	97	*200	127	27	23
23	15	16	28	44	15	92	34	75	159	121	27	23
24	16	18	28	39	20	103	34	63	121	97	27	23
25	26	17	26	39	23	133	33	58	103	215	26	23
26	23	16	26	32	21	127	33	48	*200	*201	26	24
27	20	16	23	30	20	115	32	48	*120	187	29	24
28	*18	16	23	28	20	92	33	45	86	127	31	24
29	17	19	23	26	-	80	33	50	80	103	26	24
30	16	66	53	24	-	70	32	48	75	86	28	23
31	16	-	45	20	-	133	-	48	-	75	30	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						535	26	15	17.3	1,060		
November.....						592	96	16	19.7	1,170		
December.....						924	53	17	26.6	1,650		
Calendar year 1934.....						7,046	86	12	19.3	13,950		
January.....						1,092	80	20	35.2	2,170		
February.....						556	24	16	19.9	1,100		
March.....						4,623	450	18	149	9,170		
April.....						1,609	121	32	55.8	3,180		
May.....						1,599	150	31	51.3	3,150		
June.....						4,967	300	75	166	9,850		
July.....						2,582	215	32	83.3	5,120		
August.....						1,088	60	26	35.1	2,180		
September.....						735	28	23	24.5	1,460		
Water year 1934-35.....						20,792	450	15	57.0	41,230		

*Estimated.

Jacks Fork at Eminence, Mo.

Location.- Wire-weight gage, lat. 37°9'15", long. 91°21'30", in W $\frac{1}{2}$ sec. 26, T. 29 N., R. 4 W., at bridge on State Highway 19 at Eminence. Datum raised 0.04 foot Jan. 10, 1935. Zero of present gage is 620.58 feet (revised to adjustment of 1929 U. S. Coast and Geodetic Survey) above mean sea level. Chain gage, 1,400 feet upstream prior to July 26, 1934 with datum 0.25 foot higher than present datum.

Drainage area.- About 376 square miles.

Records available.- October 1921 to September 1935.

Average discharge.- 14 years, 461 second-feet.

Extremes.- Maximum discharge recorded during year ending Sept. 30, 1934, 1,270 second-feet Sept. 15 (gage height, 4.60 feet); minimum discharge, 78 second-feet July 26, 27, Aug. 2, 6-10; minimum gage height, 2.02 feet July 6-8.
Maximum discharge recorded during year ending Sept. 30, 1935, 26,700 second-feet Mar. 11 (gage height, 14.26 feet); minimum, 110 second-feet Oct. 17 (gage height, 2.17 feet).

1921-35: Maximum discharge recorded, about 40,000 second-feet (revised) June 13, 1928 (gage height, 16.24 feet, at former location); minimum discharge, that of July 26, 27, Aug. 2, 6-10, 1934.

Remarks.- Records good except those for days of rapidly changing stage, which are poor. Discharge estimated Aug. 21, 1934. Discharges for July 26 to Sept. 30, 1934, supersede those published in Water-Supply Paper 762.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	141	130	135	118	135	292	162	110	95	82	100
2	147	147	141	135	118	147	261	162	113	95	80	113
3	147	141	132	132	118	196	246	153	130	95	80	124
4	141	141	135	141	113	256	221	150	130	90	82	711
5	141	156	141	141	113	256	196	141	124	90	82	316
6	141	182	141	199	113	221	594	144	118	85	78	228
7	138	185	141	217	116	192	857	141	115	85	78	182
8	132	166	138	252	118	185	720	138	110	85	78	158
9	127	169	132	350	118	172	594	141	108	87	78	140
10	127	159	130	292	118	162	478	138	113	87	78	129
11	118	150	132	256	118	156	430	130	118	85	82	140
12	132	147	132	225	118	153	390	124	118	85	82	218
13	147	147	132	199	121	144	297	130	118	85	92	242
14	150	147	132	192	121	144	284	141	108	85	87	440
15	153	144	127	182	115	132	270	138	115	85	87	1,120
16	166	130	127	175	115	132	256	182	261	82	102	628
17	297	135	162	182	115	132	240	182	217	87	118	440
18	261	132	156	156	115	182	225	150	159	92	124	316
19	210	135	206	150	115	256	213	144	135	82	115	260
20	202	135	302	150	115	345	202	138	130	82	108	222
21	172	144	324	144	115	339	175	132	121	80	100	198
22	178	135	240	138	115	288	185	132	115	80	164	159
23	178	135	221	138	115	240	182	135	110	80	146	222
24	178	138	206	138	121	213	175	132	105	80	146	215
25	175	127	185	135	138	192	169	130	105	80	138	176
26	172	132	178	135	144	206	169	127	102	78	129	164
27	162	130	166	130	135	345	175	130	102	78	118	161
28	150	130	172	130	135	634	172	130	102	82	115	152
29	153	130	159	130	-	553	175	113	97	82	110	158
30	153	130	147	124	-	404	169	113	97	82	108	178
31	141	-	138	118	-	334	-	113	-	82	102	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				5,042	297	118	163	0.434	0.50	10,000		
November.....				4,320	185	127	144	.383	.43	8,570		
December.....				5,105	324	127	165	.439	.51	10,130		
Calendar year 1933.....				172,183	15,600	109	472	1.26	17.00	341,900		
January.....				5,301	350	118	171	.455	.52	10,510		
February.....				3,551	144	113	120	.319	.33	6,650		
March.....				7,428	634	132	240	.636	.74	14,730		
April.....				9,007	857	169	300	.798	.89	17,870		
May.....				4,316	182	113	139	.370	.43	8,560		
June.....				3,706	261	97	124	.330	.37	7,350		
July.....				2,628	95	78	84.8	.226	.26	5,210		
August.....				3,169	164	78	102	.271	.31	6,290		
September.....				8,038	1,120	100	268	.713	.80	15,940		
Water year 1933-34.....				61,409	1,120	78	168	.447	6.09	121,800		

Jacks Fork at Eminence, Mo.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	138	924	419	260	278	1,050	206	1,990	419	396	193
2	179	135	530	356	242	260	865	206	3,510	419	374	189
3	164	138	419	297	242	232	738	206	9,700	442	352	186
4	152	149	398	260	242	242	654	211	3,120	442	352	182
5	146	278	356	235	225	398	575	434	1,660	396	352	179
6	140	222	462	222	215	603	537	695	1,180	374	352	176
7	132	186	260	208	215	530	575	664	1,460	374	331	169
8	132	167	242	232	215	462	537	575	2,310	352	310	165
9	126	158	222	356	218	398	502	434	1,360	331	290	189
10	124	146	215	440	205	1,050	502	401	1,020	331	270	196
11	121	132	202	398	192	21,600	466	383	860	331	270	210
12	118	129	176	336	189	10,700	434	366	757	310	259	196
13	118	129	170	297	205	2,990	401	351	662	352	282	176
14	118	129	164	260	235	1,860	366	320	632	352	282	162
15	118	126	161	260	316	1,370	342	299	693	310	255	156
16	113	126	155	316	297	1,100	326	288	724	290	243	152
17	113	124	155	484	278	955	315	274	1,360	290	240	149
18	113	118	165	462	260	822	304	259	2,620	270	232	149
19	118	118	189	628	235	738	293	331	1,660	270	225	149
20	115	121	192	1,050	222	654	283	1,100	1,270	270	225	146
21	115	135	215	924	215	613	274	1,730	1,100	898	225	143
22	115	129	239	862	208	537	259	1,150	935	825	228	143
23	113	129	239	682	208	502	254	865	757	825	221	140
24	113	126	239	678	205	537	240	695	662	632	210	140
25	179	126	232	484	202	738	232	575	573	860	203	140
26	398	124	215	419	316	822	223	466	544	1,460	225	189
27	225	124	218	377	336	738	211	401	490	1,100	232	186
28	189	129	205	336	297	613	211	366	466	724	225	182
29	167	126	211	316	-	537	211	466	466	602	225	169
30	158	377	278	297	-	537	206	466	442	490	225	159
31	146	-	462	278	-	738	-	401	-	466	210	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				4,573	398	113	148	0.394	0.45	9,070		
November.....				4,494	377	118	150	.399	.45	8,910		
December.....				8,500	924	165	274	.729	.84	16,860		
Calendar year 1934.....				64,509	924	78	177	.471	6.39	128,000		
January.....				13,049	1,050	208	421	1.12	1.29	25,880		
February.....				6,695	336	189	239	.636	.66	13,280		
March.....				54,154	21,600	232	1,747	4.66	5.36	107,400		
April.....				12,386	1,060	206	413	1.10	1.23	24,670		
May.....				15,554	1,730	208	502	1.34	1.64	30,860		
June.....				44,983	9,700	442	1,499	3.99	4.45	89,220		
July.....				15,807	1,450	270	510	1.36	1.57	31,350		
August.....				8,281	396	203	267	.710	.82	16,430		
September.....				5,040	210	140	168	.447	.50	10,000		
Water year 1934-35.....				193,516	21,600	113	530	1.41	19.16	383,800		

Alley Spring at Alley, Mo.

Location.- Staff gage, lat. 37°9'5", long. 91°26'30", in SE $\frac{1}{4}$ sec. 25, T. 29 N., R. 5 W., 400 feet below spring outlet at Alley. Zero of gage is 664.49 feet above mean sea level.

Records available.- October 1928 to September 1935.

Extremes.- Maximum discharge recorded during year, 1,060 second-feet Mar. 11 (gage height, 4.20 feet); minimum, 54 second-feet Oct. 15-18 (gage height, 1.21 feet).
1928-35: Maximum discharge and gage height recorded, those of Mar. 11, 1935; minimum, that of Oct. 15-18, 1934.

Remarks.- Records fair. Occasional run-off from small valley above spring is included in records.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	59	150	113	78	70	243	90	291	187	187	90
2	62	59	120	99	77	70	223	90	354	183	183	90
3	61	59	99	94	77	70	200	90	683	187	187	90
4	60	62	99	86	75	69	196	85	542	187	183	90
5	60	62	69	83	74	126	179	120	490	183	182	90
6	59	62	86	80	72	123	171	146	411	187	148	88
7	58	62	78	77	70	117	179	145	374	183	148	88
8	57	61	75	85	70	106	179	142	441	186	138	88
9	56	60	75	108	70	103	173	117	403	148	132	88
10	56	60	71	106	69	103	187	109	347	148	132	88
11	56	60	69	99	67	1,060	169	103	315	145	129	88
12	56	60	67	91	67	664	166	98	280	136	123	88
13	56	61	66	96	67	516	143	95	263	136	120	88
14	55	61	65	80	80	441	164	93	233	132	117	85
15	54	60	64	77	86	403	140	90	214	132	117	85
16	54	60	64	96	82	381	130	90	206	132	114	85
17	54	60	63	117	77	334	124	85	233	129	114	85
18	55	61	62	106	75	303	122	83	374	120	111	83
19	55	61	65	163	73	269	117	90	381	117	111	83
20	56	61	73	196	70	263	109	219	347	117	108	83
21	55	62	75	202	70	238	109	263	347	258	103	80
22	55	62	75	191	69	214	107	243	341	361	103	80
23	56	62	77	165	69	200	106	196	285	347	100	80
24	56	62	75	143	67	196	103	179	258	303	100	80
25	70	62	73	130	66	223	100	166	233	286	100	80
26	68	62	71	122	73	219	95	138	214	341	100	78
27	63	62	69	109	73	200	95	126	205	367	98	80
28	60	62	67	98	71	191	93	120	191	309	98	80
29	59	62	69	90	-	179	93	123	187	258	95	78
30	59	128	114	85	-	196	90	123	167	233	90	78
31	59	-	124	82	-	236	-	111	-	209	90	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,802	70	54	58.1	3,570		
November.....						1,897	128	59	63.2	3,760		
December.....						2,488	160	62	80.3	4,930		
Calendar year 1934.....						25,398	189	54	69.6	50,370		
January.....						3,455	202	77	111	6,850		
February.....						2,034	86	66	72.6	4,030		
March.....						7,885	1,060	69	254	15,640		
April.....						4,255	243	90	142	8,440		
May.....						3,960	263	83	128	7,850		
June.....						9,619	685	187	321	19,080		
July.....						5,274	367	117	202	12,440		
August.....						3,783	187	90	122	7,500		
September.....						2,531	90	78	84.4	5,020		
Water year 1934-35.....						49,983	1,060	54	137	99,110		

Big Spring near Van Buren, Mo.

Location.- Staff gage, lat. $36^{\circ}57'$, long. 91° , in sec. 6, T. 28 N., R. 1 E., 400 feet below spring outlet and 4 miles southeast of Van Buren. Zero of gage is 429.04 feet (U. S. Coast and Geodetic Survey adjustment of 1929) above mean sea level. Datum lowered 1.00 foot Oct. 1, 1934.

Records available.- January to June 1922, April 1923 to September 1935.

Extremes.- Maximum discharge during year (estimated), 1,200 second-feet during backwater from Current River Mar. 11; minimum, 250 second-feet Dec. 17, 18.

1922-35: Maximum discharge (estimated), 1,300 second-feet during backwater from Current River in June 1928; minimum, 253 second-feet Aug. 15, 1934.

Remarks.- Records fair except those estimated, which are poor.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	279	264	*420	312	350	286	*680	381	536	*650	522	377
2	279	264	*400	304	320	283	*660	377	*750	*650	505	372
3	279	267	*390	297	320	283	*650	390	*800	*640	489	372
4	277	267	381	290	316	283	*640	388	*780	*630	478	372
5	277	277	301	286	316	279	*630	*600	*760	*620	473	372
6	274	277	290	286	312	297	*630	*600	*740	*620	468	368
7	270	274	283	286	304	312	*640	*590	*730	*610	463	368
8	270	270	279	286	301	312	*630	*580	*720	*600	458	368
9	270	267	276	297	301	308	*610	*560	*720	588	453	368
10	270	267	272	304	297	368	†590	*540	*710	560	448	369
11	270	267	269	301	297	*1,000	*570	522	*710	543	443	359
12	267	264	269	297	301	*1,000	*550	511	*700	536	438	359
13	267	264	265	297	316	*980	*520	505	*700	552	453	354
14	267	264	262	295	320	*960	500	494	*690	536	448	354
15	267	264	262	295	320	*940	489	500	*680	522	438	354
16	265	264	262	301	316	*920	473	463	*680	505	429	350
17	265	264	260	301	316	*900	463	448	*750	494	413	350
18	265	264	260	312	312	*880	463	428	*740	489	413	346
19	264	264	272	*350	304	*860	443	418	*740	489	409	346
20	264	264	269	*500	301	*840	433	404	*730	494	409	341
21	264	265	269	*500	297	*820	428	*500	*720	*600	404	341
22	264	262	270	*490	297	*800	423	*620	*710	*640	404	341
23	264	261	270	*480	294	*780	416	*610	*700	*620	400	337
24	265	277	272	473	294	*760	413	*600	*700	*600	400	337
25	265	274	272	468	290	*740	409	*580	*690	*600	395	337
26	267	270	270	456	290	*720	404	*540	*680	*640	390	332
27	270	267	270	433	290	*700	400	529	*670	*640	390	341
28	270	270	272	390	286	*680	395	505	*660	*640	390	346
29	270	267	272	381	-	*660	390	516	*660	610	386	341
30	267	370	294	368	-	*680	386	516	*660	578	386	337
31	264	-	304	354	-	*680	-	516	-	560	381	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						8,336	279	264	269		16,530	
November.....						8,190	370	264	273		16,240	
December.....						8,977	420	260	290		17,810	
Calendar year 1934.....						110,199	580	253	302		218,600	
January.....						10,992	500	286	355		21,800	
February.....						9,578	350	266	306		17,010	
March.....						20,311	1,000	279	655		40,290	
April.....						15,318	680	386	511		30,580	
May.....						15,729	620	377	507		31,200	
June.....						21,216	800	536	707		42,080	
July.....						18,056	650	489	592		36,810	
August.....						15,375	522	381	451		26,530	
September.....						10,569	377	332	365		21,020	
Water year 1934-35.....						159,677	1,000	260	437		316,700	

*Estimated.

†Result of discharge measurement.

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 about 410.7 feet above mean sea level. Chain gage at same site and datum prior to Nov. 1, 1934.

Records available.-- October 1921 to September 1935.

Average discharge.-- 14 years, 783 second-feet.

Extremes.-- Maximum discharge recorded during year, 15,600 second-feet Mar. 12 (gage height, 13.74 feet); minimum, 180 second-feet Oct. 18, Nov. 17, 18 (gage height, 1.72 feet).

1921-35: Maximum discharge, 27,600 second-feet Apr. 14, 1927 (gage height, 18.74 feet, from flood marks); minimum discharge, that of Oct. 18, Nov. 17, 18, 1934; minimum gage height, 1.06 feet, present datum, Sept. 6-11, 1925.

Maximum stage known, 19.7 feet in August 1915.

Remarks.-- Records good.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Oct. 1 to Jan. 12, July 28 to Sept. 30)

1.7	195	2.2	380	3.0	855	4.4	1,890	6.4	3,880	9.2	7,480
1.8	225	2.4	490	3.3	1,040	4.8	2,260	7.0	4,800	10.0	8,640
1.9	255	2.6	590	3.6	1,260	5.2	2,660	7.6	5,320	11.0	10,300
2.0	290	2.8	705	4.0	1,570	5.8	3,260	8.4	6,300	13.0	14,100

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	219	188	380	276	480	290	1,660	645	2,070	1,420	970	535
2	210	190	310	262	450	290	1,490	675	3,080	1,420	970	535
3	207	216	310	265	430	290	1,340	705	6,580	1,680	900	535
4	207	195	278	249	405	310	1,260	738	4,240	1,340	835	535
5	201	190	290	243	405	455	1,190	3,260	2,560	1,260	835	535
6	198	188	276	240	380	562	1,190	1,890	2,070	1,190	835	505
7	198	188	269	240	380	508	1,260	1,490	2,560	1,120	802	505
8	195	190	252	268	355	455	1,260	1,340	2,760	1,120	770	505
9	192	188	252	286	380	480	1,190	1,260	2,160	1,040	770	535
10	192	188	240	286	355	758	1,120	1,190	1,890	1,040	770	535
11	192	182	228	283	355	9,940	1,120	1,120	1,730	970	738	505
12	188	182	228	272	330	13,300	1,040	1,040	1,670	1,040	738	480
13	192	182	222	269	380	4,120	970	970	1,490	1,120	738	480
14	188	188	222	282	430	2,760	970	970	1,670	970	705	480
15	185	188	219	280	455	2,260	970	900	1,570	970	705	480
16	185	185	219	355	420	1,960	900	835	1,650	900	705	455
17	185	180	219	430	430	1,730	835	802	3,480	900	675	455
18	180	185	219	405	405	1,670	835	770	4,720	900	645	455
19	190	185	237	900	380	1,490	835	835	3,260	835	645	455
20	190	190	249	1,260	355	1,420	802	1,490	2,460	835	645	450
21	188	225	249	1,650	330	1,340	802	2,070	2,070	1,040	645	430
22	182	237	246	1,260	330	1,340	770	1,650	2,070	900	618	430
23	182	219	243	1,040	330	1,260	738	1,420	1,810	900	618	430
24	182	204	240	835	330	1,340	738	1,260	1,650	970	590	430
25	196	204	257	770	330	1,570	705	1,190	1,570	1,890	590	430
26	198	201	234	675	310	1,490	705	1,120	1,490	2,380	590	455
27	198	198	228	618	310	1,420	675	1,040	1,420	1,890	590	430
28	195	198	228	590	290	1,260	675	1,040	1,340	1,420	590	430
29	190	201	243	535	-	1,190	675	1,120	1,340	1,190	562	430
30	185	283	252	505	-	1,190	645	1,040	1,570	1,120	582	406
31	185	-	272	480	-	1,890	-	970	-	1,040	582	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,977	219	180	193	11,840
November.....	5,928	283	180	198	11,790
December.....	7,789	380	219	251	15,460
Calendar year 1934.....	104,844	970	180	287	208,000
January.....	16,269	1,660	240	585	32,970
February.....	10,510	490	290	375	20,860
March.....	60,185	13,300	290	1,941	119,400
April.....	29,355	1,650	645	978	58,280
May.....	38,845	3,260	645	1,189	73,080
June.....	69,780	6,580	1,340	2,325	138,400
July.....	38,860	2,360	835	1,189	73,080
August.....	21,913	970	645	707	43,460
September.....	14,235	535	406	474	28,830
Water year 1934-35.....	315,614	13,300	180	866	626,100

Greer Spring at Greer, Mo.

Location.— Water-stage recorder, lat. $36^{\circ}47'10''$, long. $91^{\circ}20'50''$, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 25 N., R. 4 W., 300 feet below lower outlet of spring and 1 mile north of Greer. Zero of gage is 539.74 feet above mean sea level.

Records available.— August to December 1904, November 1921 to September 1935.

Average discharge.— 13 years (1922-35), 357 second-feet.

Extremes.— Maximum discharge during year, 725 second-feet June 17 (gage height, 1.83 feet); minimum, 123 second-feet Nov. 23-25, 27-29 (gage height, 0.30 foot).

1921-35: Maximum discharge recorded, 903 second-feet May 26, 1927; maximum gage height, that of June 17, 1935; minimum, that of Nov. 23-25, 27-29, 1935.

Remarks.— Records excellent.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	156	136	198	187	268	182	463	315	463	556	489	350
2	153	136	185	162	280	182	454	315	579	552	480	338
3	150	136	186	159	264	179	450	311	654	548	478	338
4	147	142	162	153	246	186	441	304	615	545	463	338
5	147	139	173	145	240	264	433	379	606	538	454	334
6	150	136	170	145	253	260	429	412	602	534	446	334
7	147	136	167	142	226	257	433	408	606	525	441	331
8	145	134	162	150	220	250	433	403	606	516	441	331
9	145	134	159	182	217	243	429	395	597	507	433	327
10	142	131	158	167	213	319	424	387	592	502	429	327
11	142	128	150	164	210	654	420	379	588	498	429	323
12	142	128	147	162	207	592	412	370	579	499	424	311
13	139	128	145	156	213	570	403	366	574	494	424	311
14	139	128	142	150	240	548	399	362	574	489	412	308
15	136	128	142	153	243	543	391	354	570	484	408	308
16	136	128	139	194	233	538	379	350	570	480	403	304
17	136	128	136	217	226	534	374	346	629	476	399	304
18	134	128	136	213	220	530	370	354	624	471	395	300
19	134	128	142	304	213	525	366	338	610	467	395	296
20	134	128	147	346	207	516	358	412	602	463	391	293
21	134	128	147	393	204	507	354	471	602	458	397	293
22	134	128	147	379	201	498	346	476	597	458	383	285
23	131	126	147	366	198	494	342	467	592	463	374	282
24	131	123	150	350	194	489	338	454	588	489	374	282
25	160	126	147	331	191	489	334	441	584	515	370	278
26	159	126	145	315	188	484	331	424	579	538	366	278
27	150	126	145	304	185	476	331	416	574	552	366	278
28	145	123	147	296	182	463	327	408	574	538	362	278
29	142	126	150	293	-	454	323	403	574	525	358	274
30	139	173	167	285	-	450	319	395	566	516	358	274
31	136	-	176	278	-	467	-	387	-	502	354	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						4,405	159	131	142		8,740	
November.....						3,945	173	123	132		7,820	
December.....						4,831	198	136	156		9,580	
Calendar year 1934.....						68,132	336	123	187		135,100	
January.....						7,191	383	142	232		14,280	
February.....						6,132	288	122	219		12,160	
March.....						13,115	634	179	423		26,010	
April.....						11,606	463	319	387		23,020	
May.....						11,982	476	304	387		23,770	
June.....						17,650	634	463	588		35,010	
July.....						15,496	556	458	506		31,130	
August.....						12,684	469	364	409		25,160	
September.....						9,208	350	274	307		18,260	
Water year 1934-35.....						117,945	634	123	323		234,900	

Little Red River near Heber Springs, Ark.

Location.- Staff gage, lat. 35°32', long. 92°4', in NE¼ sec. 1, T. 10 N., R. 10 W., 4 miles northeast of Heber Springs.

Drainage area.- 1,160 square miles.

Records available.- September 1927 to June 1935 (discontinued).

Extremes.- Maximum discharge observed during year, 79,800 second-feet May 5 (gage height, 42.0 feet); minimum, 18 second-feet Oct. 28 to Nov. 3 (gage height, 2.8 feet). 1927-35: Maximum discharge observed, about 81,000 second-feet (revised) Apr. 6, 1928 (gage height, 42.35 feet); no flow Oct. 1-19, 22-30, 1929, Aug. 2-18, 1930.

Remarks.- Records poor. Gage-height estimated by observer where sections of gage were destroyed: Mar. 24-28, Apr. 1-3, 6-12, 22, May 3, 7-10, 20-23, 30, June 1-9, 16, 17, 19-21.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	18	6,220	780	1,170	970	5,100	870	9,150			
2	40	18	3,040	970	1,020	920	4,030	780	9,900			
3	40	18	2,390	920	920	870	3,120	5,100	10,700			
4	55	23	5,460	820	780	780	2,960	12,400	11,500			
5	75	23	2,740	780	700	5,100	2,460	69,900	10,700			
6	75	28	1,910	700	620	8,700	6,350	47,800	5,100			
7	75	28	1,490	620	550	5,100	9,150	18,400	2,390			
8	65	34	1,120	1,170	490	3,640	10,700	12,400	5,100			
9	55	40	870	5,340	520	2,740	7,700	7,700	4,030			
10	55	40	820	3,120	1,490	4,440	5,100	4,030	2,680			
11	55	40	700	2,530	1,730	41,900	4,030	2,960	2,250			
12	47	40	550	1,970	1,320	55,100	3,120	2,670	2,390			
13	40	40	460	1,610	2,040	8,350	2,670	2,040	3,120			
14	40	40	400	1,320	3,280	4,030	2,250	1,730	2,320			
15	34	40	370	1,070	3,280	3,120	1,970	2,180	2,390			
16	34	34	340	920	2,530	3,120	1,670	2,390	5,100			
17	28	34	315	870	2,110	2,740	1,370	2,250	20,600			
18	24	290	780	1,790	2,530	1,270	1,850	34,800				
19	28	34	370	2,670	1,550	1,850	1,270	3,120	18,400			
20	28	34	580	16,300	1,320	2,040	1,730	9,150	5,100			
21	23	75	1,270	29,500	1,170	2,110	2,960	10,700	4,030			
22	23	285	1,070	14,300	1,070	37,800	3,280	7,700	3,040			
23	23	1,610	970	6,740	970	47,700	2,670	5,100	2,250			
24	23	1,070	780	4,440	870	7,700	2,110	3,120	1,730			
25	23	660	780	4,030	780	6,350	1,790	2,530	1,320			
26	23	480	780	2,740	780	5,100	1,490	1,910	1,070			
27	23	400	780	2,250	1,070	4,030	1,270	1,610	1,020			
28	18	340	700	1,850	1,020	3,120	1,170	1,730	970			
29	18	290	700	1,610	-	2,880	1,070	2,530	920			
30	18	680	660	1,370	-	2,960	970	6,350	1,070			
31	18	-	660	1,270	-	3,120	-	7,700	-			
Month			Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off				
								Inches	Acre-feet			
October.....			1,170	75	18	37.7	0.032	0.04	2,320			
November.....			6,470	1,610	12	216	.166	.21	12,630			
December.....			39,565	6,220	290	1,277	1.10	1.27	78,520			
Calendar year 1934.....			454,287	48,500	1	1,245	1.07	14.56	901,000			
January.....			115,360	29,500	620	3,721	3.21	3.70	228,800			
February.....			36,940	3,280	490	1,519	1.14	1.19	73,270			
March.....			276,610	55,100	780	8,929	7.70	8.88	549,000			
April.....			96,800	19,700	970	3,227	2.78	3.10	192,000			
May.....			280,700	69,900	780	6,410	7.26	8.36	517,100			
June.....			184,740	34,200	920	6,158	5.31	5.92	368,400			
July.....			-	-	-	-	-	-	-			
August.....			-	-	-	-	-	-	-			
September.....			-	-	-	-	-	-	-			
The period.....			-	-	-	-	-	-	2,020,000			

Arkansas River at Granite, Colo.

Location.- Water-stage recorder, lat. 39°3', 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.- May 1897 to September 1899, April 1910 to September 1927, October 1933 to September 1935 in reports of U. S. Geological Survey; May 1897 to September 1899, April 1910 to September 1935 in reports of State engineer.

Average discharge.- 25 years (1910-35), 332 second-feet.

Extremes.- Maximum discharge during year, 1,700 second-feet June 14 (gage height, 4.35 feet); minimum mean daily discharge, 62 second-feet Jan. 21. 1897-99, 1910-35: Maximum discharge, 2,900 second-feet June 16, 1924 (gage height, 4.57 feet); minimum not determined.

Remarks.- Records good except those for period Dec. 1 to Mar. 25, which are fair and are based on four discharge measurements, temperature records, and comparative hydrograph with Arkansas River at Salida. Minor diversions for irrigation above station. Sugar Loaf and Twin Lakes Reservoirs on tributaries above station. (Total capacities, 72,120 acre-feet.) Ewing Ditch, Busk-Ivanhoe Tunnel, Twin Lakes Tunnel, and Fremont Pass Ditch bring water from Colorado River Basin to Arkansas River above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	93	70	70	70	72	79	116	357	1,030	1,060	269
2	118	96	68	68	71	76	80	108	432	996	1,030	254
3	116	91	67	69	73	78	86	100	437	960	1,010	232
4	112	112	66	68	74	76	87	100	494	814	1,040	208
5	110	110	66	72	70	70	84	100	580	810	964	182
6	108	108	68	72	68	68	93	110	722	1,080	854	186
7	104	112	69	72	70	64	91	114	871	1,120	814	258
8	98	110	72	72	71	66	112	130	960	1,120	820	299
9	95	106	74	72	70	64	133	125	1,100	1,150	854	273
10	100	104	76	72	69	66	123	125	1,360	1,130	842	236
11	98	100	77	72	68	70	97	130	1,520	1,220	856	192
12	96	98	82	72	68	70	91	136	1,210	1,200	761	188
13	102	95	88	70	67	70	86	143	1,250	1,060	472	185
14	104	84	91	72	67	70	104	162	1,640	984	441	172
15	96	86	93	72	66	71	104	178	1,330	960	398	166
16	95	82	87	70	68	72	120	163	1,280	924	420	166
17	93	79	91	68	70	73	110	166	984	900	482	158
18	91	84	75	67	72	74	102	192	1,250	930	560	149
19	91	82	72	67	73	75	123	146	1,250	930	531	188
20	91	76	75	67	74	76	172	141	1,270	954	522	188
21	89	87	76	62	73	77	175	149	1,370	960	536	192
22	86	80	78	66	72	78	185	178	1,320	1,030	536	176
23	86	96	80	72	72	79	182	152	1,240	843	517	172
24	84	91	79	78	72	80	178	201	954	650	458	172
25	86	82	74	79	70	82	155	250	1,060	575	485	192
26	82	84	72	80	68	84	152	284	1,010	531	402	198
27	82	68	72	80	67	86	136	369	972	545	334	205
28	82	87	80	78	67	82	125	429	1,090	866	338	175
29	82	93	81	77	-	86	120	432	1,100	732	291	215
30	82	76	76	76	-	91	120	394	1,080	1,080	284	195
31	86	-	70	74	-	96	-	341	-	1,040	276	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,989	120	82	95.8	8,890		
November.....						2,752	112	68	91.7	8,460		
December.....						2,554	93	65	75.9	4,670		
Calendar year 1934.....						69,003	922	-	189	136,900		
January.....						2,826	80	62	71.8	4,420		
February.....						1,960	74	66	70.0	3,890		
March.....						2,342	96	64	75.5	4,650		
April.....						3,597	185	79	120	7,130		
May.....						5,913	432	100	191	11,730		
June.....						31,473	1,640	357	1,049	62,430		
July.....						28,954	1,220	531	934	57,430		
August.....						19,155	1,060	276	618	37,990		
September.....						6,039	299	149	201	11,980		
Water year 1934-35.....						109,734	1,640	62	301	217,700		

Arkansas River at Salida, Colo.

Location.- Water-stage recorder, lat. 38°31', long. 106°, in sec. 32, T. 50 N., R. 9 E., at Salida. South Arkansas River enters 1½ miles below.

Drainage area.- 1,210 square miles.

Records available.- April 1895 to October 1903, November 1909 to September 1927, October 1933 to September 1935 in reports of U. S. Geological Survey; April 1895 to October 1903, November 1909 to September 1935 in reports of State engineer.

Average discharge.- 25 years (1910-35), 628 second-feet.

Extremes.- Maximum discharge during year, 4,050 second-feet July 12 (gage height, 7.15 feet); minimum daily discharge, 157 second-feet Apr. 2, 3, 4, and 6.
1895-1903, 1909-35: Maximum discharge, 5,100 second-feet June 18, 1924 (gage height, 7.2 feet); minimum daily discharge, 140 second-feet Sept. 19-21, 1902.

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

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	332	226	217	203	200	175	159	192	462	1,610	1,460	577
2	328	239	220	206	203	190	157	187	680	1,700	1,440	566
3	324	242	214	203	206	200	157	192	691	1,750	1,530	566
4	320	246	212	198	206	195	157	187	759	1,660	1,520	500
5	305	255	206	214	203	187	159	190	935	1,470	1,520	452
6	297	255	198	214	200	178	157	192	1,200	1,730	1,160	430
7	249	265	206	195	170	166	150	1,800	1,820	1,130	448	
8	242	255	212	209	203	178	185	192	1,700	1,550	1,100	425
9	242	252	217	214	190	170	182	200	1,900	1,860	1,190	630
10	236	242	220	214	190	166	195	200	2,340	1,810	1,170	558
11	233	239	230	212	195	168	185	209	2,860	1,780	1,190	452
12	236	239	235	214	190	173	166	214	2,360	2,030	1,130	439
13	236	249	203	186	192	166	239	2,200	1,900	771	439	
14	239	233	262	212	182	185	246	2,850	1,700	696	430	
15	233	233	266	214	178	195	262	3,140	1,680	620	404	
16	230	230	259	214	178	190	173	262	3,000	1,520	644	405
17	230	230	242	200	178	198	190	249	2,020	1,440	670	395
18	230	235	253	190	187	192	190	332	2,260	1,440	869	353
19	230	230	223	195	185	185	182	297	2,410	1,490	878	328
20	246	214	226	195	190	178	220	246	2,590	1,470	878	324
21	233	217	233	178	190	168	249	239	2,870	1,530	890	320
22	233	217	233	195	185	164	259	259	2,860	1,680	862	316
23	233	217	236	203	176	161	272	301	2,820	1,590	901	290
24	233	239	226	209	187	161	286	324	2,250	1,240	856	279
25	233	233	226	214	178	159	269	366	2,190	1,100	886	305
26	233	220	220	212	166	161	252	462	2,180	935	901	379
27	230	214	220	214	170	161	233	601	2,040	890	764	481
28	223	217	223	212	175	159	223	675	2,060	912	644	452
29	217	220	230	212	-	159	209	722	2,010	1,020	596	457
30	217	223	220	209	-	161	200	660	1,900	1,350	615	452
31	220	-	214	206	-	161	-	486	-	1,420	601	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						7,723	332	217	249	15,320		
November.....						7,001	265	214	233	13,890		
December.....						7,026	266	198	227	13,940		
Calendar year 1934.....						129,610	1,560	163	352	255,100		
January.....						6,397	214	178	206	12,690		
February.....						5,278	206	168	188	10,470		
March.....						5,432	200	169	176	10,770		
April.....						5,835	268	187	198	11,770		
May.....						9,583	722	197	309	19,049		
June.....						61,107	3,140	462	2,037	121,200		
July.....						47,577	2,030	890	1,535	94,570		
August.....						29,732	1,520	596	959	58,970		
September.....						13,105	630	279	437	25,990		
Water year 1934-35.....						205,896	3,140	157	564	408,400		

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 1935 in reports of U. S. Geological Survey; May 1888 to September 1935 in reports of State engineer.

Average discharge.- 48 years (1887-1935), 734 second-feet.

Extremes.- Maximum discharge during year, 5,990 second-feet July 11 (gage height, 5.25 feet); minimum daily discharge, 90 second-feet Apr. 7.

1888-1935: Maximum discharge, 19,000 second-feet Aug. 2, 1921 (gage height, 10.7 feet); minimum daily discharge, that of Apr. 7, 1935.

Remarks.- Records good. Diversions for irrigation above station. Regulation same as noted on Arkansas River at Granite and Salida.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	180	267	256	244	222	109	183	493	1,990	1,420	814
2	247	168	258	256	244	205	100	167	529	1,870	1,320	649
3	242	197	247	253	236	200	96	175	672	1,860	1,320	622
4	242	194	244	253	236	202	94	175	740	1,770	1,330	575
5	233	211	256	267	242	183	92	180	918	1,660	1,310	518
6	228	214	247	261	247	175	94	208	1,180	1,650	1,180	483
7	214	216	253	256	244	170	90	200	1,680	1,840	1,110	537
8	170	216	258	236	230	180	109	191	1,910	1,830	1,170	642
9	167	222	258	233	216	170	133	188	2,100	1,830	1,430	717
10	164	228	277	230	214	170	138	188	2,730	1,860	1,210	642
11	162	228	283	228	208	154	154	177	3,260	2,320	1,200	562
12	162	228	283	236	197	239	138	183	3,290	1,740	1,240	461
13	177	239	283	253	197	277	116	208	2,890	2,050	1,050	461
14	188	228	286	233	186	293	114	236	3,440	1,930	831	430
15	191	211	286	230	216	250	102	283	4,260	1,790	773	414
16	186	191	286	239	208	228	118	274	4,210	1,630	724	386
17	180	186	270	236	247	222	118	296	3,050	1,610	807	368
18	180	183	270	239	253	250	172	619	2,610	1,550	806	351
19	172	183	253	228	244	208	151	584	2,850	1,600	954	303
20	172	180	264	211	222	186	138	391	2,920	1,610	1,060	299
21	194	180	283	200	219	170	178	325	3,340	1,700	874	292
22	183	176	280	239	214	149	194	293	3,330	1,820	927	307
23	186	177	267	270	197	136	216	310	3,400	1,650	883	303
24	186	186	261	267	230	141	244	352	3,020	1,340	883	288
25	186	208	261	277	250	121	261	377	2,610	1,250	1,040	292
26	188	197	277	267	253	96	242	437	2,490	1,050	1,070	336
27	194	202	277	258	261	94	247	554	2,300	981	874	530
28	188	239	277	261	261	106	242	636	2,230	918	857	608
29	183	247	274	267	-	104	239	733	2,230	1,030	879	608
30	175	253	261	256	-	102	211	748	2,100	1,240	871	615
31	175	-	247	247	-	104	-	665	-	1,400	664	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						5,962	247	162	192		11,830	
November.....						6,187	253	175	206		12,270	
December.....						6,294	286	244	268		16,450	
Calendar year 1934.....						123,929	1,460	151	340		245,800	
January.....						7,643	277	200	247		15,160	
February.....						6,416	261	186	229		12,730	
March.....						5,507	293	94	178		10,920	
April.....						4,650	281	90	155		9,220	
May.....						16,536	748	167	340		20,900	
June.....						72,682	4,260	493	2,423		144,200	
July.....						50,269	2,320	918	1,622		99,710	
August.....						31,667	1,430	664	1,022		62,810	
September.....						14,393	814	288	480		26,560	
Water year 1934-35.....						224,206	4,260	90	614		444,800	

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 south side waterworks intake, 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 1935 in reports of U. S. Geological Survey; May 1885 to September 1886, September 1894 to September 1935 in reports of State engineer. Records May 1925 to September 1934 do not include water diverted around station in the north side waterworks intake.

Average discharge.-- 31 years (1894-1924, 1934-35), 775 second-feet; 9 years (1925-34), 624 second-feet (does not include water diverted around station in north side waterworks intake).

Extremes.-- Maximum discharge during year, 9,880 second-feet (includes 20 second-feet diverted around station in north side waterworks intake) May 18; minimum daily discharge, 18 second-feet (includes 13 second-feet diverted around station in north side waterworks intake) Apr. 7.

1885-86, 1894-1935: Maximum discharge, 103,000 second-feet (slope measurement, including estimated discharge of Dry Creek, 19,500 second-feet) June 3, 1921 (gage height, 24.66 feet, gage at Pueblo); minimum daily discharge, probably that of Apr. 7, 1935.

Remarks.-- Records good except those estimated for Nov. 29, Dec. 2-8, Jan. 19-25, Feb. 25-27, Mar. 25. Diversions for irrigation above station. During 1935 it was discovered that the north side waterworks intake was diverting water around station. This diversion has probably existed since establishment of station at present site in May 1925. Regulation (see description for Arkansas River at Salida).

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	117	90	129	104	110	19	148	416	1,820	1,750	721
2	117	123	90	104	83	94	25	94	482	1,620	1,630	901
3	117	129	90	98	71	87	25	87	677	1,500	2,070	635
4	98	148	90	75	68	94	10	141	704	1,620	1,520	490
5	104	87	90	123	71	79	1	129	1,020	1,490	1,490	446
6	98	83	90	117	75	83	9	117	1,110	1,380	1,270	349
7	141	104	90	123	90	60	5	148	1,260	1,690	1,080	524
8	110	94	100	110	104	60	24	135	1,790	1,650	1,080	1,570
9	75	83	117	104	90	71	25	117	2,030	1,620	1,110	910
10	71	79	104	94	79	55	31	123	2,490	1,660	1,180	809
11	75	98	90	94	83	56	47	117	3,030	1,660	1,020	668
12	75	110	94	98	64	60	53	94	3,410	2,140	1,030	522
13	71	104	87	98	64	68	49	123	3,010	2,250	1,050	402
14	87	98	94	80	58	64	41	181	2,820	2,020	680	402
15	110	83	104	117	56	56	38	269	3,610	1,890	460	356
16	104	83	104	110	98	53	26	261	4,090	1,760	362	323
17	94	87	110	110	64	49	40	361	3,470	1,580	395	291
18	87	83	117	98	87	60	30	3,370	2,520	1,540	687	266
19	90	104	123	80	87	55	123	1,010	2,870	1,840	614	242
20	87	94	110	60	104	42	64	597	2,850	1,540	571	212
21	90	75	90	80	129	22	64	498	2,980	1,840	935	172
22	154	71	110	100	117	18	110	482	3,140	2,000	697	192
23	155	68	98	100	98	12	123	580	3,110	2,150	514	212
24	148	58	123	100	90	14	216	580	2,950	1,530	580	202
25	148	68	123	150	75	11	223	623	2,340	1,240	1,040	153
26	141	87	100	223	75	20	160	563	2,200	1,050	1,220	197
27	129	90	195	261	100	27	154	686	2,060	618	1,060	362
28	129	71	104	246	141	24	160	1,040	2,010	695	1,100	530
29	148	60	117	135	-	20	188	704	1,980	704	761	474
30	129	90	141	135	-	10	209	640	1,910	920	892	446
31	110	-	135	135	-	14	-	563	-	1,570	686	-

Month	Observed					Diverted by North side waterworks intake (acre-feet)	Corrected for diversion	
	Second-foot-days	Discharge in second-feet			Run-off in acre-feet		Run-off in acre-feet	Mean (second-feet)
		Maximum	Minimum	Mean				
October.....	3,432	160	71	111	6,810	3,000	9,810	160
November.....	2,729	148	58	91.0	5,410	2,800	8,210	138
December.....	3,320	195	87	107	6,590	2,300	8,890	144
Calendar year 1934	77,669	1,370	8	213	154,100	-	-	-
January.....	3,697	261	60	119	7,310	3,000	10,310	168
February.....	2,426	141	56	86.6	4,810	2,500	7,310	132
March.....	1,548	110	10	49.9	3,070	2,300	5,370	87.3
April.....	2,352	223	1	78.4	4,670	1,280	5,950	99.9
May.....	14,531	3,370	87	469	28,820	2,040	30,860	502
June.....	68,369	4,060	416	2,279	136,600	2,690	139,200	2,323
July.....	48,287	2,260	695	1,568	95,760	2,590	98,170	1,597
August.....	30,334	2,070	382	979	60,170	2,260	62,420	1,016
September.....	13,977	1,570	153	466	27,720	2,370	30,090	506
Water year 1934-35	194,961	4,090	1	534	366,800	28,820	415,600	574

Note.-- Table of daily discharges does not include water diverted around station in north side waterworks intake.

Arkansas River near Nepesta, Colo.

Location.- Water-stage recorder, lat. 38°11', long. 104°10', in sec. 31, T. 21 S., R. 80 W., at Oxford Farmers' Canal dam, 1½ miles west of Nepesta.

Drainage area.- 9,130 square miles.

Records available.- September 1897 to October 1903, July 1909 to November 1912, October 1933 to September 1935 in reports of U. S. Geological Survey; September 1897 to October 1903, July 1909 to November 1912, January 1914 to September 1935 in reports of State engineer. No records during winters after 1927.

Extremes.- Maximum discharge during year, 14,700 second-feet May 31 (gage height, 6.00 feet); minimum daily discharge, 1 second-foot Apr. 8 (estimated).
1897-1903, 1909-12, 1914-35: Maximum discharge, 180,000 second-feet at point 9 miles upstream (slope measurement) June 4, 1921; no flow at times during 1902, 1910, 1931, 1934.

Remarks.- Records fair. Discharge estimated Oct. 5, 6, Nov. 27-30, Apr. 8-11. No records Dec. 1 to Feb. 26. Storage, regulation, and diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	158			-	202	32	153	1,080	1,660	1,090	640
2	32	170			-	162	24	138	1,180	1,740	1,020	1,010
3	28	149			-	152	32	128	1,160	1,500	1,160	828
4	14	135			-	130	35	146	1,220	1,490	606	850
5	20	143			-	149	25	186	1,160	1,550	862	1,530
6	1	49			-	149	21	178	1,170	1,540	898	438
7	4	112			-	140	20	164	1,080	1,350	762	430
8	21	92			-	143	1	173	1,650	1,250	610	1,700
9	43	105			-	164	3	170	1,380	1,190	521	680
10	90	134			-	161	6	152	1,630	1,290	630	946
11					-							
12	91	82			-	138	6	130	1,780	1,460	600	886
13	87	89			-	138	16	90	2,860	1,540	610	560
14	68	108			-	149	76	56	2,020	1,550	620	359
15	89	106			-	149	69	71	2,020	1,390	366	284
16	91	119			-	143	31	95	2,290	1,650	531	260
17					-							
18	98	106			-	140	37	133	2,780	1,680	430	236
19	111	106			-	146	27	336	4,460	1,460	366	310
20	100	106			-	138	81	2,280	2,480	1,380	680	226
21	95	156			-	143	182	6,290	1,910	1,300	590	206
22	84	164			-	146	186	1,440	1,980	1,280	346	226
23					-							
24	83	143			-	128	140	850	2,110	1,250	620	211
25	85	103			-	111	121	955	2,290	5,000	216	206
26	128	118			-	105	138	940	2,380	3,300	254	211
27	174	135			-		164	1,190	2,380	1,100	278	177
28	198	133			-		215	1,230	1,880	1,280	620	126
29					-							
30	170	135			-	71	240	335	1,890	1,160	1,380	201
31	158	170			182	69	215	1,070	2,490	946	1,170	284
	161	165			202	67	215	1,260	1,630	773	1,410	531
	186	160			-	70	202	1,210	2,110	630	1,030	408
	210	150			-	55	186	1,480	1,840	740	580	296
	198	-			-	45	-	7,480	-	1,080	970	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							3,017	210	1	97.3	5,980	
November.....							3,802	170	49	127	7,540	
December.....							-	-	-	-	-	
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							3,887	202	45	125	7,710	
April.....							2,746	240	1	91.5	5,450	
May.....							30,979	7,480	56	999	61,450	
June.....							58,280	4,460	1,080	1,945	112,600	
July.....							46,539	5,000	630	1,501	92,310	
August.....							22,005	1,410	216	710	45,650	
September.....							15,054	1,700	126	502	29,860	
Water year												

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 comparable.

Drainage area.- 12,200 square miles.

Records available.- December 1893 to December 1895, January to December 1901, April to October 1903, August to November 1908, April 1912 to December 1913, October 1933 to September 1935 in reports of U. S. Geological Survey; December 1893 to December 1895, January to December 1901, April to October 1903, August to November 1908, April 1912 to September 1935 in reports of State engineer.

Average discharge.- 23 years (1912-35), 284 second-feet.

Extremes.- Maximum discharge during year, 18,400 second-feet May 19; minimum daily discharge, 5 second-feet Sept. 4, 5, 8.
1893-95, 1901, 1903, 1908, 1912-35: Maximum discharge, 200,000 second-feet (slope measurement) June 4, 1921 (gage height, 18.4 feet); no flow Jan. 20-23, Mar. 20-22, 1915.

Remarks.- Records fair. Discharge estimated Nov. 23 to Dec. 11, Dec. 31 to Jan. 3, Jan. 20-28, Feb. 26. Regulation by storage and diversions above station for irrigation.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	6	17	37	16	35	16	37	710	360	483	489
2	7	10	17	38	12	21	13	37	250	538	538	326
3	6	10	18	42	12	21	13	37	622	380	465	454
4	5	6	18	64	18	22	12	37	350	380	612	322
5	5	7	20	64	14	22	12	37	345	454	405	322
6	6	8	20	69	12	25	11	37	360	495	416	252
7	6	8	22	50	12	28	12	34	305	501	360	154
8	5	6	23	35	12	26	11	31	403	256	175	286
9	6	7	23	32	13	28	9	31	503	281	58	114
10	6	8	25	33	19	29	15	20	386	499	36	154
11	8	8	30	24	23	30	17	19	758	525	66	181
12	7	10	56	19	25	27	19	22	1,490	477	94	240
13	7	9	40	17	28	28	23	26	1,090	146	34	299
14	6	9	41	16	23	28	21	28	729	224	52	181
15	6	8	36	18	15	26	21	80	1,220	260	87	92
16	6	9	28	16	16	30	23	26	986	507	18	117
17	6	8	14	37	19	26	26	41	1,560	577	48	38
18	6	8	12	37	20	32	27	1,080	1,230	577	64	17
19	6	10	32	27	12	32	28	11,530	887	590	85	54
20	6	8	32	27	12	25	39	458	868	590	68	46
21	7	8	14	27	16	24	26	106	605	704	112	24
22	7	10	25	28	16	22	26	145	680	4,000	127	16
23	7	10	56	30	24	22	28	351	460	855	127	12
24	7	12	55	30	26	21	30	335	672	355	58	18
25	7	13	39	30	24	23	47	330	634	275	80	22
26	7	16	39	29	25	22	21	360	465	490	240	66
27	7	16	34	29	42	21	30	266	998	444	380	97
28	6	16	50	32	70	22	34	370	341	414	290	97
29	8	16	64	40	-	17	36	776	432	266	507	336
30	7	16	35	24	-	17	37	330	564	198	133	380
31	6	-	35	19	-	17	-	3,300	-	198	516	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				203	8	5	6.5	405				
November.....				302	16	7	10.1	539				
December.....				968	64	12	31.2	1,920				
Calendar year 1934.....				24,888	2,840	5	68.2	49,390				
January.....				1,020	69	16	32.9	2,020				
February.....				576	70	12	20.6	1,140				
March.....				771	35	17	24.9	1,530				
April.....				683	47	9	22.8	1,350				
May.....				20,720	11,530	19	668	41,100				
June.....				20,883	1,560	260	696	41,420				
July.....				16,808	4,000	148	542	33,340				
August.....				6,764	612	18	218	13,420				
September.....				5,206	489	12	174	10,530				
Water year 1934-35.....				74,904	11,530	5	205	148,600				

Arkansas River at Lamar, Colo.

Location.- Water-stage recorder, lat. 38°6', long. 102°37', in sec. 30, T. 22 S., R. 48 W., at highway bridge 1 mile north of Lamar.

Drainage area.- 19,800 square miles.

Records available.- May to December 1913, October 1933 to September 1935 in reports of U. S. Geological Survey; May 1913 to September 1935 in reports of State engineer.

Average discharge.- 22 years (1913-35), 297 second-feet.

Extremes.- Maximum discharge during year, 15,500 second-feet May 20 (gage height, 6.40 feet); minimum daily discharge, 1 second-foot several days in March, April, May, and July.

1913-35: Maximum discharge, 165,000 second-feet (slope measurement) June 5, 1921; no flow at times during 1913-15.

Remarks.- Records fair except those below 20 second-feet, which are poor. Regulation by storage and diversion for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2	2	3	3	2	2	3	5,370	109	18	3
2	2	2	2	3	3	2	1	4	940	2	26	3
3	2	2	2	3	4	2	2	4	710	1	42	3
4	2	2	2	3	4	1	2	4	5	1	79	3
5	2	2	2	3	4	1	2	2	5	1	121	3
6	2	2	2	3	4	1	2	3	5	1	152	3
7	2	2	2	3	4	1	2	3	3	1	212	2
8	2	2	2	3	4	1	2	3	3	11	256	990
9	2	2	2	3	4	1	2	3	3	1	252	1,160
10	2	2	2	3	2	1	2	2	3	1	201	250
11	2	2	2	3	2	1	2	3	2	2	226	65
12	2	2	2	3	2	1	1	2	4	890	201	25
13	2	2	2	3	2	1	1	2	390	310	180	3
14	2	2	2	3	2	1	1	2	310	10	3	3
15	2	2	2	3	2	1	1	2	5	5	10	3
16	2	2	2	2	2	1	1	2	4	3	10	3
17	2	2	2	2	2	1	1	2	14	3	15	3
18	2	2	2	2	2	1	1	7	3,720	2	370	2
19	2	2	2	2	2	1	1	4,310	1,910	1	232	2
20	2	2	2	2	2	1	1	6,890	124	1	5	2
21	2	2	2	2	2	1	2	365	310	2	3	2
22	2	2	2	2	2	1	2	28	70	1,710	2	2
23	2	2	2	2	2	1	2	3	29	3,520	2	2
24	2	2	2	17	2	1	2	2	6	1,650	10	2
25	2	2	2	15	2	1	2	1	6	375	26	30
26	2	2	2	17	3	1	2	1	8	79	26	940
27	2	2	2	18	9	1	3	1	435	25	20	215
28	2	2	2	2	3	1	3	1	1,320	16	20	3
29	2	2	2	3	-	1	3	20	278	13	3	3
30	2	2	2	3	-	1	3	1,100	8	14	196	3
31	2	-	2	3	-	1	-	565	-	12	5	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				62		2	2	2.0	123			
November.....				60		2	2	2.0	119			
December.....				65		3	2	2.1	129			
Calendar year 1934.....				16,469		9,600	-	45.1	32,640			
January.....				137		18	2	4.4	279			
February.....				81		2	2	2.9	161			
March.....				34		2	1	1.1	67			
April.....				54		3	1	1.8	107			
May.....				13,360		6,890	1	431	26,500			
June.....				16,000		6,370	2	533	31,740			
July.....				8,760		3,520	1	263	17,360			
August.....				2,896		370	2	95.1	5,720			
September.....				3,753		1,160	2	125	7,440			
Water year 1934-35.....				45,252		6,890	1	124	89,760			

Arkansas River at Holly, Colo.

Location.- Water-stage recorder, lat. 38°2', long. 102°6', in sec. 14, T. 23 S., R. 42 W., just above mouth of Wild Horse Creek and 300 feet below highway bridge half a mile south of Holly.

Drainage area.- 25,000 square miles.

Records available.- October 1907 to September 1927, October 1933 to September 1935 in reports of U. S. Geological Survey; October 1907 to September 1935 in reports of State engineer.

Average discharge.- 28 years, 356 second-feet.

Extremes.- Maximum discharge during year, 13,200 second-feet May 27 (gage height, 5.42 feet); minimum daily discharge, 1 second-foot Aug. 21-24.
1907-35: Maximum discharge, 136,000 second-feet (slope measurement) Oct. 20, 1908 (gage height, 11.0 feet, former datum); no flow Aug. 9, 1924, May 27-31, June 1-6, 26-30, July 1-3, 1925.

Remarks.- Records fair. Discharge estimated Feb. 24-26, Aug. 9-20. Extensive regulation and diversions for irrigation above station.

Flood on Aug. 28, 1935, closed the siphon where Holly Drain crossed Wild Horse Creek and caused Holly Drain to discharge into Arkansas River above gaging station at Holly and caused Wild Horse Creek to discharge down the former channel of Holly Drain. Discharge on Aug. 28, 1935, includes the flow of Wild Horse Creek. Discharge on and after Aug. 29 includes the flow of Holly Drain above the siphon crossing Wild Horse Creek.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	4	2	20	21	10	7	4	6,410	179	123	356
2	7	4	2	24	20	10	6	5	3,310	191	107	173
3	7	4	3	30	18	10	6	4	1,540	184	97	107
4	7	4	3	28	15	10	6	4	1,130	145	73	311
5	7	4	2	30	14	10	5	4	750	92	59	69
6	5	4	4	32	11	10	5	4	488	52	56	56
7	5	4	4	32	10	9	5	4	356	28	52	45
8	5	4	4	30	9	10	4	4	247	1,240	42	45
9	5	4	4	30	9	10	4	4	198	287	30	1,360
10	5	4	4	30	9	10	4	4	156	159	20	1,200
11	5	4	5	30	9	10	4	4	97	123	10	471
12	4	4	7	28	8	9	4	3	56	4,080	5	287
13	4	4	7	26	8	9	4	5	97	1,680	5	198
14	4	4	7	26	9	9	3	5	710	488	2	112
15	4	4	7	24	9	7	3	5	145	102	2	76
16	4	4	8	24	9	7	4	5	42	59	2	49
17	4	4	8	22	9	7	4	5	92	32	2	30
18	4	4	8	22	9	7	4	6	66	34	2	20
19	4	4	8	22	9	7	4	804	1,240	36	2	11
20	4	4	8	24	10	7	4	5,360	370	32	2	6
21	4	4	9	24	12	7	3	2,190	156	28	1	4
22	4	4	9	28	11	7	3	824	134	357	1	2
23	4	3	10	28	11	7	3	437	162	5,850	1	2
24	4	3	10	40	8	7	3	295	270	3,680	1	2
25	4	3	11	49	6	7	4	247	123	1,940	2	2
26	4	3	11	28	6	7	4	254	191	868	2	150
27	4	3	12	26	12	7	4	4,130	198	403	4	1,320
28	4	2	14	24	13	7	3	1,980	2,680	233	6,000	608
29	4	2	14	22	-	7	4	279	1,200	184	1,680	247
30	4	2	15	22	-	7	4	247	626	162	1,940	156
31	4	-	15	21	-	7	-	1,220	-	139	680	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				150	12	4	4.8	298				
November.....				109	4	2	3.6	216				
December.....				235	15	2	7.6	466				
Calendar year 1934				18,579	3,890	1	50.9	36,880				
January.....				846	49	20	27.3	1,680				
February.....				304	21	6	10.9	603				
March.....				255	10	7	8.2	506				
April.....				125	7	3	4.2	248				
May.....				18,346	5,360	3	592	36,390				
June.....				23,220	6,410	42	774	46,060				
July.....				23,046	5,850	28	745	46,710				
August.....				11,005	6,000	1	355	21,830				
September.....				7,475	1,380	2	249	14,850				
Water year 1934-35.....				85,116	6,410	1	233	168,800				

Arkansas River at Syracuse, Kans.

Location.- Water-stage recorder, lat. 37°58'5", long. 101°45'18", 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 1906, June 1921 to September 1935.

Average discharge.- 14 years (1921-35), 333 second-feet.

Extremes.- Maximum discharge during year, 18,300 second-feet July 12 (gage height, 7.38 feet); minimum, 1 second-foot Oct. 8, 9.

1902-6, 1921-35: Maximum stage, about 11.75 feet (present datum) June 6, 1921 (discharge not determined); minimum discharge, 1 second-foot July 31, 1931, and Oct. 8, 9, 1934. Bank-full stage, 7.0 feet.

Remarks.- Records fair. Stage discharge relation affected by ice Nov. 27 to Dec. 11, Dec. 27-31; discharge estimated. Discharge interpolated Jan. 4. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	2	15	39	50	78	13	15	4,030	633	258	1,260
2	3	2	17	50	50	60	13	20	3,770	537	212	562
3	2	3	17	50	44	57	13	17	1,220	528	157	435
4	2	2	20	59	46	60	13	18	835	473	117	309
5	2	2	22	69	46	62	13	17	704	365	100	429
6	2	2	22	65	46	65	13	16	491	340	86	346
7	2	2	22	87	46	67	13	16	332	286	80	327
8	1	2	20	59	48	67	13	18	264	623	73	321
9	1	2	20	63	48	70	13	18	217	974	65	1,360
10	2	2	20	67	48	70	13	17	181	537	62	1,420
11	2	2	21	67	48	67	13	16	163	385	57	737
12	2	2	22	65	43	62	13	17	150	4,800	53	499
13	2	2	23	59	38	40	14	24	122	2,740	51	346
14	2	3	20	52	39	24	14	22	236	803	49	263
15	2	3	20	50	28	20	14	23	295	549	46	198
16	2	3	20	52	17	19	14	22	188	327	42	153
17	4	3	20	48	16	19	16	27	160	245	48	117
18	6	3	21	44	17	17	16	53	188	200	48	70
19	6	2	18	34	16	17	15	193	767	181	40	53
20	4	2	20	34	15	15	14	9,970	1,160	169	38	48
21	3	3	24	36	15	14	14	3,820	717	163	38	44
22	2	3	24	34	15	13	14	1,200	633	177	35	41
23	3	3	23	25	15	13	14	734	620	6,910	35	38
24	3	3	25	28	14	13	14	510	571	3,840	32	36
25	3	3	27	39	13	13	15	401	562	2,400	34	48
26	2	3	24	61	19	13	15	327	428	1,160	31	68
27	2	6	29	80	27	13	15	322	450	787	31	317
28	2	8	34	78	55	13	15	4,540	1,560	504	7,460	317
29	2	11	41	69	-	13	15	542	1,750	392	2,840	204
30	2	15	39	59	-	13	16	344	1,020	314	2,970	138
31	2	-	39	56	-	13	-	603	-	258	1,240	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						78	6	1	2.5	155		
November.....						103	15	2	3.4	204		
December.....						729	41	15	25.5	1,450		
Calendar year 1934.....						27,679	6,400	1	75.8	54,900		
January.....						1,878	87	25	54.1	3,330		
February.....						922	55	13	32.9	1,830		
March.....						1,100	78	13	35.5	2,180		
April.....						420	16	13	14.0	835		
May.....						23,382	9,970	15	754	46,380		
June.....						23,704	4,030	122	790	47,020		
July.....						32,570	6,910	163	1,051	64,620		
August.....						16,428	7,460	31	530	32,580		
September.....						10,583	1,450	36	353	20,990		
Water year 1934-35.....						111,697	9,970	1	306	221,600		

Arkansas River at Garden City, Kans.

Location.- Water-stage recorder, lat. 37°57'18", long. 100°52'31", 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 1935.

Average discharge.- 13 years, 239 second-feet.

Extremes.- Maximum discharge during year, 6,790 second-feet June 2, (gage height, 7.3 feet, determined from graph drawn on basis of resident engineer's notes and recorder record); no flow during several periods.
1922-35: Maximum discharge, 21,200 second-feet Aug. 9, 1929 (gage height, 7.74 feet); no flow during several periods. Bank-full stage, 7.0 feet.

Remarks.- Records poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0							0	68	258	0	304
2	0							0	3,550	76	5	136
3	0							0	2,070	33	1	44
4	0							0	748	24	0	4
5	0							0	465	20	2	0
6	0							0	374	16	0	0
7	0							0	133	14	0	0
8	0							0	53	10	0	0
9	0							0	37	3	0	0
10	0							0	16	0	0	94
11	0							0	7	0	0	129
12	0							0	5	878	0	23
13	0							0	2	3,460	0	0
14	0							0	2	1,440	0	0
15	0							0	2	422	0	0
16	0							0	2	96	0	0
17	0							0	1	30	0	0
18								30	0	9	0	0
19								220	0	0	0	0
20								2,150	0	0	0	0
21	#1							5,350	141	0	0	0
22								1,520	19	0	0	0
23								529	4	70	0	0
24								260	0	2,770	0	0
25								126	0	1,860	0	0
26								73	0	1,330	0	0
27	#2							48	9	350	0	4
28								1,590	4	106	138	22
29								1,520	465	51	1,940	0
30								497	628	31	690	0
31								195	-	16	1,000	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								22	-	0	0.7	44
November.....								120	-	-	*4	236
December.....								118	-	-	*3.8	254
Calendar year 1934.....								5,545	490	0	15.2	11,000
January.....								62	-	-	*2	123
February.....								56	-	-	*2	111
March.....								0	0	0	0	0
April.....								0	0	0	0	0
May.....								16,208	5,350	0	455	27,990
June.....								8,805	3,550	0	294	17,460
July.....								13,373	3,460	0	431	26,520
August.....								3,774	1,940	0	122	7,490
September.....								760	304	0	25.3	1,510
Water year 1934-35.....								41,198	5,350	0	113	81,720

*Estimated.

Arkansas River at Larned, Kans.

Location.- Water-stage recorder, lat. 38°10'5", long. 99°5'50", in NE $\frac{1}{4}$ sec. 5, T. 22 S., R. 16 W., at Larned, about 800 feet above mouth of Pawnee River.

Drainage area.- 34,900 square miles.

Records available.- June 1922 to September 1935.

Average discharge.- 13 years, 241 second-feet.

Extremes.- Maximum discharge during year (estimated and includes an estimated flood overflow of 11,000 second-feet from Pawnee River), 12,000 second-feet May 29 (gage height not known, affected by backwater from Pawnee River); no flow during extensive periods.
1922-35: 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 poor. Discharge interpolated Jan. 10-13, Aug. 13-15. Discharge estimated May 15-21, Aug. 29 to Sept. 3. Discharge, May 28, 29, includes chiefly a flood overflow from Pawnee River entering Arkansas River above station through Saw Mill Creek. Maximum discharge below mouth of Pawnee River (estimated), 21,000 second-feet May 29.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0	51	15	13	10	1,740	121	61	800
2			0	0	47	23	13	9	866	147	55	500
3			0	0	41	26	13	8	521	123	50	300
4			0	0	37	28	15	8	2,670	101	46	173
5			0	0	32	28	16	9	2,010	81	45	152
6			0	0	29	25	18	8	1,090	68	40	97
7			0	14	30	29	19	6	386	67	29	74
8			0	34	29	26	19	5	274	72	26	68
9			0	55	26	26	19	2	252	94	22	53
10			0	55	26	26	18	4	206	75	18	59
11			0	56	36	24	15	7	149	48	18	55
12			0	58	30	22	13	3	141	42	15	29
13			0	59	26	22	13	17	139	36	12	25
14			0	61	28	24	13	36	169	36	10	21
15			0	52	25	23	12		198	910	8	91
16			2	52	25	21	12		2,480	954	5	50
17			13	50	33	25	12		1,200	760	4	22
18			18	48	27	24	12	160	275	543	2	15
19			5	21	25	23	12		128	182	2	3
20			11	27	24	21	12		117	124	0	0
21			10	4	22	18	12		104	96	0	0
22			8	0	20	18	12	1,150	88	74	0	0
23			5	0	20	15	11	3,000	78	61	0	0
24			7	0	18	16	11	1,870	64	52	0	0
25			8	0	11	17	10	965	58	47	0	0
26			0	0	11	16	10	319	112	44	0	3
27			0	0	13	12	11	533	81	348	0	1
28			0	0	18	12	10	800	94	274	0	0
29			0	5	-	11	9	9,000	99	173	0	6
30			0	35	-	10	10	6,000	101	135	5	11
31			0	52	-	10	-	2,200	-	94	1,000	-
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.....				87	18	0	2.8	173				
Calendar year 1934.....				7,986	174	0	21.9	15,840				
January.....				734	61	0	23.7	1,460				
February.....				760	51	11	27.1	1,510				
March.....				636	29	10	20.5	1,260				
April.....				395	19	9	13.2	783				
May.....				27,089	9,000	2	874	53,750				
June.....				15,780	2,670	58	526	31,300				
July.....				5,797	954	36	187	11,480				
August.....				1,478	1,000	0	47.7	2,930				
September.....				2,548	800	0	84.9	5,050				
Water year 1934-35.....				55,294	9,000	0	161	109,700				

Arkansas River near Wichita, Kans.

Location.- Chain gage, lat. 37°43'40", long. 97°21'50", on line between secs. 7 and 18, T. 27 S., R. 1 E., at Thirteenth Street Bridge, at Wichita, 1½ miles above mouth of Little Arkansas River.

Drainage area.- 40,300 square miles.

Records available.- June 1921 to March 1935 (discontinued).

Average discharge.- 13 years, 505 second-feet.

Extremes.- Maximum discharge observed during year, 71 second-feet Oct. 1 (gage height, 3.45 feet); minimum, 1 second-foot Nov. 14-17.
1921-35: Maximum discharge, 12,000 second-feet Aug. 18, 1927 (gage height, 14.75 feet); no flow during several periods. Bank-full stage, 14 feet.

Remarks.- Records fair. Discharge estimated during period of ice effect, Dec. 6, 7, 19-22.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	12	44	17	25	8						
2	45	11	42	15	27	8						
3	40	12	44	13	27	18						
4	35	11	44	12	22	36						
5	31	10	36	11	18	34						
6	24	10	20	25	18	34						
7	*21	8	10	34	18	30						
8	18	7	6	42	*20	34						
9	16	7	4	44	22	36						
10	15	6	3	36	30	*36						
11	14	6	3	34	27	36						
12	11	5	2	23	28	36						
13	9	4	9	20	25	39						
14	8	1	22	17	27	39						
15	7	1	22	17	27	36						
16	7	1	22	15	30	-						
17	21	1	20	17	34	-						
18	40	12	22	18	36	-						
19	48	45	20	18	36	-						
20	54	48	20	23	34	-						
21	62	51	20	14	34	-						
22	59	51	20	4	32	-						
23	52	56	19	5	32	-						
24	38	59	18	6	13	-						
25	31	62	*16	6	11	-						
26	22	59	15	4	11	-						
27	19	56	9	4	10	-						
28	18	54	10	3	10	-						
29	15	51	11	5	-	-						
30	14	51	14	18	-	-						
31	12	-	16	26	-	-						
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						877	71	7	28.3	1,740		
November.....						768	62	1	25.6	1,520		
December.....						583	44	2	18.8	1,160		
Calendar year 1934.....						31,943	547	0	87.5	63,360		
January.....						546	44	3	17.6	1,080		
February.....						684	36	10	24.4	1,360		
March 1-15.....						460	39	8	30.6	912		
April.....						-	-	-	-	-		
May.....						-	-	-	-	-		
June.....						-	-	-	-	-		
July.....						-	-	-	-	-		
August.....						-	-	-	-	-		
September.....						-	-	-	-	-		
The period.....										7,770		

*Discharge interpolated.

Arkansas River at Wichita, Kans.

Location.- Water-stage recorder, lat. $37^{\circ}41'20''$, long. $97^{\circ}20'45''$, in SE $\frac{1}{4}$ 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 1935.

Extremes.- Maximum discharge during period July to October 1934, 391 second-feet Sept. 5 (gage height, 1.53 feet); minimum, 3 second-feet Sept. 3 (gage height, 0.37 foot).

Maximum discharge during water year 1934-35, 12,500 second-feet June 3 (gage height, 9.67 feet); minimum, 26 second-feet May 11.

1934-35: Maximum discharge, that of June 3, 1935; minimum, 3 second-feet Sept. 3, 1934.

Remarks.- Records fair.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										70	12	10
2										54	10	16
3										46	10	8
4										36	10	16
5										36	10	336
6										46	11	310
7										40	10	236
8										32	10	184
9										28	10	169
10										19	10	144
11										19	10	126
12										18	10	109
13										16	10	85
14										16	10	102
15										13	10	87
16										12	10	64
17										14	10	52
18										12	10	52
19										10	11	205
20										12	10	158
21										10	10	114
22										10	10	99
23										12	8	114
24										11	7	*270
25										10	9	*200
26										13	9	126
27										10	9	99
28										10	9	117
29										10	9	138
30										11	10	173
31										12	9	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....												
June.....												
July.....						668	70	10	21.5	1,320		
August.....						303	12	7	9.8	601		
September.....						3,919	336	8	131	7,770		
The period										9,690		

*Estimated.

Arkansas River at Wichita, Kans.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	173	48	70	37	50	72	34	81	8,300	5,320	469	209	
2	227	52	68	39	50	74	36	78	11,200	5,320	432	246	
3	173	85	64	37	52	81	34	57	12,100	4,240	426	305	
4	117	70	59	37	52	78	33	52	11,400	3,290	397	493	
5	94	55	57	36	52	70	63	47	8,860	3,440	363	420	
6	83	52	52	36	52	66	54	45	6,320	3,500	325	369	
7	74	48	50	44	61	64	52	44	4,240	3,220	315	475	
8	63	44	50	59	68	66	50	44	2,660	2,800	305	444	
9	63	40	47	61	66	70	50	45	1,930	2,040	289	374	
10	59	39	44	61	63	74	47	37	1,540	1,440	274	351	
11	63	39	45	59	64	81	47	31	1,320	1,160	250	300	
12	66	37	47	61	64	81	45	36	1,200	968	245	280	
13	70	36	45	59	61	74	42	380	1,120	836	231	231	
14	74	36	45	57	83	76	39	1,160	1,040	753	231	205	
15	72	34	48	55	78	72	39	1,360	1,010	706	218	184	
16	72	33	50	55	74	66	34	968	1,120	660	188	193	
17	109	50	54	54	68	64	45	901	1,400	633	180	193	
18	102	104	66	52	66	59	48	*4,000	1,490	679	176	148	
19	236	83	78	50	66	61	54	7,200	2,220	768	166	132	
20	162	89	76	47	66	70	52	7,020	3,020	740	149	114	
21	117	173	72	48	64	63	48	7,200	2,280	699	138	106	
22	102	166	70	42	68	55	47	7,930	1,930	666	138	99	
23	89	120	64	37	68	55	44	6,680	1,630	653	129	92	
24	94	112	63	34	74	63	42	6,320	1,240	640	114	89	
25	86	102	59	34	74	55	44	5,640	1,040	620	109	102	
26	81	94	57	34	63	52	173	3,790	1,010	607	104	106	
27	74	92	54	36	61	47	114	2,530	968	562	104	104	
28	70	89	47	34	64	40	76	4,240	1,280	524	173	106	
29	65	85	44	33	-	39	126	10,200	3,160	481	222	106	
30	55	78	40	37	-	36	132	8,500	5,160	493	201	96	
31	52	-	39	45	-	36	-	7,740	-	543	188	-	
Month						Second-foot-days		Maximum		Minimum		Mean	Run-off in acre-feet
October.....						3,034		236		52		97.9	6,020
November.....						2,185		173		33		72.8	4,330
December.....						1,724		78		39		55.6	3,420
Calendar year													
January.....						1,410		61		33		45.5	2,800
February.....						1,812		83		50		64.7	3,690
March.....						1,960		81		36		63.2	3,990
April.....						1,744		173		33		58.1	3,460
May.....						94,156		10,200		31		3,037	186,800
June.....						103,188		12,100		968		3,440	204,700
July.....						49,321		5,320		481		1,591	97,830
August.....						7,248		469		104		234	14,380
September.....						6,632		493		89		221	13,150
Water year 1934-35.....						274,414		12,100		31		752	544,400

eEstimated.

Arkansas River at Arkansas City, Kans.

Location.- Water-stage recorder, lat. 37°3'55", long. 97°3'20", 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 1935.

Average discharge.- 14 years (1921-35), 1,265 second-feet.

Extremes.- Maximum discharge during year, 28,300 second-feet May 31 (gage height, 18.17 feet); minimum, 98 second-feet Oct. 17 (gage height, 6.35 feet).

1902-6, 1921-35: Maximum gage height, 25.64 feet June 11, 1923, from flood marks (discharge not determined); minimum discharge, 12 second-feet in March and April 1923, owing to diversion by power canal of Kansas Gas & Electric Co. Bank-full stage, 16 feet.

Remarks.- Records fair except those for June 26 to Aug. 2, which are poor. Discharge estimated Jan. 21-24. Discharge July 3-13, 15-24, July 26 to Aug. 2 estimated from comparative studies of records of Walnut River at Winfield and Arkansas River at Wichita.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	462	220	314	236	314	260	260	271	20,900	13,200	780	377
2	437	216	296	248	356	260	262	650	24,200	9,640	755	384
3	345	224	290	248	345	298	248	806	20,500	5,000	752	474
4	309	216	264	240	327	355	244	488	21,400	7,700	736	582
5	276	220	252	240	318	345	248	243	22,700	6,700	704	752
6	240	206	248	240	304	332	260	170	16,800	5,000	672	776
7	210	206	240	236	309	318	314	128	9,400	4,700	620	658
8	182	199	236	264	314	304	300	120	6,500	4,500	582	658
9	156	192	232	305	318	300	292	115	4,970	4,300	530	736
10	141	185	202	523	327	288	288	111	4,100	3,600	509	650
11	130	182	206	439	332	300	288	107	3,520	3,200	474	568
12	116	175	216	385	336	314	276	107	5,770	2,600	467	509
13	114	175	216	360	340	314	264	1,860	5,770	2,100	460	446
14	108	179	213	327	340	322	266	6,500	7,070	1,810	446	397
15	103	185	220	314	336	336	248	7,270	4,820	1,650	432	358
16	101	188	228	309	332	327	232	5,280	3,950	1,400	397	319
17	1,480	192	240	300	332	318	220	3,080	7,670	1,250	377	269
18	2,440	530	236	292	327	304	220	3,800	5,770	1,150	351	453
19	1,480	2,180	252	280	327	292	268	10,400	4,820	1,170	325	672
20	660	1,140	272	276	322	284	314	14,600	4,240	1,210	301	530
21	566	492	264	322	280	300	17,600	4,530	1,200	265	338	255
22	462	1,130	288	316	288	300	20,100	3,800	1,150	271	283	283
23	422	2,080	288	304	292	276	20,900	3,370	1,100	265	248	248
24	530	1,170	288	309	322	260	13,200	3,010	1,050	248	216	216
25	417	698	284	336	292	336	916	8,080	2,520	1,030	243	200
26	412	542	256	360	272	332	232	6,500	2,090	1,000	238	205
27	365	462	220	340	272	318	1,110	4,970	1,550	960	210	205
28	292	422	232	280	264	304	832	5,280	1,500	930	200	195
29	260	375	224	276	-	292	509	10,900	4,970	880	221	185
30	244	356	220	276	-	280	338	18,000	13,200	860	358	190
31	228	-	228	296	-	268	-	25,900	-	810	390	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	13,648	2,440	101	440	27,070
November.....	14,927	2,190	175	498	29,610
December.....	7,675	314	202	245	15,220
Calendar year 1934.....	133,517	2,440	57	366	264,800
January.....	9,466	523	236	305	18,780
February.....	8,889	345	264	317	17,630
March.....	9,481	355	260	306	18,800
April.....	10,365	1,110	220	346	20,560
May.....	207,568	25,900	107	6,696	411,700
June.....	246,410	24,200	1,600	9,180	486,900
July.....	94,759	13,200	810	3,066	178,900
August.....	13,569	760	200	438	26,960
September.....	12,853	776	185	428	25,490
Water year 1934-35.....	648,621	25,900	101	1,777	1,278,000

Arkansas River near Muskogee, Okla.

Location.- Staff gage, lat. 35°46', long. 95°18', in NW¼ sec. 21, T. 15 N., R. 19 E., 1½ miles below confluence of Neosho and Verdigris Rivers and ¾ miles northeast of Muskogee. Zero of gage is 471.38 feet above mean sea level (Corps of Engineers, U. S. Army, bench mark).

Drainage area.- 96,800 square miles.

Records available.- March to September 1935.

Extremes.- Maximum discharge observed during period, 243,000 second-feet June 9 (gage height, 30.8 feet); minimum, 1,800 second-feet Aug. 28 (gage height, 4.9 feet).
Maximum stage known, 34.1 feet in June 1923.

Remarks.- Records fair. Gage readings furnished by Oklahoma Gas & Electric Co.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

5.0	2,000	12.0	31,000	19.0	92,500	26.0	177,000
6.0	4,700	13.0	37,400	20.0	103,500	27.0	190,000
7.0	7,700	14.0	44,600	21.0	115,000	28.0	204,000
8.0	11,200	15.0	52,800	22.0	127,000	29.0	218,000
9.0	15,300	16.0	62,000	23.0	139,000	30.0	232,000
10.0	20,000	17.0	71,900	24.0	151,000		
11.0	25,200	18.0	82,000	25.0	164,000		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						5,300	15,800	13,200	156,000	106,000	4,400	4,400
2						3,600	10,800	9,800	178,000	75,900	4,100	10,200
3						3,800	10,500	9,450	194,000	59,200	3,800	8,400
4						3,800	9,450	10,800	185,000	39,600	3,500	9,800
5						4,700	10,200	38,800	159,000	28,700	3,500	8,400
6						9,450	10,500	28,900	168,000	25,200	2,900	8,400
7						10,200	8,050	20,000	238,000	24,200	4,100	12,000
8						9,450	8,050	15,800	225,000	19,100	3,500	10,500
9						8,050	11,600	12,000	243,000	15,300	3,500	8,750
10						7,100	11,600	9,800	242,000	14,500	4,100	7,400
11						31,600	10,200	9,100	210,000	13,200	4,100	6,200
12						114,000	8,750	9,100	141,000	10,800	3,500	8,400
13						140,000	7,700	9,450	113,000	11,200	3,500	5,900
14						115,000	7,100	12,000	99,100	10,500	3,200	4,700
15						48,700	6,500	11,200	104,000	9,800	3,500	4,100
16						21,600	7,700	16,700	121,000	8,750	3,500	3,800
17						23,100	5,600	94,700	214,000	8,050	4,100	3,200
18						19,500	5,900	101,000	221,000	7,700	3,200	2,900
19						17,200	7,700	115,000	196,000	7,700	2,900	2,400
20						15,800	7,700	109,000	161,000	7,100	2,400	2,900
21						11,600	7,100	135,000	159,000	6,900	2,900	2,900
22						10,800	9,800	145,000	193,000	6,500	2,400	2,400
23						18,100	9,100	145,000	193,000	5,900	2,400	2,200
24						56,500	7,400	126,000	137,000	5,900	2,200	2,200
25						78,000	7,100	115,000	93,500	5,300	2,200	3,500
26						67,000	11,200	109,000	75,900	5,300	2,400	6,500
27						34,800	10,200	102,000	58,300	5,300	2,000	4,700
28						24,200	12,000	55,600	56,500	4,700	2,000	3,800
29						18,100	27,500	67,900	78,000	7,100	2,200	3,200
30						8,200	19,100	114,000	75,900	5,900	3,500	2,900
31						12,400	-	131,000	-	4,700	3,500	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....						949,850	140,000	3,800	30,640	1,884,000		
April.....						301,900	27,500	5,800	10,060	598,800		
May.....						1,899,300	145,000	9,100	61,270	3,767,000		
June.....						4,888,300	243,000	56,500	156,300	9,299,000		
July.....						585,900	106,000	4,700	18,250	1,122,000		
August.....						99,000	4,400	2,000	3,194	196,400		
September.....						167,350	12,000	2,200	6,578	331,900		
The period.....											17,200,000	

Arkansas River at Webbers Falls, Okla.

Location.— Water-stage recorder, lat. 35°29', long. 95°8', in NW¼ sec. 18, T. 12 N., R. 21 E., at Webbers Falls, 6 miles above mouth of Canadian River. Zero of gage is 444.53 feet above mean sea level.

Drainage area.— 97,000 square miles (revised).

Records available.— October 1933 to February 1935 (discontinued).

Extremes.— Maximum discharge during period, 99,200 second-feet Nov. 24 (gage height, 17.95 feet); minimum, 1,750 second-feet Nov. 16 (gage height, 4.88 feet).
1933-35: Maximum discharge, that of Nov. 24, 1934; minimum observed, 148 second-feet Aug. 21, 1934 (gage height, 3.48 feet).
Maximum stage known, 38.2 feet in June 1833 and 33.6 feet in April 1927.

Remarks.— Records good. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25,300	3,550	19,000	4,050	6,200							
2	37,200	3,150	17,200	4,300	5,600							
3	23,900	3,150	15,700	4,050	5,300							
4	15,700	2,950	14,200	4,300	5,300							
5	11,600	2,750	12,800	4,050	5,300							
6	8,900	2,750	11,200	3,800	5,600							
7	6,800	3,550	10,000	3,800	5,050							
8	5,600	4,800	8,800	4,050	5,050							
9	4,550	4,050	7,750	10,600	6,350							
10	4,050	3,150	7,100	24,800	20,800							
11	3,550	2,750	6,200	27,400	20,200							
12	3,150	2,450	5,900	17,200	12,800							
13	2,750	2,250	5,600	12,000	9,600							
14	2,750	2,150	5,050	9,600	8,450							
15	2,550	1,950	4,800	8,100	7,750							
16	2,350	1,750	4,550	6,800	8,800							
17	2,350	1,650	4,550	6,800	10,000							
18	2,150	1,650	4,300	6,500	8,800							
19	2,750	2,950	4,300	7,400	7,750							
20	20,000	8,100	4,550	10,000	6,500							
21	32,400	12,000	5,300	13,200	6,200							
22	26,000	28,100	5,900	15,200	5,600							
23	22,600	75,200	5,600	12,000	5,050							
24	14,200	96,800	5,300	9,600	4,800							
25	8,100	81,200	5,050	8,100	4,550							
26	6,200	65,600	5,050	7,400	4,550							
27	5,300	53,000	5,050	6,800	5,300							
28	4,550	46,000	4,800	6,800	5,600							
29	4,550	36,400	4,800	6,500	-							
30	4,300	33,200	4,300	6,200	-							
31	4,050	-	4,050	6,900	-							
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						320,100	37,200	2,150	10,330	654,900		
November.....						589,400	96,800	1,750	19,650	1,169,000		
December.....						228,750	19,000	4,050	7,379	458,700		
Calendar year 1934.....						2,992,497	96,800	154	8,199	5,936,000		
January.....						278,200	27,400	3,800	8,974	551,800		
February.....						214,850	20,800	4,550	7,673	426,100		
March.....						-	-	-	-	-		
April.....						-	-	-	-	-		
May.....						-	-	-	-	-		
June.....						-	-	-	-	-		
July.....						-	-	-	-	-		
August.....						-	-	-	-	-		
September.....						-	-	-	-	-		
The period.....										3,236,000		

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. Prior to Oct. 1, 1934, chain gage at same site and datum.

Drainage area.— 150,300 square miles (revised).

Records available.— October 1927 to September 1935.

Extremes.— Maximum discharge during year, 418,000 second-feet June 19 (gage height, 33.8 feet, after break in levee); maximum stage, 34.1 feet June 19; minimum, 2,870 second-feet Nov. 18 (gage height, 2.73 feet).
1927-35: Maximum discharge, that of June 19, 1935; minimum, 216 second-feet Aug. 19, 1934.
Maximum stage known, 35.0 feet Apr. 16, 1927.

Remarks.— Records good. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30,500	6,400	44,800	6,980	12,000	8,560	50,000	53,000	148,000	142,000	9,120	5,400
2	65,800	5,800	37,500	6,400	11,400	8,560	46,200	41,000	163,000	152,000	8,320	33,300
3	64,900	5,400	33,300	6,640	10,100	8,560	38,900	30,500	210,000	130,000	7,360	39,200
4	46,200	5,000	29,100	6,640	9,760	12,700	31,900	32,700	230,000	99,600	6,880	29,100
5	25,800	4,600	25,800	6,400	9,440	26,200	31,900	108,000	223,000	77,400	6,200	25,200
6	18,500	4,310	21,600	6,400	9,120	24,600	44,800	163,000	208,000	64,900	5,400	22,800
7	14,400	4,040	19,000	6,400	9,120	28,400	38,200	160,000	205,000	53,800	4,700	28,400
8	11,000	4,310	16,500	9,760	9,120	34,000	33,300	149,000	255,000	50,000	5,200	27,700
9	9,120	5,400	14,400	14,000	8,560	26,400	20,000	119,000	268,000	44,000	5,200	25,400
10	8,080	5,400	12,800	16,500	10,100	25,800	20,500	81,800	264,000	41,800	5,200	20,000
11	7,120	4,800	11,400	34,700	25,600	40,600	22,800	54,500	257,000	36,800	4,800	18,500
12	6,400	4,500	10,400	35,400	27,700	11,000	21,000	39,600	225,000	31,900	7,360	17,000
13	5,800	4,130	9,440	26,400	19,600	179,000	18,000	34,000	174,000	29,800	8,800	16,000
14	5,400	3,770	8,800	19,600	15,200	203,000	16,000	38,900	148,000	30,500	7,120	15,200
15	5,000	3,410	8,320	15,600	13,600	173,000	14,400	50,800	143,000	27,000	6,200	12,400
16	4,700	3,230	7,840	12,400	12,800	105,000	13,200	66,700	169,000	24,600	6,200	12,800
17	4,500	3,140	7,600	11,000	12,800	65,200	12,000	100,000	266,000	22,200	5,800	15,200
18	4,310	2,960	7,360	10,400	14,800	43,200	10,700	143,000	331,000	20,000	5,400	13,200
19	4,040	3,050	6,800	11,700	13,600	35,400	10,700	169,000	403,000	18,500	5,200	11,000
20	3,860	16,300	9,120	19,000	11,700	31,200	12,800	205,000	403,000	18,000	4,800	9,760
21	15,500	47,800	8,560	39,600	10,100	28,400	17,000	197,000	356,000	17,500	4,400	8,800
22	35,400	55,200	8,800	47,800	9,120	54,000	13,500	212,000	327,000	16,000	4,040	8,560
23	34,700	64,000	9,440	50,000	8,560	69,400	23,400	210,000	313,000	14,400	4,040	8,320
24	29,100	104,000	9,120	44,800	7,840	114,000	22,200	192,000	297,000	13,600	3,860	7,600
25	20,000	107,000	8,560	35,400	7,560	163,000	17,500	165,000	249,000	12,800	3,590	7,600
26	14,400	81,800	8,320	23,400	6,080	177,000	27,100	149,000	189,000	12,000	3,500	7,840
27	11,400	68,500	8,080	17,500	8,520	167,000	53,800	146,000	140,000	11,400	3,410	9,760
28	9,120	58,400	7,840	16,600	6,800	100,000	54,500	125,000	115,000	10,700	3,320	12,400
29	6,080	53,000	7,600	14,400	-	59,200	52,200	86,600	115,000	10,100	3,320	11,700
30	7,120	50,000	7,360	13,200	-	44,000	57,600	90,500	132,000	9,440	3,560	9,760
31	6,400	-	7,360	12,400	-	42,500	-	124,000	-	10,100	3,680	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						536,450	65,800	3,860	17,300	1,064,000		
November.....						789,650	107,000	2,960	26,320	1,566,000		
December.....						434,920	44,800	7,560	14,050	562,700		
Calendar year 1934.....						5,245,322	114,000	245	14,370	10,400,000		
January.....						595,920	50,000	6,400	19,220	1,182,000		
February.....						334,400	27,700	7,360	11,940	663,300		
March.....						2,196,880	203,000	8,560	70,870	4,357,000		
April.....						351,100	57,600	10,700	28,370	1,686,000		
May.....						3,536,600	219,000	30,500	114,100	7,015,000		
June.....						6,929,000	403,000	115,000	231,000	13,740,000		
July.....						1,253,040	159,000	9,440	40,420	2,485,000		
August.....						166,100	9,120	3,320	5,358	329,500		
September.....						486,900	39,200	5,400	16,250	965,800		
Water year 1934-35.....						18,110,960	403,000	2,960	49,620	35,920,000		

Arkansas River at Little Rock, Ark.

Location.— Water-stage recorder, lat. $34^{\circ}45'$, long. $92^{\circ}16'$, in sec. 3, T. 1 N., R. 12 W., at Little Rock. Zero of gage is 223.39 feet above mean sea level. Prior to Oct. 1, 1934, staff gage 130 feet upstream at Main Street Bridge at same datum.

Drainage area.— 157,900 square miles (revised).

Records available.— September 1927 to September 1931; October 1933 to September 1935.

Extremes.— Maximum discharge during year, 422,000 second-feet June 22, 23 (gage height, 23.18 feet); minimum, 4,100 second-feet Nov. 19 (gage height, -2.11 feet).
1927-31, 1933-35: Maximum discharge, that of June 22, 23, 1935; minimum, 850 second-feet Aug. 23, 1934 (gage height, -4.16 feet).
Maximum stages known, 34.6 feet in June 1833, and 33.0 feet Apr. 20, 1927.

Remarks.— Records good. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,600	10,000	61,900	13,200	27,100	15,200	92,000	66,300	107,000	169,000	11,800	5,800
2	21,800	8,800	62,800	14,400	23,000	14,800	84,000	68,100	135,000	166,000	11,500	5,800
3	38,700	9,220	60,200	14,000	19,800	14,800	61,100	74,400	180,000	184,000	11,500	5,800
4	57,000	7,940	55,400	12,900	19,200	14,800	74,400	77,500	192,000	161,000	11,500	6,580
5	63,700	7,380	50,600	11,600	17,200	19,200	67,200	114,000	220,000	142,000	10,600	26,400
6	49,800	6,840	43,600	10,900	16,000	48,400	62,200	188,000	229,000	117,000	10,300	30,000
7	36,000	6,320	37,300	10,800	14,800	66,400	69,000	222,000	233,000	92,000	10,000	25,500
8	24,600	5,800	31,400	11,800	14,400	62,800	77,300	228,000	231,000	74,400	9,400	21,400
9	18,200	5,560	26,400	14,400	14,400	55,400	72,600	218,000	226,000	63,000	9,100	21,400
10	14,800	5,100	23,000	20,200	14,800	55,400	59,000	199,000	236,000	53,400	8,800	25,000
11	12,200	4,900	19,600	24,600	14,800	80,300	50,200	176,000	255,000	45,900	8,220	23,900
12	10,300	5,100	17,200	25,800	14,400	147,000	45,900	148,000	263,000	41,800	8,220	20,400
13	9,100	5,800	16,000	30,200	16,700	155,000	43,800	120,000	260,000	41,800	8,220	18,100
14	7,940	5,800	14,400	38,000	27,700	182,000	41,100	97,200	247,000	37,900	8,220	15,600
15	7,380	5,320	13,200	36,000	35,400	202,000	37,300	81,100	211,000	31,800	9,400	14,800
16	6,580	5,100	12,200	29,900	29,500	200,000	32,400	82,100	195,000	29,400	11,800	14,400
17	6,060	4,700	11,800	23,500	25,200	170,000	28,900	94,000	222,000	27,800	11,600	12,900
18	5,560	4,500	11,200	19,600	21,800	134,000	26,100	110,000	296,000	25,000	10,000	11,200
19	5,320	4,300	10,900	19,600	19,600	101,000	25,500	148,000	349,000	22,900	9,400	10,900
20	4,900	4,300	10,900	36,100	18,600	79,200	27,800	178,000	375,000	20,900	9,100	12,200
21	4,700	4,900	11,500	64,300	18,600	65,400	34,200	207,000	400,000	19,400	8,220	11,800
22	4,500	10,500	12,500	83,000	18,600	82,400	37,300	218,000	418,000	18,600	7,940	10,300
23	4,300	46,600	13,200	91,000	16,800	141,000	38,600	211,000	418,000	17,700	7,660	9,400
24	8,420	69,100	12,900	93,000	16,600	152,000	39,800	216,000	400,000	17,700	7,380	8,220
25	25,800	87,000	12,500	91,000	14,400	152,000	39,800	211,000	379,000	17,500	6,840	7,660
26	30,800	106,000	12,500	83,000	14,400	184,000	40,500	195,000	367,000	16,000	6,580	7,940
27	25,800	101,000	12,900	70,900	16,600	203,000	37,900	179,000	341,000	14,400	6,580	9,220
28	19,100	85,000	12,900	57,800	16,600	203,000	38,600	161,000	290,000	14,000	6,320	7,660
29	15,200	73,600	12,200	45,000	-	176,000	59,000	152,000	229,000	13,200	6,060	7,660
30	12,900	66,400	12,200	36,700	-	143,000	69,000	135,000	182,000	12,900	5,800	7,660
31	10,900	-	12,200	31,400	-	111,000	-	111,000	-	12,200	5,800	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						577,960	63,700	4,300	18,640	1,146,000		
November.....						771,880	106,000	4,300	25,730	1,531,000		
December.....						727,500	62,800	10,900	23,470	1,443,000		
Calendar year 1934.....						7,332,900	126,000	850	20,090	14,540,000		
January.....						1,163,300	93,000	10,600	37,530	2,307,000		
February.....						520,800	35,400	14,400	18,960	1,053,000		
March.....						3,430,500	203,000	14,800	110,700	6,804,000		
April.....						1,632,500	92,000	25,500	51,080	3,040,000		
May.....						4,683,500	226,000	66,300	151,100	9,290,000		
June.....						8,066,000	418,000	107,000	268,900	16,000,000		
July.....						1,700,400	169,000	12,200	54,860	3,373,000		
August.....						273,760	11,800	5,800	8,831	543,000		
September.....						414,600	30,000	5,900	13,820	822,300		
Water year 1934-35.....						23,872,700	418,000	4,300	65,400	47,350,000		

South Arkansas River near Salida, Colo.

Location.- Water-stage recorder, lat. 38°31', long. 106°, in sec. 5, T. 49 N., R. 9 E., three-quarters of a mile above mouth and 1½ miles southwest of Salida.

Drainage area.- 208 square miles.

Records available.- October 1933 to September 1935 in reports of U. S. Geological Survey; June 1929 to September 1935 and at point 1½ miles downstream April 1922 to December 1924 in reports of State engineer.

Extremes.- Maximum discharge during year, 673 second-feet June 14 (gage height, 3.88 feet); no flow Apr. 14, 15.
1922-24, 1929-35: Maximum daily discharge, 1,220 second-feet June 17, 1923; no flow at times during 1922, 1931-33, 1935.

Remarks.- Records fair. Discharge estimated Nov. 29 to Dec. 2, Dec. 3, 4, Jan. 20-25, Feb. 25, 26, 28. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	7	50	42	41	41	4	3	93	40	11	26
2	2	7	55	39	43	42	3	3	94	35	18	22
3	2	8	59	49	38	40	3	3	165	32	8	20
4	2	13	60	47	43	40	3	7	232	32	6	22
5	2	12	62	49	42	38	2	12	269	27	6	22
6	1	10	64	50	45	38	3	12	339	20	6	20
7	2	9	62	45	44	44	3	7	395	12	6	25
8	2	9	57	45	45	45	3	6	453	8	4	33
9	2	8	48	45	44	35	2	5	496	6	4	32
10	3	7	52	47	40	29	1	3	535	3	5	29
11	2	7	54	45	38	33	1	2	591	3	6	25
12	4	6	54	47	40	31	1	1	541	3	9	23
13	7	6	53	43	40	30	1	1	561	11	3	21
14	10	6	54	42	40	24	0	2	617	15	2	20
15	8	4	57	44	42	21	0	3	518	16	3	18
16	8	3	54	42	50	18	1	3	451	23	3	13
17	4	4	48	41	52	14	1	2	300	22	1	10
18	6	7	52	39	40	10	4	45	230	22	1	9
19	6	7	45	55	39	8	3	37	237	24	1	8
20	7	6	45	45	37	6	5	34	248	19	1	3
21	6	6	47	42	29	4	3	29	237	17	2	2
22	6	6	48	42	26	4	4	31	202	22	2	3
23	6	10	47	42	26	3	4	54	177	23	1	2
24	6	19	45	42	26	4	4	76	132	15	2	1
25	6	24	45	41	35	4	4	52	104	12	14	5
26	5	26	43	41	45	3	7	72	78	5	4	30
27	5	34	44	41	50	5	8	68	70	2	4	51
28	5	37	45	40	42	4	8	55	60	2	6	48
29	5	40	46	40	-	4	7	59	52	2	5	51
30	6	45	43	42	-	5	5	100	45	11	12	48
31	7	-	41	43	-	5	-	103	-	15	13	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				148	10	1	4.77	294				
November.....				393	-	3	13.1	780				
December.....				1,577	64	41	50.9	3,130				
Calendar year 1934.....				6,597.1	141	.2	18.1	13,080				
January.....				1,360	-	-	43.9	2,700				
February.....				1,122	52	26	40.1	2,230				
March.....				650	44	3	20.3	1,250				
April.....				98	8	0	3.27	194				
May.....				890	103	1	28.7	1,770				
June.....				8,492	617	45	285	16,840				
July.....				519	40	2	16.7	1,030				
August.....				169	13	1	5.45	335				
September.....				642	51	1	21.4	1,270				
Water year 1934-35.....				16,040	617	0	43.9	31,820				

Grape Creek near Westcliffe, Colo.

Location.- Water-stage recorder and weir, lat. $38^{\circ}11'$, long. $105^{\circ}30'$, in sec. 36, T. 21 S., R. 73 W. (revised), 3 miles northwest of Westcliffe.

Drainage area.- 346 square miles.

Records available.- December 1924 to June 1928, October 1933 to September 1935 in reports of U. S. Geological Survey; December 1924 to June 1928, March 1930 to September 1935 in reports of State engineer. No records during winters after 1927.

Extremes.- Maximum discharge during year, 328 second-feet June 16 (gage height, 2.87 feet); minimum daily discharge, 3 second-feet Oct. 5, 6, 8-12, 15, Apr. 16.
1924-28, 1930-35: Maximum discharge, 732 second-feet July 22, 1930 (gage height, 4.60 feet); minimum daily discharge, 1 second-foot at times during June, July 1930, June, July 1934.

Remarks.- Records fair. Discharge estimated July 18-24. No records Nov. 14 to Mar. 20. Diversions for irrigation above station.

Rating table, water year 1934-35 (gage heights, in feet, and discharge, in second-feet)
(Shifting-control method used July 27 to Sept. 30)

0	0	1.0	70	2.0	200
.2	3.0	1.2	94	2.2	228
.4	12	1.4	119	2.4	258
.6	27	1.6	145	2.6	288
.8	48	1.8	172	2.8	318

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	6				-	8	8	7	52	30	77
2	4	6				-	7	7	10	37	25	127
3	5	6				-	7	11	13	44	21	90
4	4	6				-	6	25	18	39	18	61
5	3	6				-	6	50	25	32	17	48
6	3	6				-	6	24	37	25	15	39
7	4	7				-	6	12	45	23	14	32
8	3	7				-	6	11	47	30	12	34
9	3	6				-	8	10	74	58	25	35
10	3	6				-	8	8	120	61	26	38
11	3	6				-	7	7	175	54	21	28
12	3	6				-	6	7	252	64	18	21
13	9	6				-	6	10	230	115	17	18
14	4	-				-	4	30	291	122	16	16
15	3	-				-	4	75	309	159	16	13
16	4	-				-	3	22	306	122	16	10
17	6	-				-	4	46	288	86	12	9
18	6	-				-	16	149	228	84	9	8
19	5	-				-	24	86	188	61	7	8
20	6	-				-	13	38	169	78	6	6
21	5	-				12	11	31	169	76	6	13
22	4	-				10	7	21	179	74	6	20
23	4	-				10	7	14	165	72	9	13
24	5	-				12	9	13	155	70	9	10
25	5	-				10	21	11	127	66	10	10
26	6	-				11	44	10	109	59	77	17
27	5	-				11	41	8	101	51	37	29
28	5	-				8	21	10	84	40	44	39
29	6	-				8	13	10	82	35	63	49
30	6	-				8	10	8	68	40	68	32
31	6	-				9	-	8	-	36	74	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						143	9	3	4.6	284		
November 1-15.....						79	7	5	6.1	157		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March 21-31.....						109	12	8	9.9	216		
April.....						539	44	3	11.5	672		
May.....						730	149	7	25.2	1,550		
June.....						4,117	309	7	137	8,170		
July.....						1,985	159	23	64.0	3,940		
August.....						744	77	6	24.0	1,480		
September.....						949	127	6	31.6	1,880		
Water year												

Huerfano River at Manzanares Crossing near Redwing, Colo.

Location.- Water-stage recorder, lat. $37^{\circ}44'$, long. $105^{\circ}20'$, in sec. 5, T. 27 S., R. 71 W., at Manzanares Crossing, $3\frac{1}{2}$ miles southwest of Redwing.

Drainage area.- 76 square miles.

Records available.- October 1933 to September 1935 in reports of U. S. Geological Survey; July 1923 to September 1935 in reports of State engineer.

Extremes.- Maximum discharge, 1,400 second-feet July 28 (gage height, 3.30 feet); minimum probably occurred during winter.
1923-35: Maximum stage, 4.30 feet July 27, 1934 (discharge not determined); minimum probably occurred during winter.

Remarks.- Records good except those for June 10 to Aug. 10, and those estimated Oct. 28 to Nov. 20, Mar. 1-5, 9-29, which are fair. No records Dec. 1 to Feb. 28.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	9				10	11	16	92	78	141	41
2	23	9				10	10	16	95	78	90	38
3	22	9				10	10	15	103	78	68	39
4	20	9				10	11	17	115	84	56	36
5	16	9				10	12	19	126	68	70	32
6	18	8				11	11	24	124	65	84	31
7	17	8				23	11	27	128	72	75	34
8	15	8				14	11	27	147	80	106	34
9	16	8				14	11	27	167	76	106	35
10	13	8				14	12	27	170	72	89	34
11	16	7				14	11	29	161	65	74	34
12	15	7				14	10	29	154	59	65	31
13	16	7				14	11	31	170	66	55	29
14	15	7				14	11	35	234	66	62	29
15	15	7				14	13	38	222	63	50	26
16	15	8				13	15	41	185	52	40	26
17	15	8				13	15	47	148	56	40	26
18	13	9				13	12	61	138	65	36	26
19	12	9				13	19	54	141	54	31	24
20	14	10				13	20	47	131	51	35	24
21	14	11				12	17	46	136	84	35	25
22	12	15				12	17	48	141	115	32	24
23	14	15				12	20	50	129	119	31	21
24	15	15				12	20	55	119	106	33	23
25	12	15				12	20	63	112	93	36	26
26	11	18				12	18	66	101	91	39	27
27	10	19				12	16	72	97	84	42	32
28	9	18				12	14	76	95	130	50	35
29	9	17				12	14	84	93	65	46	34
30	9	17				12	15	90	80	57	46	29
31	9	-				11	-	97	-	78	42	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						458	23	9	14.8	908		
November.....						324	19	7	10.8	643		
December.....						-	-	-	-	-		
Calendar year 1934.....						-	-	-	-	-		
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						392	23	10	12.6	778		
April.....						420	20	10	14.0	833		
May.....						1,374	97	15	44.3	2,730		
June.....						4,052	254	80	135	8,040		
July.....						2,368	130	31	76.4	4,700		
August.....						1,768	141	31	57.7	3,550		
September.....						905	41	21	30.2	1,800		
Water year 1934-35.....						-	-	-	-	-		

Cucharas River at Boyd ranch near La Veta, Colo.

Location.- Water-stage recorder, lat. 37°25', long. 105°3', in sec. 24, T. 30 S., R. 89 W., 6 miles south of La Veta.

Drainage area.- 75 square miles.

Records available.- October 1934 to September 1935. Records not comparable with those at former station, Cucharas River near La Veta, Colo., located 2 miles downstream.

Extremes.- Maximum discharge during year, 189 second-feet May 25 (gage height, 1.85 feet); minimum daily discharge, 2 second-feet several days November, December, January, and February.

Remarks.- Records fair. Discharge estimated Nov. 21 to Dec. 12, Dec. 19-21, Dec. 31, Jan. 1, Jan. 17-24, Feb. 25-28. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	5	2	4	6	4	5	13	112	41	25	17
2	5	5	2	7	6	5	6	12	102	36	26	18
3	5	4	2	8	6	4	6	12	96	36	26	19
4	5	5	2	6	6	5	6	12	94	35	24	18
5	5	5	2	6	6	5	6	12	96	34	21	16
6	5	5	2	5	6	6	6	13	98	35	20	14
7	5	5	2	5	6	6	6	14	96	32	24	15
8	5	5	2	5	5	5	5	17	96	29	24	16
9	5	5	2	5	6	6	5	19	94	28	24	17
10	5	5	2	5	6	8	5	19	98	28	25	14
11	5	5	2	5	6	7	5	21	94	29	24	14
12	5	5	3	5	7	5	5	24	92	40	26	13
13	5	5	5	5	7	5	5	24	88	44	24	12
14	5	5	5	5	7	6	5	24	100	49	21	12
15	5	5	5	5	6	6	6	25	102	41	21	12
16	5	5	5	5	6	7	6	26	102	33	19	11
17	5	5	5	2	6	6	6	46	94	33	19	11
18	5	5	6	2	5	6	6	66	83	45	19	11
19	5	5	4	2	5	6	9	60	80	40	17	11
20	5	4	4	2	6	6	11	50	74	37	19	10
21	5	3	4	2	5	6	12	48	86	35	21	11
22	5	2	6	2	5	6	13	66	90	35	18	10
23	5	2	6	3	6	5	12	110	80	32	20	9
24	5	2	5	3	6	6	13	158	72	31	21	10
25	5	2	5	5	2	5	12	170	68	29	19	13
26	5	2	6	5	2	5	12	162	64	28	18	16
27	5	2	5	6	2	6	12	148	59	26	18	17
28	5	2	5	5	2	5	12	134	56	26	19	19
29	5	2	5	5	-	6	11	119	52	24	19	18
30	5	2	5	5	-	6	12	114	50	26	18	15
31	5	-	4	6	-	6	-	114	-	26	18	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						155	5	5	5.0	307		
November.....						119	5	-	4.0	236		
December.....						120	6	-	3.9	239		
Calendar year												
January.....						141	8	-	4.5	280		
February.....						149	7	-	5.5	296		
March.....						176	9	4	5.7	349		
April.....						241	13	5	8.0	478		
May.....						1,842	170	12	59.4	3,660		
June.....						2,567	112	50	85.6	5,090		
July.....						1,041	49	24	33.6	2,060		
August.....						657	26	17	21.2	1,300		
September.....						418	19	9	13.9	829		
Water year 1934-35.....						7,626	170	-	20.9	15,110		

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 (revised). Prior to 1922 station was located at Commercial Street Bridge. Flow comparable.

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, October 1933 to September 1935 in reports of U. S. Geological Survey; May 1896 to July 1899, August to December 1905, November 1906 to March 1907, October 1907 to November 1912, April 1916 to September 1935 in reports of State engineer.

Average discharge.- 23 years (1907-12, 1916-18, 1919-35), 88.8 second-feet.

Extremes.- Maximum gage height during year, 4.00 feet July 14 (discharge undetermined); minimum daily discharge, 4 second-feet Apr. 14-17.
1896-99, 1905, 1906-12, 1916-35: Maximum discharge, 45,400 second-feet Sept. 30, 1904 (gage height, 16.6 feet, Commercial Street gage). Minimum daily discharge, 2 second-feet Apr. 9, 10, 14-24, 1911, Apr. 13-22, 1925.

Remarks.- Records good except those estimated Jan. 20-23, Feb. 26-28. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	16	17	18	11	15	8	23	158	133	70	114
2	13	17	26	25	10	15	10	31	154	123	98	98
3	13	17	30	52	12	15	10	34	158	126	145	96
4	14	16	50	59	12	13	6	37	162	126	107	98
5	14	16	40	15	13	10	6	35	165	117	74	84
6	13	16	44	24	15	12	7	39	238	107	88	68
7	14	16	16	25	16	10	9	39	244	133	93	208
8	15	17	36	20	17	10	7	39	250	162	141	210
9	15	17	28	19	17	10	7	42	256	150	114	117
10	16	17	37	16	13	12	7	46	355	126	104	68
11	23	17	32	11	17	12	5	43	364	114	126	61
12	23	17	35	15	13	13	7	50	332	268	141	55
13	21	16	28	11	13	13	5	64	332	310	93	40
14	20	16	23	9	14	10	4	66	508	487	84	40
15	18	14	22	14	14	7	4	66	508	166	76	43
16	16	13	24	11	15	7	4	81	518	117	84	39
17	15	15	16	6	15	8	4	262	574	110	180	34
18	16	15	20	7	16	7	16	518	382	123	93	30
19	16	13	15	13	18	6	19	195	355	123	93	27
20	16	12	30	9	16	7	18	123	332	114	72	27
21	15	20	21	9	15	7	22	107	348	325	70	23
22	15	17	19	10	13	10	19	88	409	180	145	27
23	15	15	19	11	12	10	18	226	364	162	154	27
24	15	17	13	20	10	12	26	302	325	114	88	27
25	15	17	14	23	7	12	27	256	250	101	81	34
26	15	13	14	17	10	10	27	220	373	101	72	42
27	16	15	15	10	13	8	22	200	256	93	88	45
28	16	9	19	15	16	9	21	226	205	88	98	64
29	16	19	15	13	-	10	24	175	190	101	170	70
30	16	30	15	12	-	10	26	162	154	70	550	55
31	16	-	13	11	-	12	-	162	-	70	166	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							496	23	13	16.0	984	
November.....							497	30	9	16.2	966	
December.....							746	50	13	24.1	1,480	
Calendar year 1934.....							12,467	350	6	34.2	24,730	
January.....							528	59	6	17.0	1,050	
February.....							383	18	7	13.7	760	
March.....							322	15	6	10.4	639	
April.....							394	27	4	13.1	781	
May.....							3,979	518	23	128	7,890	
June.....							9,239	574	154	308	18,330	
July.....							4,640	487	70	150	9,200	
August.....							3,758	550	70	121	7,450	
September.....							1,971	210	23	65.7	3,910	
Water year 1934-35.....							26,945	574	4	73.6	53,440	

Purgatoire River at Ninemile Dam, near Higbee, Colo.

Location.- Water-stage recorder, lat. $37^{\circ}45'$, long. $103^{\circ}28'$, in sec. 32, T. 26 S., R. 54 W., at Ninemile Dam, 4 miles southwest of Higbee. Smith Canyon enters 4 miles below station. Datum lowered 0.60 foot Oct. 28, 1934.

Drainage area.- 2,900 square miles.

Records available.- October 1933 to September 1935 in reports of U. S. Geological Survey; October 1924 to September 1935 in reports of State engineer.

Average discharge.- 11 years, 101 second-feet.

Extremes.- Maximum discharge during year, 16,200 second-feet July 22 (gage height, 7.86 feet); no flow several days during December, April, and May.
1924-35: Maximum discharge, 64,500 second-feet (slope measurement) Sept. 15, 1934 (gage height, 12.60 feet, present datum); no flow at times nearly every year.

Remarks.- Records good. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	1.0	1.0	10	14	6.9	0.5	1.0	68	32	21	254
2	7.0	1.0	1.0	10	12	4.7	.5		65	22	20	123
3	6.2	1.0	1.0	10	12	4.3	.5	0	46	29	15	63
4	5.1	1.0	1.0	10	10	4.1	.5	1.0	42	35	19	50
5	4.7	1.0	1.0	10	11	3.3	.5	1.5	34	18	15	30
6	4.1	1.0	1.0	10	9.8	3.5	.5	1.0	27	12	14	57
7	3.7	1.0	1.0	10	9.5	6.2	.5	.8	25	12	14	570
8	3.2	1.0	1.0	10	9.8	4.0	.5	.2	23	23	5	2,550
9	3.0	1.0	1.0	11	10	3.5	.5	1.0	21	17	10	866
10	2.6	1.0	0	11	9.8	3.3	.2	307	14	28	12	558
11	2.6	1.0	0	11	9.8	4.1	.5	13	85	28	8	261
12	2.6	1.0	0	14	9.5	3.7	.5	36	30	29	7	144
13	2.6	1.0	0	14	9.5	3.8	.2	13	76	17	10	87
14	2.6	1.0	0	14	9.2	2.8	.2	11	72	55	14	55
15	2.6	1.0	0	13	5.4	2.6	.2	35	54	189	7	41
16	2.6	1.0	0	13	2.0	2.6	.2	104	35	97	3	35
17	2.0	1.0	0	7.8	8.4	2.6	.2	90	248	104	140	29
18	2.0	1.0	0	7.0	8.9	2.0	.2	1,090	136	63	2,100	24
19	2.0	1.0	2.0	3.0	8.2	2.0	.2	3,010	100	16	400	22
20	2.0	1.0	4.0	3.0	7.6	1.5	.1	1,080	88	6	144	17
21	2.0	1.0	5.0	3.0	7.0	1.0	.1	206	68	1,380	70	15
22	2.0	1.0	8.0	3.0	30	1.0	.1	104	35	4,010	35	14
23	2.0	1.0	10	6.7	3.0	1.0	.1	59	42	1,670	24	12
24	2.0	1.0	10	7.2	3.0	1.0	0	43	42	466	9	11
25	2.0	1.0	10	4.7	7.0	1.0	6.7	97	37	112	30	11
26	2.0	1.0	10	15	7.0	1.0	6.5	164	148	68	128	61
27	2.0	1.0	10	5.1	5.9	.9	3.7	136	766	61	26	30
28	2.0	1.0	10	6.0	5.1	.8	2.0	94	300	60	1,460	20
29	2.0	1.0	10	6.0	-	.8	1.5	1,550	124	52	1,980	14
30	2.0	1.0	10	8.2	-	.5	1.0	1,140	48	31	307	37
31	1.0	-	10	13	-	.5	-	194	-	25	97	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						92.1	7.9	1.0	2.97	183		
November.....						30.0	1.0	1.0	1.00	60		
December.....						118.0	10	0	3.81	234		
Calendar year 1934.....						24,023.1	11,300	0	65.8	47,650		
January.....						279.7	15	3.0	9.02	555		
February.....						254.4	30	2.0	9.09	505		
March.....						80.6	6.9	.5	2.60	160		
April.....						28.9	6.7	0	.96	57		
May.....						9,532.5	3,010	0	307	18,910		
June.....						2,892	766	14	96.4	5,740		
July.....						8,765	4,010	8	235	17,550		
August.....						7,144	2,100	3	230	14,170		
September.....						5,566	2,350	11	196	11,640		
Water year 1934-35.....						35,081.2	4,010	0	96.1	69,590		

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

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

Drainage area.- 3,320 square miles.

Records available.- October 1933 to September 1935 in reports of U. S. Geological Survey; October 1931 to September 1935 in reports of State engineer.

Extremes.- Maximum discharge during year, 9,050 second-feet Sept. 8 (gage height, 7.00 feet); no flow several days during year.

1931-35: Maximum discharge, 33,000 second-feet (slope measurement) Sept. 15, 1934 (gage height, 14.00 feet, from flood marks); no flow at times during 1932-35.

Remarks.- Records fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	1	3	4	0	3		0	160	40	28	119
2	4	1	6	4	0	2		0	102	21	19	215
3	4	1	7	4	0	1		0	93	45	15	119
4	4	1	8	4	2	0		0	83	22	12	90
5	4	1	9	4	2	0		0	76	31	10	88
6	3	1	10	4	1	0		0	45	15	10	75
7	3	1	10	5	1	0		0	48	11	9	90
8	3	1	10	4	1	0		0	41	75	8	3,410
9	3	1	11	4	1	0		4	5	67	7	725
10	3	1	11	6	1	0		128	19	23	6	440
11	2	1	11	7	1	0		137	17	9	5	220
12	2	1	10	6	1	0		37	45	26	0	134
13	2	1	4	9	1	0		17	28	19	0	113
14	2	1	11	11	1	0		16	34	12	0	92
15	2	1	1	14	0	0		18	50	56	0	75
16	1	2	1	12	0	0		56	33	80	0	65
17	1	2	1	10	0	0		150	160	53	0	51
18	1	2	0	8	0	0		580	195	73	1,410	25
19	1	2	0	8	0	0		6,040	116	34	548	24
20	1	2	0	8	0	0		1,010	80	13	195	17
21	1	2	0	6	0	0		312	64	10	88	13
22	1	2	1	4	0	0		180	28	5,130	54	10
23	1	2	1	3	0	0		155	32	1,560	41	8
24	1	2	2	1	0	0		128	19	645	24	6
25	1	2	2	2	0	0		125	19	345	19	12
26	1	2	3	3	0	0		215	19	190	35	140
27	1	2	3	0	0	0		122	1,160	131	70	100
28	1	2	3	0	1	0		116	175	128	95	56
29	1	2	3	0	-	0		612	170	85	2,040	22
30	1	2	4	0	-	0		1,030	85	62	440	11
31	1	-	4	0	-	0		337	-	45	170	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				61	4	1	2.0	121				
November.....				45	2	1	1.5	89				
December.....				141	11	0	4.5	280				
Calendar year 1934.....				15,065	2,500	0	41.3	29,820				
January.....				155	14	0	5.0	307				
February.....				14	2	0	.5	28				
March.....				6	3	0	.2	12				
April.....				0	0	0	0	0				
May.....				11,525	6,040	0	372	22,860				
June.....				3,204	1,160	5	107	6,360				
July.....				6,852	3,130	9	221	13,590				
August.....				5,359	2,040	0	173	10,530				
September.....				6,565	3,410	6	219	13,020				
Water year 1934-35.....				35,926	6,040	0	92.9	67,300				

Wild Horse Creek at Holly, Colo.

Location.— Water-stage recorder, lat. 38°3', long. 102°7', in sec. 15, T. 23 S., R. 42 W., a quarter of a mile southeast of Holly and just above mouth.

Records available.— October 1922 to September 1927, October 1933 to September 1935 in reports of U. S. Geological Survey; October 1922 to September 1935 in reports of State engineer.

Extremes.— Maximum discharge during year, 22,000 second-feet (slope measurement at point 11 miles above station) Aug. 28; no flow most of year.

Remarks.— Records poor. Diversions for irrigation above station. Flood on Aug. 28, 1935, closed the siphon where Holly Drain crossed Wild Horse Creek and caused Holly Drain to discharge into Arkansas River above gaging station on Arkansas River at Holly and caused Wild Horse Creek to discharge down the former channel of Holly Drain. No flow passed the station on Wild Horse Creek after Aug. 28.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0		0	1.2		0	0	17	0	
2		0	0		0	0		0	0	4.6	0	
3		0	0		0	0		0	0	41	0	
4		12	0		0	0		0	0	0	0	
5		12	4.5		0	0		0	0	0	0	
6		12	4.5		0	0		0	0	0	0	
7		12	0		0	0		0	0	0	0	
8		9.8	0		0	0		0	0	0	0	
9		9.8	0		0	0		0	0	0	0	
10		9.8	0		0	0		0	0	0	0	
11		14	0		0	0		0	0	0	0	
12		14	0		0	0		0	0	62	0	
13		14	0		0	0		0	0	0	0	
14		7.8	0		5.5	0		0	0	0	0	
15		6.9	0		5.5	0		0	0	0	0	
16		6.9	0		0	0		0	0	0	0	
17		6.9	0		0	0		0	0	0	0	
18		6.9	0		7.5	0		0	0	0	0	
19		6.9	0		7.5	0		0	0	0	0	
20		6.9	0		7.5	0		0	0	0	0	
21		6.9	0		0	0		2.5	52	0	0	
22		6.9	0		1.0	0		0	21	0	0	
23		0	0		0	0		0	23	0	0	
24		0	0		0	0		0	23	0	0	
25		0	0		0	0		0	23	0	0	
26		0	0		0	0		0	0	0	0	
27		0	0		0	0		0	0	0	0	
28		0	0		0	0		0	0	0	*	
29		0	0		0	0		0	0	0	0	
30		0	0		0	0		0	0	0	0	
31		0	0		0	0		0	0	0	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0	0	0	0	0
November.....	182.4	14	0	6.08	362
December.....	9.0	4.5	0	.29	18
Calendar year 1934	386	34	0	1.1	770
January.....	0	0	0	0	0
February.....	34.6	7.6	0	1.24	69
March.....	1.2	1.2	0	.04	2.4
April.....	0	0	0	0	0
May.....	2.5	2.5	0	.08	5.0
June.....	140	52	0	4.67	278
July.....	124.6	62	0	4.02	247
August.....	0	*	0	0	0
September.....	-	-	-	-	-
The period.....				1.35	981

*Discharge for Aug. 28, 1935, included in record for Arkansas River at Holly, Colo. (See paragraph under "Remarks").

Holly Drain near Holly, Colo.

Location.- Water-stage recorder, lat. $38^{\circ}3'$, long. $102^{\circ}3'$, in sec. 16, T. 23 S., R. 41 W., 100 yards west of Colorado-Kansas line. Cheyenne Creek enters just above station.

Records available.- January 1924 to September 1927, October 1933 to September 1935 in reports of U. S. Geological Survey; January 1924 to September 1935 in reports of State engineer.

Average discharge.- 11 years, 32.6 second-feet.

Extremes.- Maximum discharge during year, 1,420 second-feet Aug. 28 (gage height, 10.43 feet); minimum daily discharge, 6 second-feet Sept. 23, 24, 27, 1924-35: Maximum discharge, that of Aug. 28, 1935; minimum daily discharge, that of Sept. 23, 24, 27, 1935.

Remarks.- Records good except those estimated for Nov. 15-18, Nov. 28 to Dec. 4, Dec. 16, June 9, 10.

After flood on Aug. 28, 1935, records include the flow of Wild Horse Creek but they do not include the flow of Holly Drain above the point where the drain crossed Wild Horse Creek. (See "Remarks" in station description for Wild Horse Creek at Holly, Colo.)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	19	18	18	14	17	20	15	72	65	11	28
2	22	21	18	18	14	21	20	17	57	46	10	15
3	22	24	18	19	14	21	21	15	63	29	9	10
4	22	21	18	19	14	19	22	16	128	12	11	10
5	23	15	19	19	14	19	20	16	102	11	11	9
6	24	15	24	19	14	18	21	18	65	16	11	10
7	30	15	25	19	18	16	23	18	51	15	10	9
8	32	15	25	19	21	16	24	15	42	13	10	8
9	28	14	18	14	20	24	22	15	35	11	10	9
10	28	14	17	14	19	20	27	15	26	9	11	25
11	32	15	17	14	18	22	27	15	20	10	11	26
12	30	15	18	13	18	20	20	15	24	126	11	28
13	28	15	16	15	16	19	20	22	18	19	11	28
14	27	15	16	14	12	19	23	38	26	22	11	20
15	31	15	16	14	11	20	24	21	48	29	11	17
16	26	15	16	13	15	18	25	19	57	12	11	18
17	33	15	16	13	17	18	19	26	72	11	11	13
18	31	15	16	13	17	18	16	39	57	10	11	10
19	26	15	16	13	17	17	14	21	73	11	11	12
20	24	15	16	13	16	17	14	48	56	12	12	11
21	24	15	17	14	21	18	14	57	87	12	12	8
22	23	16	17	13	19	18	14	50	60	11	11	7
23	21	19	16	12	20	17	14	47	64	11	11	6
24	17	16	17	13	14	18	13	43	58	12	11	6
25	21	17	17	13	13	18	14	33	57	15	11	8
26	16	18	17	13	14	18	14	27	42	12	11	12
27	17	19	17	13	16	18	13	26	15	11	11	6
28	17	18	16	13	18	19	14	26	12	10	810	14
29	17	18	16	13	-	20	13	29	32	10	116	9
30	19	18	18	13	-	20	15	26	48	9	20	7
31	19	-	18	13	-	20	-	67	-	9	21	-
Month	Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet			
October.....	752		33		16		24.3		1,490			
November.....	497		24		14		16.6		986			
December.....	551		25		16		17.6		1,090			
Calendar year 1934.....	8,683		78		12		23.8		17,210			
January.....	454		19		12		14.6		900			
February.....	454		21		11		16.2		900			
March.....	583		24		16		18.8		1,160			
April.....	560		27		13		18.7		1,110			
May.....	853		67		15		27.5		1,690			
June.....	1,869		128		12		52.3		3,110			
July.....	611		126		9		19.7		1,210			
August.....	1,260		810		9		40.6		2,500			
September.....	400		29		6		13.3		793			
Water year 1934-35.....	8,544		810		6		23.4		16,940			

Amazon Canal near Hartland, Kans.

Location.- Water-stage recorder, lat. 37°53'8", long. 101°22'18", in SE¼ sec. 9, T. 25 S.; 37 W., 2½ miles below head gate and half a mile west of Hartland.

Records available.- Irrigation seasons 1921-24, October 1930 to September 1935 in reports of U. S. Geological Survey; March 1925 to September 1930 in reports of Division of Water Resources, State Board of Agriculture.

Extremes.- Maximum discharge during year, 411 second-feet May 27 (gage height, 7.90 feet); no flow during extensive periods.
1921-24, 1930-35: Maximum discharge, 490 second-feet Aug. 28, 1933 (gage height, 8.80 feet); no flow during extensive periods.

Remarks.- Records fair. Canal diverts water from left bank of Arkansas River in sec. 7, T. 25 S., R. 37 W. Water used for irrigation.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	104	137	0	239
2								0	218	80	0	94
3								0	191	0	0	0
4								0	179	0	0	0
5								0	177	0	0	0
6								0	178	0	0	0
7								0	187	0	0	0
8								0	186	0	0	0
9								0	188	153	0	18
10								0	180	101	0	227
11								0	102	0	0	104
12								0	94	90	0	0
13								20	80	208	0	0
14								20	80	220	0	0
15								0	164	238	0	0
16								0	136	242	0	0
17								55	85	157	0	0
18								43	71	153	0	0
19								36	49	149	0	0
20								140	174	96	0	0
21								178	187	0	0	0
22								180	177	0	0	0
23								186	162	124	0	0
24								90	109	236	0	0
25								0	104	253	0	0
26								0	84	231	0	0
27								51	129	209	0	0
28								43	128	208	118	93
29								40	188	69	244	0
30								37	189	0	256	0
31								33	-	0	251	-
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 1934.....				2,781	239	0	7.62	5,530				
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.....				1,152	186	0	37.2	2,280				
June.....				4,174	218	49	139	8,280				
July.....				3,355	253	0	108	6,650				
August.....				866	256	0	27.9	1,720				
September.....				776	239	0	25.8	1,540				
Water year 1934-35.....				10,322	256	0	28.3	20,470				

South Side Ditch near Hartland, Kans.

Location.- Water-stage recorder, lat. 37°52'24", long. 101°21'38", in SE $\frac{1}{4}$ sec. 15, T. 25 S., R. 37 W., three-quarters of a mile south of Hartland and $\frac{1}{8}$ miles below diversion from Arkansas River.

Records available.- Irrigation season 1921-24, October 1930 to September 1935 in reports of U. S. Geological Survey; October 1924 to September 1930 in reports of Division of Water Resources, State Board of Agriculture.

Extremes.- Maximum discharge during year, 228 second-feet Sept. 1 (gage height, 7.74 feet); no flow during extensive periods.
1921-24, 1930-35: Maximum discharge, 306 second-feet Sept. 18, 1934 (gage height, 8.15 feet); no flow during extensive periods.

Remarks.- Records fair. Ditch diverts water from right bank of Arkansas River in sec. 16, T. 25 S., R. 37 W. Water used for irrigation.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0			0	77	122	62	178
2					0			0	85	58	57	152
3					0			0	126	0	40	41
4					0			0	113	0	27	0
5					0			0	101	0	17	0
6					24			0	66	0	18	0
7					42			0	35	0	8	0
8					42			0	47	0	0	0
9					40			0	47	102	0	0
10					40			0	77	32	0	29
11					39			0	73	0	0	21
12					36			0	73	50	0	0
13					27			0	84	135	0	0
14					0			0	44	66	0	0
15					0			0	68	111	0	0
16					0			0	68	78	0	0
17					0			0	76	83	0	0
18					0			0	98	38	0	0
19					0			0	107	0	0	0
20					0			0	130	40	0	0
21					0			0	112	71	0	0
22					0			0	106	64	0	0
23					0			0	96	114	0	0
24					0			0	109	193	0	0
25					0			0	118	180	0	0
26					0			0	108	147	0	0
27					0			0	49	131	0	0
28					0			46	44	76	69	0
29					-			77	79	89	139	0
30					-			52	107	121	187	0
31								77	-	87	199	-
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												
January.....						0	0	0	0	0		
February.....						290	42	0	10.4	575		
March.....						0	0	0	0	0		
April.....						0	0	0	0	0		
May.....						262	77	0	8.1	500		
June.....						2,503	130	35	83.4	4,960		
July.....						2,186	193	0	70.5	4,340		
August.....						821	199	0	26.5	1,630		
September.....						421	178	0	14.0	835		
Water year 1934-35.....						6,473	199	0	17.7	12,840		

Great Eastern Canal at Lakin, Kans.

Location.- Water-stage recorder, lat. 37°56'9", long. 101°16'17", in NE¼ sec. 28, T. 24 S., R. 36 W., half a mile west of Lakin and 6 miles northeast of Hartland.

Records available.- Irrigation seasons 1921-24, October 1930 to September 1935 in reports of U. S. Geological Survey; November 1924 to September 1930 in reports of Division of Water Resources, State Board of Agriculture.

Extremes.- Maximum discharge during year (estimated), 600 second-feet May 27 (gage height, 11.15 feet); no flow during extensive periods.
1921-24, 1930-35: Maximum discharge, that of May 27, 1935; no flow during extensive periods.

Remarks.- Records fair. Stage-discharge relation affected by ice Dec. 28-31. Canal diverts water from left bank of Arkansas River 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	3	27	46		0	213	135	0	204
2			0	1	25	38		0	250	0	0	195
3			0	11	26	28		0	*254	0	0	130
4			0	6	26	36		0	*291	0	0	125
5			0	19	23	31		0	290	0	0	107
6			0	42	12	24		0	278	0	0	125
7			0	110	0	24		0	173	0	0	81
8			0	55	0	16		0	59	0	0	66
9			0	43	0	21		0	10	110	0	55
10			0	38	0	21		0	3	31	0	410
11			3	36	0	24		0	0	3	0	347
12			6	36	0	23		0	0	86	0	250
13			12	31	0	19		0	0	237	0	225
14			17	24	16	11		0	0	197	0	165
15			13	26	27	5		0	12	173	0	87
16			12	27	21	2		0	18	56	0	2
17			11	19	24	0		5	18	0	0	0
18			14	11	11	1		3	0	0	0	0
19			5	10	9	1		0	15	0	0	0
20			3	0	7	0		103	134	0	0	0
21				0	7	0		413	192	0	0	0
22			15	0	6	0		413	71	0	0	0
23			14	0	7	0		362	65	290	0	0
24			10	0	3	0		230	52	301	0	0
25			20	0	0	0		298	56	346	0	0
26			10	11	0	0		274	67	232	0	0
27			2	27	0	0		365	9	123	0	0
28			6	71	1	0		*33	0	40	270	0
29			12	62	-	0		*260	245	7	264	0
30			8	41	-	0		*150	253	6	223	0
31			6	32	-	0		*200	-	2	218	-
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.....						221	22	0	7.1	435		
Calendar year												
January.....						792	110	0	25.5	1,570		
February.....						278	27	0	9.9	551		
March.....						371	46	0	12.0	758		
April.....						0	0	0	0	0		
May.....						3,154	413	0	102	6,260		
June.....						3,028	291	0	101	6,010		
July.....						2,425	346	0	78.2	4,310		
August.....						980	270	0	31.6	1,940		
September.....						2,634	410	0	87.8	5,220		
Water year 1934-35.....						13,893	418	0	33.0	27,540		

*Estimated.

Farmers Ditch near Garden City, Kans.

Location.- Water-stage recorder, lat. 37°59'52", long. 101°3'39", 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.- Irrigation seasons 1921-24, October 1930 to September 1935 in reports of U. S. Geological Survey; March 1925 to September 1930 in reports of Division of Water Resources, State Board of Agriculture.

Extremes.- Maximum discharge during year, 311 second-feet July 25 (gage height, 8.20 feet); no flow during extensive periods.
1921-24, 1930-35: Maximum discharge, 317 second-feet Aug. 5, 1933 (gage height, 7.97 feet); no flow during extensive periods.

Remarks.- Records fair. Ditch diverts water from left bank of Arkansas River in sec. 12, T. 24 S., R. 35 W. Water used for irrigation.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0		0	0			0	115	54	17	87
2		0		0	0			0	22	76	14	91
3		0		0	0			0	38	112	11	50
4		0		0	0			0	98	144	8	41
5		0		0	0			0	30	150	4	36
6		0		0	0			0	40	113	4	29
7		0		0	0			0	46	76	2	22
8		0		0	0			0	44	55	0	22
9		0		0	0			0	29	55	0	18
10		0	*1	0	0			0	30	98	0	169
11		0		0	0			0	29	120	0	195
12		0		0	0			0	29	157	0	139
13		0		0	0			0	24	242	0	49
14		0		0	0			0	23	256	0	24
15		0		0	0			0	23	220	0	16
16		0		0	0			0	22	113	0	39
17		0		0	*1			0	30	65	0	64
18		0		0	0			0	24	44	0	51
19		0		0	0			0	29	32	0	33
20		0	0	0	0			2	37	15	0	24
21		0	0	0	0			51	66	0	0	15
22		0	0	0	0			166	61	0	0	13
23		0	0	0	0			220	51	33	0	10
24		0	0	0	0			179	28	268	0	8
25		0	0	0	0			130	16	299	0	6
26		0	0	*1	*1			78	55	216	0	14
27		*0	0	0	*1			78	59	94	0	6
28		*1	0	0	*1			92	62	39	54	169
29		*1	0	0	0			110	12	29	269	196
30		*1	0	0	0			132	86	30	265	139
31		-	0	0	0			147	-	24	290	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	0					0	0	0	0			
November.....	3					-	0	0	.1			
December.....	19					-	0	0	.6			
Calendar year 1934.....	2,838					223	0	7.78	5,650			
January.....	7					-	0	.2	14			
February.....	12					-	0	.4	24			
March.....	0					0	0	0	0			
April.....	0					0	0	0	0			
May.....	1,405					220	0	45.3	2,790			
June.....	1,258					115	12	41.9	2,500			
July.....	3,232					299	0	104	6,410			
August.....	938					290	0	30.3	1,860			
September.....	1,774					196	6	59.1	3,520			
Water year 1934-35.....	6,648					299	0	23.7	17,160			

*Estimated.

Garden City Canal near Garden City, Kans.

Location.- Water-stage recorder, lat. 37°59'37", long. 101°2'29", in SW $\frac{1}{4}$ sec. 3, T. 24 S., R. 34 W., $1\frac{1}{2}$ miles below diversion from Arkansas River, 3 miles west of Holcomb, and 9 miles west of Garden City.

Records available.- Irrigation season 1921-24, October 1930 to September 1935 in reports of U. S. Geological Survey; March 1925 to September 1930 in reports of Division of Water Resources, State Board of Agriculture.

Extremes.- Maximum discharge during year, 55 second-feet May 21; maximum gage height, 8.02 feet Sept. 30; no flow during extensive periods.
1921-24, 1930-35: Maximum discharge, 80 second-feet Oct. 5, 1930 (gage height, 7.14 feet); no flow during extensive periods.

Remarks.- Records fair. Canal diverts water from left bank of Arkansas River in sec. 5, T. 24 S., R. 34 W. Water used for irrigation.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	1	1		0		0	2	16	0	0
2		0	1	1		0		0	14	0	0	0
3		0	1	1		0		0	5	12	0	0
4		0	1	1		0		0	3	21	0	0
5		0	1	1		0		0	2	20	0	0
6		0	1	1		0		0	2	20	0	0
7		0	1	1		0		0	1	13	0	0
8		0	1	1		1		0	1	7	0	0
9		0	1	1		1		0	0	6	0	0
10		0	1	1		1		0	0	5	0	0
11		0	1	1		2		0	0	3	0	0
12		0	1	1		1		0	0	16	0	0
13		0	1	1		1		0	0	28	0	0
14		0	1	1		1		10	0	11	0	0
15		0	1	1		1		18	0	8	0	0
16		0	1	1		1		15	0	5	0	0
17		0	1	1		1		24	0	0	0	0
18		0	1	1		0		31	0	0	0	0
19		0	1	1		0		19	0	0	0	0
20		0	1	1		0		35	0	3	0	0
21		0	1	1		0		51	12	24	0	0
22		1	1	1		0		12	6	24	0	0
23		0	1	2		0		2	5	28	0	0
24		0	1	2		0		2	4	43	0	0
25		0	1	1		0		2	0	25	0	0
26		0	1	0		0		2	0	18	0	0
27		1	1	0		0		4	17	11	0	0
28		1	1	0		0		33	25	0	0	0
29		0	1	0		0		8	23	0	13	2
30		1	1	0		0		4	37	0	0	35
31		-	1	0		0		2	-	0	0	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						4	1	0	0	.1 7.9		
December.....						31	.1	1	1.0	61		
Calendar year												
January.....						27	2	0	.9	54		
February.....						0	0	0	0	0		
March.....						11	2	0	.4	22		
April.....						0	0	0	0	0		
May.....						274	51	0	8.8	543		
June.....						159	37	0	5.3	315		
July.....						367	43	0	11.8	728		
August.....						13	13	0	.4	26		
September.....						35	33	0	1.2	69		
Water year 1934-35.....						921	51	0	2.5	1,830		

Pawnee River near Larned, Kans.

Location.- Water-stage recorder, lat. 36°11', long. 99°18'40", in NW¼ sec. 33, T. 21 S., R. 18 W., about 300 feet below Moffet Dam and 1½ miles west of Larned.

Drainage area.- 2,300 square miles.

Records available.- November 1924 to September 1935.

Average discharge.- 11 years, 49 second-feet.

Extremes.- Maximum discharge during year (estimated and includes about 11,000 second-feet which overflowed above the station into Saw Mill Creek and thence into the Arkansas River above gaging station at Larned), 20,000 second-feet May 28 (gage height, 31.96 feet); no flow during extensive periods.

1924-35: Maximum discharge, that of May 28, 1935; no flow during periods in 1928, 1930, 1931, 1933, and 1935. Bank-full stage, 24 feet.

Remarks.- Records fair. Diversions for irrigation by pumping above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	2	2	2	1	0		0	340	268	8	286
2	1	2	2	2	1	0		0	674	220	7	200
3	1	3	2	2	1	0		0	263	275	7	956
4	1	2	2	2	1	0		0	93	52	6	506
5	1	2	2	2	1	0		0	68	160	6	62
6	1	2	2	2	0	0		0	55	128	5	25
7	1	2	2	2	1	0		0	45	32	5	14
8	1	2	2	2	1	0		0	45	20	5	9
9	1	2	2	2	1	1		0	40	15	4	7
10	1	2	2	2	1	0		0	36	19	2	6
11	1	2	2	2	2	0		0	35	14	2	6
12	1	2	2	2	2	0		0	425	12	1	6
13	1	2	2	2	2	0		0	138	12	1	5
14	1	2	2	2	3	0		92	560	11	0	5
15	1	2	2	2	2	0		1,370	245	12	0	4
16	2	2	2	2	2	0		520	794	13	0	4
17	1	3	2	2	2	0		44	2,430	14	0	4
18	1	3	2	2	2	0		412	425	7	1	3
19	26	2	2	2	2	0		1,870	283	4	1	3
20	234	2	2	2	2	0		2,280	162	4	1	2
21	76	2	2	1	2	0		2,610	53	5	1	2
22	27	2	2	2	2	0		1,680	39	6	2	2
23	12	2	2	2	2	0		229	34	7	812	2
24	7	2	2	2	1	0		52	32	7	1,400	1
25	5	3	2	2	1	0		30	23	8	116	1
26	4	3	2	2	1	0		13	60	9	16	2
27	3	3	2	2	1	0		1,080	580	9	9	6
28	3	2	2	2	1	0		12,800	550	9	128	268
29	3	2	2	2	-	0		17,000	512	9	658	128
30	3	2	2	2	-	0		3,770	234	8	742	56
31	2	-	2	2	-	0		1,590	-	8	1,420	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	434	234	1	14.0	561
November.....	66	3	1	2.2	131
December.....	62	2	2	2.0	123
Calendar year 1934.....	9,502	1,270	1	26.0	18,850
January.....	61	2	1	2.0	121
February.....	41	3	0	1.5	81
March.....	2	1	0	.1	4
April.....	0	0	0	0	0
May.....	48,371	17,000	0	1,560	95,940
June.....	9,572	2,430	23	319	18,990
July.....	1,583	273	4	44.6	2,740
August.....	5,566	1,420	0	173	10,640
September.....	2,563	956	1	85.4	6,080
Water year 1934-35.....	67,921	17,000	0	186	134,700

*Discharge for May 28, 29 includes the water which overflowed above the station into Saw Mill Creek and thence into Arkansas River above gaging station at Larned.

Little Arkansas River at Valley Center, Kans.

Location.- Water-stage recorder, lat. 37°50'5", long. 97°23'10", in SW¼ sec. 36, T. 25 S., R. 1 W., half a mile west of Valley Center and 16 miles above mouth. Prior to Feb. 12, 1935, chain gage located 2 miles downstream.

Drainage area.- 1,316 square miles (1,332 square miles at former site).

Records available.- February to September 1935. June 1922 to February 1935 at station 2 miles downstream, lat. 37°48'50", long. 97°22'30".

Average discharge.- 13 years, 148 second-feet.

Extremes.- Maximum discharge during year, 8,500 second-feet May 28 (gage height, 17.03 feet); minimum, 10 second-feet Oct. 10-14.

1922-35: 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 fair except those for period Oct. 1 to Feb. 11, which are poor. No significant inflow occurs between the stations. The daily discharge for both stations are used to make a full record-year.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	18	25	22	22	21	26	24	2,920	1,650	30	25
2	192	18	25	20	22	21	27	24	5,430	1,000	27	27
3	81	20	22	22	22	22	28	24	3,850	410	30	26
4	53	25	22	18	22	25	28	25	2,620	231	32	26
5	36	20	22	22	22	26	28	24	1,600	152	33	25
6	28	20	22	22	28	28	29	24	843	114	31	24
7	18	20	20	20	25	29	28	24	523	96	28	23
8	12	20	22	25	25	30	28	24	387	83	27	24
9	11	20	25	28	25	31	28	24	319	72	25	24
10	10	20	20	25	25	32	29	24	260	64	25	22
11	10	22	20	25	22	35	28	26	227	60	25	22
12	10	20	22	25	22	36	27	39	203	55	24	21
13	10	20	22	25	22	36	26	260	187	51	24	21
14	10	22	22	22	24	36	26	819	211	48	24	20
15	11	25	22	22	24	35	25	725	203	46	23	20
16	12	28	22	25	24	33	26	294	169	44	22	20
17	12	30	22	22	24	32	26	175	157	44	23	20
18	335	33	25	22	24	32	29	574	144	44	23	20
19	161	53	25	20	24	32	36	3,530	134	42	22	19
20	75	182	25	20	24	31	40	3,770	127	42	24	19
21	63	133	25	18	24	30	30	4,370	124	39	25	19
22	53	48	25	20	24	30	28	3,300	121	36	21	19
23	40	48	20	20	24	28	29	1,920	113	39	21	19
24	28	58	22	20	24	30	30	1,120	111	39	21	18
25	22	48	20	20	22	30	92	540	105	39	21	18
26	18	44	16	20	22	29	150	353	121	44	22	21
27	16	36	14	20	21	28	46	276	294	40	22	28
28	20	33	20	20	21	26	31	3,300	574	34	21	25
29	20	30	20	-	-	26	26	5,840	2,620	32	23	22
30	18	25	21	20	-	25	25	3,220	1,860	31	24	22
31	20	-	22	20	-	26	-	2,350	-	31	23	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						1,506		335	10	48.6	2,990	
November.....						1,139		182	18	38.0	2,260	
December.....						679		25	14	21.9	1,350	
Calendar year 1934.....						9,417		335	6	25.8	18,680	
January.....						670		28	18	21.6	1,330	
February.....						654		28	21	23.4	1,300	
March.....						911		36	21	29.4	1,810	
April.....						1,055		150	25	35.2	2,090	
May.....						37,040		5,840	23	1,195	73,470	
June.....						26,557		5,430	105	885	52,680	
July.....						4,755		1,650	31	153	9,430	
August.....						766		33	21	24.7	1,520	
September.....						659		28	18	22.0	1,310	
Water year 1934-35.....						76,391		5,840	10	209	151,500	

Walnut River at Winfield, Kans.

Location.— Water-stage recorder, lat. 5°13'30", long. 96°59'40", in NE¼ sec. 33, T. 32 S., R. 4 E., 1 mile south of Winfield and 1 mile above Black Creek. Prior to Oct. 1, chain gage at same site and datum.

Drainage area.— 1,894 square miles.

Records available.— November 1921 to September 1935.

Average discharge.— 14 years, 630 second-feet.

Extremes.— Maximum discharge during year, 21,800 second-feet May 30 (gage height, 29.51 feet); minimum, 14 second-feet Oct. 16 (gage height, 2.57 feet).

1921-35: Maximum discharge observed (estimated), 94,400 second-feet Nov. 18, 1928 (gage height, 40.61 feet); no flow Nov. 11, 1928. Bank-full stage, 30 feet.

Remarks.— Records good except those for May 14 to June 30, which are fair.

Rating tables, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Dec. 1-23, May 15, 16, July 12 to Aug. 31)

Table for Oct. 1 to Nov. 17

2.6	16	4.2	347
2.8	32	4.4	423
3.0	55	4.6	508
3.2	85	4.8	595
3.4	120	5.0	685
3.6	163	5.5	930
3.8	217	6.0	1,155
4.0	279	7.0	1,720

Table for Nov. 18 to Sept. 30

2.6	21	5.5	990	18.0	8,600
2.8	46	6.0	1,225	20.0	10,100
3.0	78	8.0	2,225	22.0	12,000
3.5	180	10.0	3,250	24.0	14,000
4.0	330	12.0	4,400	26.0	16,500
4.5	530	14.0	5,800	28.0	19,100
5.0	750	16.0	7,200	30.0	22,800

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	31	220	132	75	68	43	78	1,730	796	83	33
2	120	30	190	118	75	75	40	1,820	4,540	539	73	64
3	82	38	163	110	76	78	42	596	9,360	428	70	54
4	55	31	143	103	76	91	43	296	5,940	370	67	48
5	58	163	132	98	75	92	45	185	1,380	327	67	45
6	55	130	124	98	73	96	404	138	1,030	296	65	38
7	39	94	112	110	87	96	255	180	1,150	274	60	35
8	28	69	107	156	92	92	152	105	842	262	50	30
9	23	49	100	226	96	85	118	100	662	226	57	29
10	20	40	96	264	98	87	105	243	1,000	203	64	25
11	19	33	94	240	94	92	91	570	706	190	80	28
12	19	28	92	206	87	92	78	283	1,220	178	57	33
13	16	25	89	166	87	87	73	4,400	2,280	161	45	31
14	16	23	85	143	76	80	67	14,200	3,250	145	40	29
15	16	22	82	132	75	76	60	16,400	1,120	132	39	29
16	32	22	82	126	76	72	57	10,600	1,380	130	43	35
17	1,080	22	80	118	75	62	56	1,580	8,740	130	49	45
18	1,720	2,320	92	112	70	54	130	3,600	1,380	130	35	33
19	1,770	2,320	109	107	68	51	228	10,600	773	130	30	29
20	465	934	120	100	64	46	286	15,500	618	124	29	26
21	217	596	120	85	62	43	161	14,000	530	134	28	28
22	130	3,690	122	80	60	46	105	13,000	461	114	25	33
23	94	3,580	143	80	62	48	78	8,250	416	105	29	32
24	120	1,420	306	76	65	62	70	1,820	366	105	31	30
25	85	1,120	452	75	65	70	366	1,050	330	100	30	36
26	120	957	320	76	60	70	139	842	1,730	107	32	42
27	111	1,000	252	76	57	65	145	750	3,080	183	32	38
28	85	565	214	75	59	62	132	3,800	1,620	198	28	38
29	58	337	186	75	-	57	94	15,800	2,020	143	30	38
30	49	267	154	76	-	51	76	21,200	1,250	116	30	35
31	38	-	132	76	-	48	-	11,400	-	100	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6,870	1,770	16	222	13,630
November.....	19,956	3,690	22	665	39,580
December.....	4,712	452	80	152	9,350
Calendar year 1934.....	63,704	3,690	1	175	126,400
January.....	3,695	264	75	119	7,330
February.....	2,085	98	57	74.5	4,140
March.....	2,194	96	43	70.8	4,350
April.....	3,738	404	40	125	7,410
May.....	173,524	21,200	76	5,598	344,200
June.....	61,454	9,880	330	2,048	121,900
July.....	8,566	796	100	212	13,020
August.....	1,434	88	25	46.3	2,840
September.....	1,069	64	25	35.6	2,120
Water year 1934-35.....	287,297	21,200	16	787	569,900

Cimarron River at Oilton, Okla.

Location.- Wire-weight gage, lat. 36°6', long. 96°35', in SW $\frac{1}{4}$ sec. 29, T. 19 N., R. 7 E., at highway bridge half a mile north of Oilton and 25 miles above confluence with Arkansas River.

Records available.- July 1934 to September 1935.

Extremes.- Maximum discharge observed during year, 72,300 second-feet June 21 (gage height, 16.8 feet); minimum, 90 second-feet Jan. 22 (gage height, 3.65 feet).

1934-35: Maximum discharge observed, that of June 21, 1935; minimum, 17 second-feet Aug. 11, 12, 1934 (gage height, 3.26 feet).

Remarks.- Records fair. Station discontinued from July 1 to Sept. 11, 1935.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,560	390	415	177	140	126	180	720	4,130			-
2	1,880	390	365	171	136	118	165	340	6,000			-
3	1,690	470	315	168	136	126	201	290	7,800			-
4	1,300	690	250	166	130	390	340	340	3,860			-
5	720	415	250	150	132	230	316	800	5,280			-
6	440	415	230	165	120	163	270	860	5,280			-
7	390	390	210	207	134	128	250	1,000	4,680			-
8	340	365	210	250	171	118	230	1,100	2,980			-
9	174	340	204	230	160	112	210	530	2,110			-
10	250	210	195	204	168	315	210	340	1,820			-
11	230	116	186	189	171	3,180	186	250	1,560			-
12	204	105	180	183	180	2,430	165	201	1,550			1,250
13	192	102	177	210	207	1,820	165	177	1,300			900
14	159	102	168	230	207	1,820	159	171	1,430			850
15	142	116	156	250	210	1,000	146	17,900	1,100			600
16	162	390	146	250	195	600	138	4,980	950			500
17	440	230	146	230	192	440	142	3,630	9,800			1,100
18	2,590	148	290	230	189	340	210	2,780	5,600			760
19	1,430	270	315	250	186	290	1,000	21,200	6,000			640
20	1,050	1,560	290	204	180	210	680	30,100	4,980			560
21	365	950	230	122	180	180	315	14,200	50,800			530
22	270	4,680	230	94	174	156	1,150	8,800	22,600			470
23	560	2,430	230	128	168	470	500	4,680	12,600			950
24	720	1,820	250	146	162	10,400	177	3,630	6,000			124
25	640	1,690	365	136	168	3,380	315	2,780	3,630			132
26	560	1,300	315	148	174	5,280	230	1,820	2,780			290
27	500	900	270	142	136	2,780	192	2,110	2,270			270
28	470	640	250	146	130	1,050	192	2,580	1,950			230
29	440	600	230	124	-	720	580	3,380	1,820			210
30	440	500	210	136	-	600	250	2,780	1,820			204
31	440	-	183	140	-	390	-	7,800	-			-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					20,388	2,590	142	658	40,440			
November.....					22,714	4,680	102	787	45,050			
December.....					7,461	415	146	241	14,800			
Calendar year												
January.....					5,566	250	94	180	11,040			
February.....					4,328	210	120	165	9,180			
March.....					39,352	10,400	112	1,268	78,050			
April.....					9,193	1,150	138	306	18,250			
May.....					141,979	30,100	171	4,580	281,600			
June.....					184,510	50,800	950	6,150	366,000			
July.....					-	-	-	-	-			
August.....					-	-	-	-	-			
September 12-30.....					10,570	1,250	124	556	20,970			
Water year												

Stillwater Creek at Stillwater, Okla.

Location.- Water-stage recorder, lat. 36°6', long. 97°3', on line between secs. 25 and 26, T. 19 N., R. 2 E., 1 mile southeast of Stillwater. Zero of gage is 833.95 feet (revised) above mean sea level.

Drainage area.- 165 square miles.

Records available.- October 1934 to September 1935.

Extremes.- Maximum discharge during year, 10,850 second-feet June 21 (gage height, 26.68 feet); minimum, 0.18 second-foot Apr. 11, 18 (gage height, 3.78 feet); minimum gage height, 3.72 feet June 2.

Remarks.- Records good.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	0.9	1.0	0.5	0.6	0.6	0.3	0.6	0.4	25	0.53	62
2	3.4	.9	1.2	.6	.6	.6	.3	.5	110	12	.43	507
3	2.6	1.2	1.4	.8	.5	.6	.3	.5	454	5.9	.53	28
4	3.0	.8	1.6	.7	.6	7.1	.3	8.3	20	3.9	.43	7.5
5	1.7	.9	2.1	.8	.6	.4	.3	9.1	5.1	3.0	.43	3.2
6	1.5	.8	2.2	.8	.6	.4	.3	5.0	2.7	2.4	.53	1.8
7	1.3	.7	1.7	2.4	2.4	.4	.3	1.9	93	1.8	.63	1.7
8	1.1	.6	1.5	.8	.6	.4	.3	1.3	23	1.7	.53	2.8
9	.9	.8	1.2	.8	.5	.4	.3	.6	5.7	1.4	.53	15
10	.8	.7	1.0	.8	.5	.4	.3	.6	2.6	1.3	.43	9.2
11	.8	.6	.8	.8	.5	402	.3	.4	1.2	1.2	.43	3.4
12	.6	.6	.7	.8	.5	123	.3	.4	1.2	.83	.43	1.5
13	.7	.6	.7	.8	1.2	14	.3	.9	.4	.73	.43	1.0
14	.6	.7	.7	.8	.6	5.7	.3	.9	8.0	.73	.43	.94
15	.6	.7	.7	.8	.6	2.9	.3	2.0	1.3	.73	.43	.73
16	.6	.9	.6	.7	.6	.8	.3	.6	1.0	.73	.43	.63
17	60	1.9	.6	.6	.5	.4	.3	.7	730	.73	.43	.63
18	33	1.0	3.3	.6	.5	.4	3.8	180	142	.94	.43	.53
19	4.4	32	1.1	.6	.5	.4	18	330	35	.83	.43	.63
20	3.0	5.0	.7	.6	.5	.4	18	27	252	117	.43	.63
21	2.1	66	.6	.6	.5	.4	3.4	6.8	7,880	15	.43	.53
22	1.7	266	.5	.6	.5	.4	1.2	3.0	1,530	4.3	.53	.63
23	1.3	54	.4	.6	.5	35	.5	1.6	38	2.2	.43	.73
24	1.8	11	.4	.6	.5	276	.4	.8	14	1.5	.43	.73
25	1.7	5.2	.5	.6	.6	28	.4	.6	8.6	1.2	.43	.53
26	1.5	3.6	.4	.6	.7	8.2	.4	.4	6.2	1.0	.43	.94
27	1.3	2.5	.4	.6	.6	3.1	.4	.4	4.8	.94	.43	.83
28	1.2	1.7	.4	.6	.6	.9	3.4	.4	4.0	.83	.43	.83
29	1.2	1.4	.4	.6	-	.4	29	.4	4.7	.73	464	.73
30	1.2	1.2	.4	.6	-	.3	3.8	.4	119	.65	160	.83
31	1.1	-	.4	.6	-	.3	-	.4	-	.53	9.8	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off		
										Inches	Acre-feet	
October.....				144.3		60	0.6	4.65	0.028	0.03	286	
November.....				464.1		266	.6	.094	.008	.10	921	
December.....				29.6		3.3	.4	.95	.0058	.007	59	
Calendar year												
January.....				22.7		2.4	.5	.73	.0044	.005	45	
February.....				18.0		2.4	.5	.64	.0039	.004	36	
March.....				914.3		402	.3	29.5	.179	.21	1,810	
April.....				87.3		29	.3	2.93	.018	.02	174	
May.....				586.4		330	.4	18.9	.115	.13	1,160	
June.....				11,497.9		7,880	.4	383	2.32	2.59	22,810	
July.....				211.71		117	.53	6.83	.041	.05	420	
August.....				676.64		494	.43	21.8	.132	.15	1,340	
September.....				656.43		507	.53	21.9	.133	.15	1,300	
Water year 1934-35.....				15,309.88		7,880	.3	41.9	.254	3.45	30,360	

West Fork of Brush Creek near Stillwater, Okla.

Location.- Water-stage recorder, lat. 36°8', long. 96°59', in NW¼NW¼ sec. 20, T. 19 N., R. 3 E., 2½ miles east of Stillwater. Zero of gage is 847.10 feet above mean sea level.

Drainage area.- 13.1 square miles.

Records available.- October 1934 to September 1935.

Extremes.- Maximum discharge during year, 2,050 second-feet June 21 (gage height, 15.31 feet); no flow during various periods.

Remarks.- Records good except those for Nov. 21, 22, which are poor. Discharge determined by series of loop curves.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.24	0	0.03	0.01	0.01	0	0.05	0.10	0.09	1.5	0	37
2	.04	0	.02	.01	.01	0	.05	.06	15	.80	0	18
3	.01	.04	.01	.01	.01	.01	.05	.04	17	.45	0	.65
4	0	.01	.01	0	.01	5.0	.05	5.1	.78	.27	0	.14
5	0	0	.01	.01	.01	.77	.05	5.0	.20	.20	0	.04
6	0	0	.01	.01	.01	.18	.05	.64	.13	.17	0	.01
7	0	0	.01	.07	.03	.07	.04	.23	34	.13	0	0
8	0	0	.01	.23	.06	.04	.04	1.0	.10	.11	0	0
9	0	0	.01	.14	.04	.03	.04	.06	.24	.11	0	0
10	0	0	0	.05	.02	.04	.04	.04	.10	.09	0	.02
11	0	0	0	.03	.02	72	.03	.04	.05	.07	0	.06
12	0	0	0	.02	.01	3.2	.02	.03	.03	.06	0	.02
13	0	0	0	.01	.03	.66	.02	.03	.02	.04	0	.01
14	0	0	0	.01	.03	.24	.03	.04	12	.04	0	0
15	0	0	0	.01	.03	.11	.02	.40	5.1	.03	0	0
16	0	0	0	.01	.02	.06	.02	.10	1.1	.03	0	0
17	7.0	0	0	.01	.02	.04	.02	.06	90	.03	0	0
18	.69	0	.06	.01	.01	.04	.68	20	2.8	.03	0	0
19	.12	51	.45	.01	.01	.04	4.3	2.9	.69	.02	0	0
20	.02	2.2	.27	.01	.01	.04	.83	.46	125	.02	0	0
21	.01	26	.10	0	.01	.03	.20	.18	728	.02	0	0
22	0	34	.05	0	.01	.03	.09	.10	8.3	.01	0	0
23	0	1.8	.03	0	.01	.42	.06	.05	1.8	.01	0	0
24	.01	.69	.02	0	.01	50	.05	.04	1.2	.01	0	0
25	.01	.27	.01	0	.01	1.6	.04	.04	.89	0	0	0
26	0	.14	.01	.01	0	.59	.03	.05	.66	0	0	0
27	0	.12	.01	.01	0	.27	.03	.04	.62	0	0	0
28	0	.10	.01	.01	0	.12	.04	.04	.49	0	0	0
29	0	.07	.01	.01	-	.09	1.0	.03	1.6	0	1.8	0
30	0	.05	.01	.01	-	.08	.36	.55	14	0	.37	-
31	0	-	.01	.01	-	.06	-	.24	-	0	.04	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off		
										Inches	Acres-feet	
October.....				8.15		7.0	0	0.265	0.020	0.02	16	
November.....				116.49		51	0	3.88	.296	.35	251	
December.....				1.17		.45	0	.038	.0025	.003	2.5	
Calendar year												
January.....				.73		.23	0	.024	.0018	.002	1.4	
February.....				.45		.06	0	.016	.0012	.001	.89	
March.....				180.44		72	0	5.82	.444	.61	368	
April.....				8.35		4.3	.02	1.278	.021	.02	17	
May.....				39.79		20	.03	1.28	.098	.11	79	
June.....				1,062.79		728	.02	35.4	2.70	3.01	2,110	
July.....				4.25		1.5	0	.137	.010	.01	8.4	
August.....				2.01		1.8	0	.065	.0050	.006	4.0	
September.....				55.85		37	0	1.86	.142	.16	111	
Water year 1934-35				1,480.45		728	0	4.06	.310	4.182	2,940	

Council Creek near Stillwater, Okla.

Location.- Water-stage recorder, lat. 36°7', long. 96°52', in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 19 N., R. 4 E., 10 miles east of Stillwater. Zero of gage is 838.28 feet above mean sea level. Prior to May 4, 1934, staff gage at same site and datum.

Drainage area.- 30.2 square miles.

Records available.- March 1934 to September 1935.

Extremes.- Maximum discharge during period ending Sept. 30, 1934, 1,410 second-feet Sept. 10 (gage height, 7.78 feet); no flow during various periods.

Maximum discharge during year ending Sept. 30, 1935, 2,800 second-feet June 21 (gage height, 11.92 feet); no flow during various periods.

Remarks.- Records good. Discharge estimated during construction of gage Apr. 22 to May 2.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	0.3	0.5	0		0	98
2						-	.3	.3	0		0	89
3						-	.2	349	0		0	77
4						-	113	17	0		0	.1
5						-	9.6	1.6	0		0	0
6						-	37	.7	0		0	0
7						-	3.4	.5	0		0	0
8						-	1.3	.3	0		0	0
9						-	1.3	.1	0		0	64
10						-	1.3	15	0		0	247
11						-	1.0	1.3	96		0	1.6
12						-	.3	.2	1.3		0	.1
13						-	.5	.1	0		0	0
14						-	.3	.2	0		0	1.8
15						-	.7	.2	0		0	.1
16						-	1.0	.1	0		0	0
17						-	.7	0	0		0	0
18						-	.7	0	0		0	0
19						-	.5	0	0		0	0
20						0.1	.3	0	0		0	39
21						.1	.2	0	0		0	10
22						.1	0	0	0		0	.1
23						.1	0	0	0		0	0
24						.1	0	0	0		0	0
25						.1	0	0	0		21	0
26						.3	.3	0	0		.1	0
27						.3	0	0	0		0	0
28						.3	0	0	0		0	0
29						.2	0	0	0		0	28
30						.3	0	0	0		0	.2
31						.3	-	0	-		0	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				-	-	-	-	-	-	-		
November.....				-	-	-	-	-	-	-		
December.....				-	-	-	-	-	-	-		
Calendar year												
January.....				-	-	-	-	-	-	-		
February.....				-	-	-	-	-	-	-		
March 20-31				2.3	0.3	0.1	0.19	0.0063	0.003	4.6		
April.....				176.6	113	-	5.89	.195	.22	350		
May.....				356.9	349	0	12.5	.414	.45	767		
June.....				97.3	96	0	3.24	.107	.12	193		
July.....				0	0	0	0	0	0	0		
August.....				21.1	21	0	.68	.023	.03	42		
September.....				656.0	247	0	21.9	.725	.81	1,300		
The period.....										2,660		

Council Creek near Stillwater, Okla.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0.3	0.2	0.2	0.4	0.6	0.4	0.6	3.9	0	56
2	0	0	.2	.1	.2	.2	.6	.4	26	1.9	0	19
3	0	1.9	.3	.2	.4	.4	.6	.2	17	1.3	0	.07
4	0	.5	.3	.4	.2	2.3	.8	2.3	.8	.78	0	0
5	0	0	.3	.2	.1	.6	.6	5.2	.4	.76	0	0
6	0	0	.2	.4	.2	.2	.8	1.9	.1	.76	0	0
7	0	0	.3	3.1	1.3	.1	.6	1.3	108	.58	0	0
8	0	0	.3	2.3	.8	.2	.6	.8	3.1	.58	0	0
9	0	0	.3	.8	.4	.2	.6	.6	1.3	.58	0	0
10	0	0	.2	.6	.4	.6	.6	.4	.6	.58	0	0
11	0	0	.2	.6	.4	61	.2	.2	.2	.22	0	0
12	0	0	.2	.6	.4	4.0	.1	.1	.1	.22	0	0
13	0	0	.1	.6	1.6	1.3	.1	.9	.2	.07	0	0
14	0	0	.2	.6	.8	.8	.2	6.1	.6	.04	0	0
15	0	0	.3	.4	.6	.6	.1	4.0	1.3	.04	0	0
16	0	.1	.3	.6	.6	.4	.1	.8	1.6	.01	0	0
17	250	.1	.6	.6	.6	.2	.2	.8	149	0	0	0
18	7.0	0	2.6	.4	.4	.4	1.7	34	2.7	0	0	0
19	.5	92	3.8	.6	.2	.6	46	4.4	2.8	0	0	0
20	0	4.2	1.0	.1	.2	.6	1.9	.8	74	0	0	0
21	0	104	.5	0	.2	.6	1.0	.4	604	0	0	0
22	0	62	.5	0	.2	.6	.6	.4	7.6	0	0	0
23	0	3.0	.3	.1	.2	75	.6	.2	4.3	0	0	0
24	0	1.6	.2	.1	.6	58	.6	.2	3.1	0	0	0
25	0	1.6	.2	.1	1.0	3.5	2.3	.4	2.3	0	0	0
26	0	1.9	.1	.2	.1	1.3	.8	.6	1.9	0	0	0
27	0	.5	.1	.2	.4	.8	.4	.2	1.9	0	0	0
28	0	.2	.1	.2	.4	.6	.6	.2	1.6	0	0	0
29	0	.3	.1	.4	-	.6	1.0	46	124	0	26	0
30	0	.5	.1	.2	-	.6	.6	4.9	70	0	.13	0
31	0	-	.1	.4	-	.6	-	1.0	-	0	0	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....				257.5	250	0	8.31	0.275	0.32	511		
November.....				273.8	104	0	9.13	.302	.34	543		
December.....				14.2	3.8	.1	.46	.015	.02	28		
Calendar year												
January.....				15.1	3.1	0	.49	.016	.02	30		
February.....				13.1	1.8	.1	.47	.016	.02	26		
March.....				217.3	75	.1	7.01	.232	.27	431		
April.....				65.7	46	.1	2.19	.075	.08	130		
May.....				120.1	46	.1	3.87	.128	.15	238		
June.....				1,211.1	604	.1	40.4	1.34	1.50	2,400		
July.....				12.36	3.9	0	.399	.013	.01	25		
August.....				28.13	26	0	.843	.028	.03	52		
September.....				85.07	66	0	2.84	.094	.10	169		
Water year 1934-35.....				2,311.46	604	0	6.33	2.10	2.86	4,586		

Verdigris River at Independence, Kans.

Location.- Water-stage recorder, lat. 37°13'25", long. 95°40'35", in NE $\frac{1}{4}$ sec. 32, T. 32 S., R. 16 E., 2 miles east of Independence and $\frac{3}{4}$ miles below Elk River.

Drainage area.- 2,952 square miles.

Records available.- October 1930 to September 1935. April to September 1904, November 1921 to September 1930 at site three-quarters of a mile upstream.

Average discharge.- 14 years (1921-35), 1,565 second-feet.

Extremes.- Maximum discharge during year, 68,800 second-feet May 30 (gage height, 44.80 feet); minimum, 2 second-feet Nov. 18 (gage height, 1.04 feet).

1904, 1921-35: Maximum discharge (estimated), 124,000 second-feet Oct. 3, 1927 (gage height, 46.04 feet at former site); no flow Oct. 18, 20, 22-24, 1932, July 27-29, Aug. 12-21, 1934. Bank-full stage, 36 feet.

Remarks.- Records good except those for period Oct. 1 to Jan. 6, which are fair. Discharge estimated during period of ice effect Dec. 18 to Jan. 6 and interpolated Oct. 15.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-5, Nov. 27 to Dec. 17, Jan. 21 to Feb. 7, Apr. 6-28, Aug. 29 to Sept. 30)

1.0	1	4.0	700	12.0	5,100	28.0	18,800	40	36,750
1.5	34	5.0	1,080	14.0	6,500	32.0	22,900	41	40,850
2.0	124	6.0	1,490	16.0	7,900	36.0	27,500	42	45,600
2.5	245	7.0	1,900	18.0	9,500	37.0	29,200	43	51,700
3.0	383	8.0	2,400	20.0	11,300	38.0	31,160	44	60,200
3.5	537	10.0	3,700	24.0	14,900	39.0	33,520	45	71,200

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	443	15	666		243	243	158	569	32,800	2,240	90	84
2	243	18	537		243	230	146	921	22,500	1,610	75	84
3	146	35	443		243	230	124	6,570	23,400	1,240	66	80
4	88	78	355	125	230	413	124	1,410	22,100	921	193	77
5	53	62	299		250	473	124	700	15,800	700	700	77
6	33	45	257		217	383	2,180	569	6,920	633	383	80
7	20	29	217	1,120	383	383	1,000	505	16,900	569	255	92
8	19	22	205	5,100	1,280	355	805	443	8,860	537	169	77
9	13	17	193	2,400	808	313	473	383	6,500	505	111	77
10	12	12	169	1,490	601	313	383	1,780	13,100	473	88	42
11	11	8	146	1,000	537	844	313	1,160	5,800	443	64	44
12	9	7	135	772	473	921	271	601	17,100	383	68	35
13	5	6	115	601	537	772	230	700	15,400	355	47	22
14	3	5	115	505	808	569	193	12,500	9,860	327	54	13
15	3	3	115	505	601	473	169	18,900	15,400	299	61	9
16	3	3	109	569	537	383	169	13,200	24,200	271	28	8
17	3,840	3	100	537	505	327	135	4,470	33,000	230	22	9
18	4,120	181		505	443	271	135	5,490	26,700	205	18	13
19	443	2,880		1,160	383	257	271	14,400	6,870	181	18	158
20	413	3,140		808	341	230	271	20,900	2,290	169	18	383
21	243	1,740		473	327	217	181	22,400	1,900	169	11	243
22	146	10,400		341	299	217	158	23,800	1,570	146	7	135
23	111	6,360		313	271	217	124	25,400	1,570	146	10	96
24	92	3,770	150	271	257	257	120	15,100	960	169	42	61
25	155	1,940		243	355	383	505	2,580	772	124	61	75
26	146	3,910		243	700	271	7,690	1,990	15,400	113	48	66
27	78	3,210		243	341	217	1,650	2,290	26,700	106	41	47
28	35	1,740		230	257	193	772	7,550	23,200	124	42	29
29	24	980		243	-	151	569	25,500	13,700	122	169	21
30	18	772		243	-	169	772	62,200	4,890	135	313	18
31	13	-		243	-	158	-	50,400	-	120	135	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	10,957	4,120	3	354	21,790
November.....	41,369	10,400	5	1,376	92,050
December.....	6,276	666	100	202	12,450
Calendar year 1934.....	167,195	13,300	0	458	331,600
January.....	20,908	5,100	125	674	41,470
February.....	12,450	1,280	217	446	24,690
March.....	10,865	921	158	350	21,550
April.....	19,915	7,690	120	664	39,500
May.....	338,881	62,200	383	10,930	672,200
June.....	413,962	33,000	772	13,800	821,100
July.....	13,765	2,240	106	444	27,300
August.....	3,407	700	7	110	6,760
September.....	2,245	383	8	74.8	4,450
Water year 1934-35.....	895,028	62,200	3	2,452	1,775,000

Neosho River near Iola, Kans.

Location.- Water-stage recorder, lat. 37°53'25", long. 95°25'55", in NE¼ sec. 9, T. 25 S., R. 18 E., 3 miles southwest of Iola and half a mile below Elm Creek.

Drainage area.- 3,795 square miles.

Records available.- August 1895 to November 1903, October 1917 to September 1935.

Average discharge.- 18 years (1917-35), 1,172 second-feet.

Extremes.- Maximum discharge during year, 28,900 second-feet May 28 (gage height, 26.92 feet); minimum, 19 second-feet Apr. 25 (gage height, 2.68 feet).
1895-1903, 1917-35: Maximum discharge, 46,000 second-feet Sept. 13, 1926 (gage height, 33.2 feet); no flow for several days in September and October 1897. Bank-full stage, 27 feet.

Remarks.- Records fair. Discharge interpolated during period of ice effect, Feb. 25, 28.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	441	21	465	123	86	70	69	73	19,700	1,970	100	240
2	392	22	418	114	63	66	104	172	23,500	1,970	98	5,520
3	350	48	444	114	75	75	104	139	23,000	2,130	126	6,540
4	376	47	363	101	75	112	66	84	22,100	1,970	400	6,420
5	253	121	297	59	82	155	63	73	20,200	834	245	2,380
6	159	63	208	99	82	139	91	84	19,000	655	245	776
7	107	70	187	251	162	114	84	63	19,100	547	330	484
8	63	36	172	1,870	735	104	84	54	7,140	462	250	362
9	59	32	139	1,280	339	104	80	208	2,050	406	174	294
10	47	32	94	679	221	94	70	200	2,130	367	154	254
11	38	28	101	418	152	104	64	109	1,640	330	126	222
12	36	27	96	287	145	109	63	155	8,280	273	100	164
13	35	28	91	221	176	82	59	1,630	8,020	278	89	138
14	31	27	104	196	368	70	55	8,670	9,580	235	83	147
15	28	27	91	148	283	70	59	7,630	10,500	197	71	160
16	25	27	91	229	200	68	52	6,980	16,300	193	71	144
17	36	31	91	238	176	66	57	5,890	6,070	185	60	108
18	36	42	89	234	148	68	48	4,280	1,850	168	58	278
19	35	1,640	91	792	129	70	54	18,400	1,360	147	62	921
20	35	618	91	413	109	66	52	16,300	1,130	144	58	384
21	32	573	91	208	101	64	45	13,600	950	178	56	222
22	30	5,280	104	142	89	66	42	12,000	854	132	54	168
23	27	4,280	117	123	89	61	42	12,800	805	132	56	135
24	30	1,680	123	89	91	52	31	11,100	747	120	54	115
25	23	1,250	142	73	88	48	707	5,170	892	250	69	108
26	23	2,860	166	91	86	43	507	1,540	5,960	226	85	112
27	23	1,760	104	91	84	52	187	1,220	6,300	150	484	112
28	23	910	117	91	68	47	145	22,100	3,200	129	1,010	129
29	23	879	117	91	-	48	107	25,900	2,290	112	1,010	123
30	23	548	109	89	-	68	94	24,700	1,970	105	490	118
31	23	-	112	96	-	82	-	22,600	-	100	254	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,862	441	23	92.3	5,680		
November.....						22,807	5,290	21	760	45,240		
December.....						5,025	465	89	162	9,970		
Calendar year 1934.....						106,066	15,300	.6	291	210,400		
January.....						9,080	1,870	73	383	18,010		
February.....						4,502	735	63	161	8,930		
March.....						2,437	155	43	78.6	4,830		
April.....						3,305	707	31	110	6,560		
May.....						224,124	25,900	54	7,230	444,500		
June.....						246,598	23,500	747	8,220	489,100		
July.....						16,095	2,130	100	497	29,940		
August.....						6,522	1,010	54	210	12,940		
September.....						27,278	5,540	108	909	54,110		
Water year 1934-35.....						569,635	25,900	21	1,561	1,130,000		

Neosho River near Parsons, Kans.

Location.- Water-stage recorder, lat. 37°20'20", long. 95°0'30", in NE¼ sec. 21, T. 31 S., R. 21 E., half a mile above St. Louis-San Francisco Railway bridge and 10 miles east of Parsons. Prior to Feb. 7, 1935, chain gage at same site and datum.

Drainage area.- 4,828 square miles.

Records available.- October 1921 to September 1935.

Average discharge.- 14 years, 2,096 second-feet.

Extremes.- Maximum discharge during year, 41,700 second-feet June 1 (gage height, 27.46 feet); minimum, 37 second-feet Aug. 24, 25; minimum observed gage height, 1.34 feet Nov. 17, 18.

1921-35: Maximum discharge recorded, 48,100 second-feet Nov. 24, 1928 (gage height, 27.50 feet); no flow Aug. 28-31, Sept. 1-10, 12, 13, 1934. Bank-full stage, 24 feet.

Remarks.- Records good except those estimated for period of ice effect, Feb. 25-28, and those for Nov. 29 to Jan. 7, July 1 to Sept. 2, which are fair.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Nov. 29 to Jan. 7, Apr. 9 to May 13, July 1 to Sept. 2, and Sept. 10-30)

1.2	26	3.0	485	6.0	2,135	14.0	10,050	22.0	20,900
1.5	58	3.5	725	8.0	3,700	16.0	12,300	24.0	25,400
2.0	163	4.0	980	10.0	5,650	18.0	14,800	26.0	32,400
2.5	306	5.0	1,535	12.0	7,850	20.0	17,500	28.0	45,800

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	377	47	1,290	244	230	222	160	494	40,900	3,100	113	398
2	259	48	1,010	241	238	208	153	1,390	40,200	2,620	102	277
3	449	130	850	227	241	208	135	1,390	37,400	2,260	98	2,470
4	425	449	675	211	224	398	135	1,360	35,400	2,330	123	6,530
5	384	303	485	211	208	1,090	335	465	30,600	1,720	222	6,530
6	388	160	465	181	205	650	2,940	328	30,200	1,140	469	5,530
7	309	142	421	433	316	429	1,960	268	32,900	875	303	1,170
8	216	160	364	4,260	2,620	351	1,360	247	31,900	700	250	580
9	186	135	322	4,060	2,260	391	534	213	29,000	570	309	490
10	147	111	293	2,260	1,260	357	348	580	16,900	490	262	364
11	113	92	247	1,310	750	1,310	675	1,340	7,960	437	208	312
12	96	77	205	850	530	1,480	238	585	12,300	405	184	277
13	75	61	176	620	566	953	200	425	9,940	364	160	256
14	64	50	175	477	1,010	606	184	6,640	11,600	303	111	216
15	56	46	179	494	900	481	150	11,000	15,200	296	94	179
16	53	46	163	775	750	402	137	9,830	16,900	271	82	155
17	980	40	173	700	526	332	127	7,740	21,100	227	72	166
18	4,450	42	166	775	405	277	107	7,410	21,300	219	62	168
19	850	90	176	1,560	354	247	96	16,100	11,800	211	52	147
20	290	1,600	202	1,540	306	238	94	23,400	4,260	197	50	650
21	181	2,770	253	1,090	271	222	90	26,800	10,000	186	43	650
22	127	10,300	306	516	238	202	88	26,200	2,690	168	40	364
23	98	8,180	303	338	216	194	86	23,900	1,780	160	45	256
24	92	6,640	277	268	227	194	81	16,900	1,720	150	39	208
25	150	2,770	250	280		194	111	12,400	1,720	150	37	189
26	216	4,650	244	262	215	205	610	6,970	5,250	147	40	166
27	158	4,160	256	259		208	1,660	4,750	11,700	213	40	142
28	105	2,770	265	253		194	620	16,700	9,280	265	44	123
29	77	1,260	238	236	-	186	675	31,900	5,650	194	437	123
30	62	1,390	233	230	-	171	1,010	36,700	4,850	155	1,040	111
31	54	-	244	224	-	163	-	39,400	-	185	750	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	11,487	4,450	53	371	22,780
November.....	48,719	10,300	40	1,624	96,630
December.....	10,894	1,280	163	351	21,610
Calendar year 1934.....	199,199	15,100	0	538	389,200
January.....	25,185	4,260	181	812	49,950
February.....	15,711	2,620	205	561	31,160
March.....	12,762	1,480	163	412	25,310
April.....	15,099	2,940	81	503	29,950
May.....	333,825	39,400	213	10,778	662,100
June.....	510,300	40,900	1,720	17,010	1,012,000
July.....	20,658	3,100	135	666	40,970
August.....	5,881	1,040	37	190	11,660
September.....	27,197	6,530	111	907	53,940
Water year 1934-35.....	1,037,718	40,900	37	2,843	2,053,000

Cottonwood River at Cottonwood Falls, Kans.

Location.- Water-stage recorder, lat. 38°22'25", long. 96°31'25", in NE¼ sec. 25, T. 19 S., R. 8 E., 1 mile east of Cottonwood Falls. Prior to Feb. 13, 1935, chain gage on Atcheson, Topeka & Santa Fe Railway bridge in Cottonwood Falls, 2 miles upstream.

Drainage area.- 1,444 square miles (1,432 square miles at former site).

Records available.- February to September 1935. April 1932 to February 1935 at chain gage in Cottonwood Falls.

Extremes.- Maximum discharge during year (estimated), 10,600 second-feet May 28 (gage height, 15.24 feet, affected by backwater from South Cottonwood Creek); minimum, 3 second-feet Sept. 24 (gage height, 1.71 feet).

1932-35: Maximum discharge recorded, 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.

Remarks.- Records good except those estimated for period of ice effect, Feb. 25-28, and those determined from effective gage-height graph for periods of backwater, May 20, 21, 28, 29, June 1, which are fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	294	6	52	21	20	31	23	15	1,410	1,070	46	25
2	98	6	52	21	21	30	18	23	7,010	468	45	149
3	57	7	36	20	27	27	18	28	9,340	241	45	74
4	43	7	27	24	24	27	20	28	6,400	175	169	38
5	34	6	27	22	23	24	15	36	1,800	145	103	24
6	26	7	23	21	23	25	17	36	665	128	59	15
7	18	7	20	25	25	21	15	35	654	118	46	13
8	15	8	27	24	31	21	17	31	534	108	39	13
9	15	8	29	26	31	23	17	30	399	98	33	12
10	12	9	21	24	33	20	17	33	344	96	33	10
11	10	8	17	23	28	18	19	50	310	96	26	9
12	9	7	17	24	18	18	18	70	2,450	96	25	8
13	8	6	18	25	14	15	23	419	722	96	25	7
14	7	4	17	26	19	18	24	2,250	361	96	25	7
15	7	4	15	27	19	17	24	3,420	251	86	24	7
16	7	4	18	29	20	19	24	722	253	59	24	7
17	7	4	17	36	19	19	23	327	232	59	23	7
18	7	8	20	32	15	15	23	482	210	50	21	7
19	6	875	26	24	13	14	26	4,794	192	52	20	5
20	14	625	24	22	19	17	21	6,930	172	54	20	5
21	18	138	22	20	21	17	21	6,570	159	52	20	5
22	15	105	27	15	19	19	19	3,970	150	50	19	5
23	14	418	26	17	19	14	17	1,091	145	48	19	5
24	14	313	25	17	20	19	21	542	134	46	19	4
25	12	200	25	19	18	18	24	350	136	50	18	5
26	10	130	24	21	18	21	19	281	253	59	15	9
27	9	114	24	19	18	57	20	290	1,190	61	14	9
28	8	88	25	18	18	41	21	8,000	1,320	57	17	8
29	7	68	24	20	-	31	19	10,400	954	52	15	10
30	6	59	24	20	-	28	18	6,310	1,410	48	14	7
31	6	-	24	21	-	25	-	1,144	-	48	15	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							813	294	6	26.2	1,610	
November.....							3,049	675	4	102	6,050	
December.....							773	52	15	24.9	1,530	
Calendar year 1934.....							15,170	740	1	41.6	30,090	
January.....							699	36	15	22.5	1,390	
February.....							593	33	13	21.2	1,180	
March.....							709	57	14	22.9	1,410	
April.....							600	25	15	20.0	1,190	
May.....							58,705	10,400	15	1,894	116,400	
June.....							39,810	9,340	134	1,327	78,650	
July.....							3,969	1,070	46	123	7,650	
August.....							1,038	169	14	33.5	2,060	
September.....							508	148	4	16.9	1,010	
Water year 1934-35.....							111,256	10,400	4	305	220,600	

Spring River near Waco, Mo.

Location.- Water-stage recorder, lat. $37^{\circ}14'45''$, long. $94^{\circ}33'55''$, on line between SE $\frac{1}{4}$ sec. 7 and NE $\frac{1}{4}$ sec. 18, T. 29 N., R. 33 W., at county highway bridge $\frac{1}{4}$ mile east of Waco. Zero of gage is 833.55 feet (revised to adjustment of 1929 of U. S. Coast and Geodetic Survey) above mean sea level. Chain gage prior to Oct. 5, 1934 and wire-weight gage Oct. 6, 1934, to Feb. 23, 1935 at same site and datum.

Drainage area.- 1,160 square miles.

Records available.- April 1924 to September 1935.

Average discharge.- 11 years, 923 second-feet.

Extremes.- Maximum discharge during year, 18,700 second-feet Mar. 12 (gage height, 20.23 feet); minimum, 31 second-feet Oct. 16 (gage height, 1.09 feet).

1924-35: Maximum discharge, 57,400 second-feet Aug. 17, 1927 (gage height, 28.6 feet, from flood marks); minimum, 11 second-feet July 24, 1934 (gage height, 0.80 feet).

Remarks.- Records poor prior to Feb. 23, good thereafter. Flow slightly regulated by operation of small mills.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 16, July 10 to Sept. 30)

1.1	30	1.8	151	3.6	904	7.0	3,350	12.0	8,250
1.2	42	2.0	207	4.2	1,280	8.0	4,250	14.0	10,500
1.3	56	2.4	344	4.8	1,670	9.0	5,200	16.0	12,800
1.4	71	2.8	504	5.4	2,080	10.0	6,150	18.0	15,300
1.6	106	3.2	691	6.0	2,550	11.0	7,150	20.0	18,300

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	571	81	1,150	526	594	271	691	483	2,080	2,310	254	173
2	288	73	1,740	402	1,030	254	618	1,030	2,470	1,870	238	170
3	198	83	1,540	344	794	254	571	1,670	6,670	1,600	238	175
4	170	192	1,280	306	742	667	548	794	6,780	1,150	422	164
5	139	238	848	288	616	2,010	548	504	2,960	964	306	146
6	123	306	642	271	548	1,740	742	548	6,450	948	254	156
7	102	192	871	288	504	1,220	1,030	526	14,700	742	222	139
8	71	141	504	1,940	2,870	1,090	1,870	462	10,700	742	222	139
9	114	132	462	1,870	2,080	691	1,220	383	6,920	691	201	173
10	88	104	442	964	1,030	618	848	504	2,550	642	195	170
11	83	59	402	618	691	7,380	964	848	1,600	642	190	167
12	85	66	364	526	571	16,000	964	794	4,380	594	190	144
13	86	108	344	462	594	10,200	742	504	4,240	571	462	137
14	62	73	325	442	1,280	4,150	642	827	7,450	504	1,030	123
15	50	66	325	442	1,150	1,800	571	594	9,760	526	383	123
16	46	73	306	904	618	1,410	526	504	5,790	483	271	116
17	110	86	325	1,030	504	1,150	548	402	6,600	462	238	134
18	3,350	50	306	742	462	1,030	594	442	6,130	442	222	116
19	3,520	42	306	3,270	964	483	548	2,990	4,400	422	207	112
20	1,480	2,710	344	2,550	402	904	483	2,010	2,630	402	195	110
21	271	3,110	422	1,410	364	794	462	1,540	5,740	402	192	110
22	129	7,920	548	794	344	794	442	1,280	2,520	383	192	101
23	126	3,780	526	618	306	794	402	794	1,800	383	184	92
24	116	1,740	422	618	306	1,340	383	842	1,280	364	167	108
25	104	691	344	504	344	2,080	364	504	1,090	383	156	112
26	86	1,740	306	504	364	1,670	383	442	3,760	344	167	110
27	141	1,340	288	904	344	1,030	442	442	4,290	325	964	110
28	139	794	271	848	306	794	383	680	2,750	306	442	116
29	121	571	271	642	-	742	462	4,940	1,740	288	325	132
30	121	691	385	548	-	642	504	6,430	1,540	288	222	114
31	92	-	642	526	-	618	-	3,800	-	271	201	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	12,141	3,520	46	392	0.338	0.39	24,080
November.....	27,232	7,920	42	908	.793	.87	54,010
December.....	16,849	1,740	271	547	.472	.54	35,620
Calendar year 1934.....	102,851	7,920	12	282	.243	3.32	204,000
January.....	26,081	3,270	271	841	.725	.84	51,730
February.....	20,182	2,870	306	721	.622	.65	40,030
March.....	65,101	16,000	254	2,100	1.81	2.09	128,100
April.....	19,495	1,970	364	650	.560	.62	38,670
May.....	38,513	6,430	383	1,242	1.07	1.23	76,390
June.....	141,780	14,700	1,090	4,728	4.07	4.54	281,200
July.....	20,344	2,310	271	668	.566	.66	40,350
August.....	9,172	1,030	156	296	.255	.29	18,190
September.....	3,988	175	92	153	.115	.13	7,910
Water year 1934-35.....	400,978	16,000	42	1,099	.947	12.84	795,300

Turkey Creek at Joplin, Mo.

Location.- Water-stage recorder, lat. 37°6'50", long. 94°31'35", in NW¼ 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 907.03 feet above mean sea level.

Drainage area.- 33 square miles.

Records available.- July 1932 to September 1935.

Extremes.- Maximum discharge recorded during year, 1,090 second-feet Mar. 11 (gage height, 7.30 feet); minimum discharge, 1.7 second-feet Nov. 15; minimum gage height, 0.35 foot Oct. 17.
1932-35: Maximum discharge, 1,150 second-feet Apr. 20, 1933 (gage height, 7.57 feet); no flow for several days during July and August 1934.

Remarks.- Records fair. Discharges estimated Mar. 24, 25, Apr. 21-25, 27-30, May 1, 4-6, 19-23, 29, 30, June 2-6, 8, 9, 12, 13, 15-21, Aug. 13-15. Considerable diversions around gage by Joplin storm sewers.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	2.3	35	5.8	16	8.2	14	9	58	42	7.0	6.0
2	8.2	2.3	34	5.6	14	8.2	14	8.7	200	32	6.7	5.1
3	6.7	24	25	5.2	12	8.2	14	10		30	6.7	5.1
4	5.6	4.0	18	4.7	12	34	14			24	6.4	4.0
5	5.1	3.0	14	4.7	11	14	15		100	22	6.2	3.7
6	4.5	2.5	12	4.7	10	18	17			21	6.2	3.3
7	3.9	2.7	11	30	26	14	20	7.2	340	20	6.0	3.2
8	3.5	2.3	11	21	36	12	17	6.4	200	19	5.6	4.0
9	3.0	2.4	10	15	26	12	16	6.0	100	18	5.1	80
10	2.9	2.3	9.0	13	23	80	17	6.7	66	17	5.1	11
11	3.0	2.5	7.2	12	18	528	16	6.2	62	16	4.9	8.7
12	2.9	3.0	6.7	11	18	140	14	5.8	60	15	5.2	8.0
13	2.8	3.3	7.0	9.7	30	78	13	6.0	60	14	5.4	7.0
14	2.7	3.2	6.7	9.7	22	54	12	6.4	430	14	5.4	6.4
15	2.5	1.7	7.0	19	17	42	11	6.2	200	14	5.6	6.2
16	2.7	3.2	5.8	15	16	37	11	5.6	500	14	5.8	5.8
17	43	1.8	5.1	11	14	32	10	5.8	13	13	5.8	5.4
18	12	1.7	9.0	18	13	30	12	7.0		13	8.0	5.2
19	5.6	50	8.2	41	12	28	9.7			13	5.2	4.9
20	4.5	38	7.7	34	12	23	9.4		150	11	5.1	4.9
21	3.5	91	7.4	22	11	20		10		10	4.9	4.3
22	3.2	70	6.2	17	9.7	17			118	9.7	4.9	4.5
23	3.0	31	5.6	15	9.7	20	8		78	9.4	7.2	4.5
24	3.0	21	5.8	13	15	60		37	58	9.0	5.1	4.3
25	2.8	30	5.4	17	13	40		33	43	8.7	4.7	9.4
26	2.4	61	5.1	18	9.7	28	11	32	42	8.7	13	11
27	2.2	30	4.5	16	8.4	23		26	43	8.4	11	5.8
28	2.1	21	4.7	14	8.2	20		35	46	8.0	5.4	5.2
29	2.2	21	9.0	14	-	18	10	200	62	8.0	8.2	4.9
30	2.2	39	7.2	13	-	15		100	54	7.4	5.2	4.7
31	2.2	-	6.2	13	-	15		62	-	7.4	4.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	164.9	43	2.1	5.32	0.161	0.19	327
November.....	571.2	91	1.7	19.0	.576	.64	1,130
December.....	316.5	35	4.5	10.2	.309	.36	628
Calendar year 1934.....	2,176.0	91	0	5.96	.181	2.46	4,310
January.....	462.1	41	4.7	14.9	.452	.52	917
February.....	442.7	36	5.2	15.8	.479	.50	876
March.....	1,476.6	528	8.2	47.6	1.44	1.66	2,930
April.....	367.1	20	9.4	12.2	.370	.41	728
May.....	702.0	200	5.6	22.6	.685	.79	1,390
June.....	3,970	500	42	132	4.00	4.46	7,870
July.....	476.7	42	7.4	15.4	.467	.54	946
August.....	189.5	13	4.5	6.11	.186	.21	376
September.....	246.6	80	3.2	8.22	.249	.28	469
Water year 1934-35.....	9,385.8	528	1.7	25.7	.779	10.56	18,610

Shoal Creek near Joplin, Mo.

Location.- Water-stage recorder, lat. $37^{\circ}2'5''$, long. $94^{\circ}32'30''$, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ 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 (adjustment of 1929 of U. S. Coast and Geodetic Survey) above mean sea level.

Drainage area.- 458 square miles.

Records available.- April 1924 to September 1935.

Average discharge.- 11 years, 446 second-feet.

Extremes.- Maximum discharge during year, about 26,900 second-feet Mar. 12 (gage height, 18.25 feet); minimum, 2.8 second-feet Dec. 15, while repairing turbines (gage height, 0.68 foot); minimum daily discharge, 28 second-feet Oct. 18. 1924-35: Maximum discharge and gage height, those of Mar. 12, 1935; minimum discharge and gage height, those of Dec. 15, 1934; minimum daily discharge, 18 second-feet Aug. 6, 1934.

Remarks.- Records fair. Flow regulated by Grand Falls hydroelectric plant.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	64	261	130	191	160	694	269	724	1,920	325	221
2	99	62	267	119	190	159	547	280	1,100	1,300	309	214
3	96	90	274	131	187	162	510	262	2,780	1,140	305	218
4	83	67	273	127	177	176	466	267	1,740	1,436	297	206
5	86	70	295	124	172	235	455	284	1,100	952	299	204
6	83	70	272	126	180	307	507	318	1,070	864	278	199
7	61	68	267	145	167	290	511	279	4,790	798	256	185
8	67	67	231	164	191	266	564	276	9,350	749	279	188
9	65	57	230	190	196	251	503	281	1,940	707	264	367
10	58	47	222	191	204	303	514	251	1,470	670	261	262
11	53	59	195	183	202	4,910	590	328	1,310	658	255	218
12	50	58	196	194	192	12,000	552	290	2,400	621	282	206
13	48	57	194	193	200	1,780	485	248	1,750	594	346	192
14	52	50	177	176	215	1,300	463	229	1,910	571	381	193
15	46	49	104	171	203	1,060	442	221	2,560	544	292	177
16	54	54	219	182	195	926	421	252	1,420	507	281	176
17	89	56	182	174	196	805	402	235	2,140	514	266	175
18	28	54	160	160	197	712	383	215	3,330	468	260	176
19	146	70	154	175	193	672	428	383	2,410	469	246	161
20	75	170	148	214	178	604	407	691	1,810	456	241	161
21	77	605	142	234	165	558	371	627	3,890	454	306	183
22	72	986	146	254	194	519	552	603	2,840	436	363	160
23	61	637	143	264	178	498	346	583	1,680	435	255	160
24	50	399	140	250	171	1,050	319	501	1,420	365	247	150
25	107	298	134	241	185	2,250	292	453	1,310	397	228	152
26	200	316	140	237	166	934	384	414	2,140	386	233	188
27	91	287	104	221	177	786	348	390	2,970	361	248	254
28	81	268	162	220	166	671	316	349	1,470	352	240	240
29	74	233	130	207	-	614	279	805	2,340	345	236	186
30	72	238	138	190	-	567	310	1,260	1,620	338	229	180
31	72	-	133	202	-	834	-	838	-	333	229	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	2,371	200	28	76.5	0.167	0.19	4,700
November.....	5,596	986	47	187	.408	.46	11,100
December.....	5,773	295	104	186	.406	.47	11,450
Calendar year 1934.....	43,407	986	16	119	.260	3.53	86,080
January.....	5,789	264	119	187	.408	.47	11,480
February.....	6,248	215	165	187	.408	.42	10,410
March.....	36,409	12,000	169	1,174	2.56	2.95	72,820
April.....	13,161	694	279	439	.959	1.07	26,100
May.....	12,871	1,260	215	415	.906	1.04	25,530
June.....	68,924	9,350	724	2,297	5.02	5.60	136,700
July.....	19,784	1,920	333	638	1.39	1.60	39,240
August.....	8,539	361	228	275	.600	.69	16,940
September.....	6,932	367	150	198	.432	.48	11,770
Water year 1934-35.....	190,397	12,000	28	522	1.14	15.44	377,600

Canadian River near Bell Ranch, N. Mex.

Location.- Water-stage recorder, lat. about $35^{\circ}32'$, long. about $104^{\circ}15'$, in Pablo Montoya grant, 1 mile above mouth of Perra Creek and about 9 miles southwest of Bell Ranch. Prior to Aug. 11, 1934, station located 200 feet upstream with a datum 0.65 foot higher.

Drainage area.- 6,400 square miles.

Records available.- October 1930 to September 1935 in reports of U. S. Geological Survey; July 1915 to July 1917, August 1927 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during water year 1933-34, about 9,600 second-feet Sept. 1 (gage height, 6.8 feet, present datum); no flow during several periods.
Maximum discharge during water year 1934-35, about 49,300 second-feet June 27 (gage height, 11.7 feet, present datum); no flow during several periods.
1930-35: Maximum discharge, that of June 27, 1935; no flow during several periods.

Remarks.- Records poor. Stage-discharge relation affected by ice Jan. 9-16, 1934, Jan. 20, 1935. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		8			37	27		*0	52	*0	*55	3,220
2					36	26		*0	46	*0	*50	667
3	*15		*14	*40	32	25		*0	46	*0	*30	406
4					30	23	*5	*0	44	*0		197
5					29	23		*0	43	*0	7	115
6			13		27			*0	43	*0	*20	70
7	*70			46	28			*0		*0	*25	52
8	*120	*8	*16	44	31	*15	3		*40			38
9	106			*29	32			*0	48	45	*10	29
10	87		19	*28	41			*0		128		20
11	50			*29	68	10		*0	*20	68	2	16
12	44			*28	61			*0			1	24
13	36			*33	56			*0		*15	0	14
14	30			*34	52			*0			0	8
15	24	7		*32	50		*3	*0	1		0	5
16	22		*15	*31	49			*0	*1		*1	3
17	18			32	48			*0	*1	*2	0	2
18	13			32	43	*10		*0			0	2
19		*10		32	43			*0	*0		0	1
20				32	44			0	*0	0	0	1
21	*13			31	46			*0	0	0	0	1
22		14	14	31	43		3	*0	*0	0	97	1
23				32	42			*0	*0	0	402	1
24				34	40		*2	*0	*0	293	168	1
25	13			35	35	9		*0	*0	186	72	0
26		*14	*25	39	33			*0	*0	*70	*220	0
27				42	30	*9	*1	0	*0		110	0
28				43	28			29	*0	*40	31	0
29	*10			44	-			135	*0	22	16	0
30				42	-	9	0	84	*0	169	9	0
31				39	-	*9	-	76	-	60	446	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					841	120	-	27.1	1,670			
November.....					305	-	-	10.2	605			
December.....					554	-	-	17.9	1,100			
Calendar year 1933.....					55,671	6,740	0	153	110,400			
January.....					1,115	-	28	35.9	2,210			
February.....					1,135	68	27	40.5	2,260			
March.....					402	27	-	13.0	797			
April.....					90	-	0	3.0	179			
May.....					323	135	0	10.4	641			
June.....					505	52	0	16.8	1,000			
July.....					1,176	293	0	37.9	2,330			
August.....					1,821	446	0	58.7	3,610			
September.....					4,894	3,220	0	163	9,710			
Water year 1933-34.....					13,157	3,220	0	36.0	26,100			

*Estimated.

Canadian River near Bell Ranch, N. Mex.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	2	6	4	3	0	0	748	205	72	1,100
2	0	0	2	4	5	3	0	0	616	168	65	667
3	0	0	2	6	6	3	0	0	560	144	998	532
4	0	0	1	6	6	3	0	0	472	135	6,130	394
5	0	0	2	5	5	2	0	0	504	117	1,910	320
6	0	0	2	7	6	1	0	0	436	104	1,590	266
7	0	0	2	13	6	1	0	1	355	90	567	225
8	0	0	2	14	6	1	0	1	598	81	355	3,160
9	0	0	2	18	4	1	0	0	525	90	255	*2,400
10	0	0	*3	24	4	1	0	0	370	107	189	775
11	0	0	4	54	4	0	0	0	360	115	157	365
12	0	0	3	54	5	0	0	89	610	120	123	248
13	0	0	3	39	8	0	0	107	225	*140	141	185
14	0	0	3	35	7	1	0	85	857	460	120	147
15	0	0	3	32	4	0	0	99	511	238	99	117
16	0	0	3	26	6	0	0	173	394	135	85	94
17	0	0	4	20	6	0	0	1,250	213	90	110	74
18	0	0	3	16	6	0	0	5,890	157	68	185	65
19	0	0	3	17	7	0	0	*4,060	126	56	112	56
20	5	0	6	14	7	0	2	*2,900	104	48	280	50
21	3	0	6	11	4	0	2	*2,100	83	48	337	44
22	2	0	7	8	4	0	1	*1,460	76	543	1,130	39
23	1	0	7	7	5	0	0	1,240	*340	443	712	34
24	1	0	7	8	2	0	0	1,150	129	242	360	44
25	0	0	7	6	2	0	0	1,630	83	147	243	135
26	0	1	6	5	2	0	0	1,290	67	157	185	1,460
27	0	1	7	5	2	0	0	1,010	11,300	144	579	584
28	0	1	7	3	3	0	0	975	2,520	209	3,400	800
29	0	1	7	3	-	0	0	1,660	490	132	2,830	301
30	0	1	8	3	-	0	0	1,060	280	74	2,900	154
31	0	-	7	4	-	0	-	920	-	112	2,640	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						10	3	0	0.3	20		
November.....						5	1	0	.2	10		
December.....						131	8	1	4.2	260		
Calendar year 1934.....						11,603	3,220	0	31.8	23,020		
January.....						473	54	3	15.3	938		
February.....						136	8	2	4.9	270		
March.....						20	3	0	.6	40		
April.....						5	2	0	.2	10		
May.....						29,150	5,990	0	940	57,820		
June.....						24,109	11,300	67	804	47,880		
July.....						4,962	543	48	160	9,840		
August.....						28,660	6,130	65	925	56,850		
September.....						14,235	3,160	34	474	28,220		
Water year 1934-35.....						101,896	11,300	0	279	202,100		

*Estimated.

Canadian River at Logan, N. Mex.

Location.- Water-stage recorder, lat. 35°21', long. 103°26', in sec. 15, T. 13 N., R. 35 E., half a mile south of Logan, three-quarters of a mile above Chicago, Rock Island & Pacific Railroad bridge, 5 miles below Ute Creek, and 5 miles above Tucumcari Creek. Prior to Oct. 1, 1934, datum of gage used was 1.54 feet lower.

Drainage area.- 11,200 square miles.

Records available.- June 1904 to February 1905, December 1908 to May 1914, October 1930 to September 1935 in reports of U. S. Geological Survey; June 1904 to February 1905, December 1908 to May 1914, October 1922 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, about 52,200 second-feet Aug. 4 (gage height, 11.95 feet, present datum); no flow during several periods.
1930-35: Maximum discharge, about 102,000 second-feet Oct. 11, 1930 (gage height, 19.00 feet, former datum); no flow during several periods.
Maximum stage known, approximately 36.55 feet at a site 1 mile below present station (zero of gage is 3,651.0 feet above mean sea level).

Remarks.- Records poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 35

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1		0	0				0	976	*300	148	*3,000
2	1		0	0				0	810	*200	411	*1,000
3	1		0	1				1	615	*100	2,620	*700
4	0		0	1				2	568		26,400	*500
5	0		0	1				4	592		15,400	*400
6	0		0	1				4	490		4,050	*300
7	0		0	2				3	459		1,990	*200
8	0		0	2				3	525		1,090	*100
9	0		0	1				2	557	*50	760	*4,000
10	0		0	1				2	685		568	*3,000
11	0		0	1				1	576		546	*1,000
12	0		0	1				1	434		420	*500
13	0		0	0				1	599	25	372	*300
14	0		0	0				1	525	25	335	*250
15	0		0	0				73	2,330	231	280	*200
16	0		0	0				110	*1,000	372	275	*100
17	0		0	0				2,050	*600	252	361	*90
18	44		0	0				*18,600	*300	161	863	*80
19	53		0	0				*9,000	*200	110	640	73
20	16		0	0				*3,000	151	71	482	69
21	6		0	0				*2,100	102	49	396	56
22	3		0	0				1,810	86	199	497	52
23	2		0	0				1,540	104	1,240	1,190	45
24	1		0	0				1,380	275	658	721	42
25	1		1	0				1,150	154	476	490	64
26	1		0	0				1,960	136	198	*300	337
27	1		0	0				1,380	1,650	601	*200	860
28	1		0	0				1,090	17,000	260	*600	649
29	0		0	0				964	*5,000	213	*5,000	402
30	0		0	0				1,590	*600	255	*4,000	248
31	0		0	0				1,320	-	216	*4,000	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						132	53	0	4.3	262		
November.....						0	0	0	0	0		
December.....						1	1	0	0	2		
Calendar year 1934.....						24,581	7,800	0	66.8	48,560		
January.....						12	2	0	.4	24		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						0	0	0	0	0		
May.....						49,143	18,600	0	1,586	97,470		
June.....						38,090	17,000	86	1,270	75,550		
July.....						6,659	1,240		215	13,210		
August.....						73,375	26,400	148	2,387	145,500		
September.....						18,624	4,000	42	621	36,940		
Water year 1934-35.....						186,036	26,400	0	510	369,000		

*Estimated.

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., 2½ miles north of Dawson, Colfax County. Prior to Aug. 1, 1934, station located about 800 feet upstream.

Drainage area.-- 250 square miles.

Records available.-- October 1930 to September 1935 in reports of U. S. Geological Survey; October 1915 to May 1923, February 1927 to December 1931 in reports of State engineer.

Discharge.-- Maximum discharge during year ending Sept. 30, 1934, 729 second-feet July 27 (gage height, 5.30 feet, old datum); no flow at times.

Maximum discharge during year ending Sept. 30, 1935, about 3,720 second-feet Sept. 24 (gage height, 4.28 feet, new datum); minimum daily discharge, 0.8 second-foot Oct. 8-10.

1930-35: Maximum discharge, that of Sept. 24, 1935; no flow at times.

Remarks.-- Records fair except those estimated, which are poor. Stage-discharge relation affected by ice Dec. 13-31, 1933, Jan. 1-5, 12, 14-19, 21-28, 28-31, Feb. 1, 2, 11-23, Nov. 25-30, Dec. 1-11, 17-28, 1934, Jan. 1-5, Feb. 24, Mar. 18, 1935. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	3	5			8	8	12	12	10	3	3
2	1	3	4		*9	8	8	13	10	7	2	
3	1	3	2	*2	9	9	9	13	11	5	20	
4	0	4	1		6	8	9	12	12	5	4	
5	0	2	0		5	8	8	13	17	5	4	*3
6	0	2	0	1	4	8	7	13	13	4	10	
7	3	2	1	1	5	9	9	11	9	4	11	
8	3	2	5	0	5	7	8	11	8	5	18	
9	3	2	7	2	6	8	7	11	8	5	16	
10	3	2	4	3	7	10	7	11	7	5	22	
11	3	4	4	3		9	7	12	6	5	18	*2
12	2		2	*2		9	11	14	5	18	24	
13	4			2		10	14	15	4	5	33	
14	4					10	15	15	4			
15	4					10	*15	14	3	*5	17	2
16	3	4		*3		10	*16	14	5		12	3
17	3	5			*8	7	*16	12	6	5	20	2
18	3	3				6	*13	11	7	11	14	2
19	3	4				7	*13	11	7	7	57	2
20	3	3		4		8	*13	11	6	5	21	2
21	3	4				7	13	12	6	3	9	2
22	3	4	*3			7	14	20	5	3	9	2
23	3	*4				8	14	19	5	2	9	3
24	3	*4		*7	8	9	14	26	6	8	9	3
25	3	4			9	9	15	30	6	6	9	3
26	3	2			8	9	15	43	4	19		3
27	3	2		10	5	8	14	20	4	71	*6	2
28	3	4			8	8	15	16	14	9		2
29	2	3			-	8	13	13	13	5	3	2
30	2	4		*10	-	8	13	17	56	5	3	1
31	2	-			-	8	-	15	-	5	3	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						76	4	0	2.5	151		
November.....						99	5	2	3.3	196		
December.....						94	-	0	3.0	186		
Calendar year 1933.....						4,912	97	0	13.5	9,740		
January.....						138	-	0	4.5	274		
February.....						207	-	4	7.4	411		
March.....						259	10	6	8.4	514		
April.....						352	16	7	11.7	698		
May.....						480	43	11	15.5	952		
June.....						279	56	3	9.3	553		
July.....						262	71	2	8.5	520		
August.....						420	57	2	13.5	833		
September.....						71	-	1	2.4	141		
Water year 1933-34.....						2,737	71	0	7.5	5,430		

*Estimated.

Vermejo River near Dawson, N. Mex.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	1.2	2.6	*1.5	*2.5	3.6	2.6	*2.5	7.4	48	9.2	34	84	
2	1.1	2.9		*2.5	3.4	4.5	*2.5	7.4	42	11	30	35	
3	.9	2.6		*2.5	3.1	4.5	*2.5	12	45	9.8	43	12	
4	1.0	2.9		*2.5	3.4	3.1	*2.5	9.8	43	9.0	22	15	
5	.9	2.6		*3.5	3.6	2.6	*2.5	9.2	42	6.8	18	20	
6	.9	3.4	*2	3.9	3.6	2.3	*2.0	9.2	40	6.3	19	19	
7	.9	3.4		3.9	3.4	2.6	*2.0	9.8	39	8.1	12	17	
8	.8	3.4		4.5	3.1	2.3	*2.0	13	39	46	32	16	
9	.9	3.1		3.9	6.3	2.9	*2.0	20	36	21	12	14	
10	.8	3.1		3.4	6.3	2.9	*2.0	21	36	14	27	12	
11	1.1	2.9	*2.5	*4.0	3.1	3.1	*1.5	20	63	13	12	11	
12	1.6	3.1	2.5	*3.0	2.9	3.1	1.6	17	30	23	8.0	8.6	
13	1.8	3.1	2.3	*2.5	2.6	3.6	1.6	18	30	20	6.8	7.4	
14	1.8	2.9	2.3	*3.0	3.4	3.6	1.8	27	36	24	6.8	6.8	
15	1.6	2.3	2.6	*3.5	2.1	3.4	2.1	21	39	21	5.7	6.3	
16	1.6	2.3	2.6	*3.0	2.3	3.9	3.1	28	35	15	5.1	5.7	
17	1.6	3.4		*2.0	2.3	3.4	4.5	61	33	13	5.7	5.1	
18	1.6	3.6		*2.5	3.6	*3.0	5.1	45	29	11	5.1	9.8	
19	1.6	3.1		*2.5	3.4	3.6	6.3	48	27	27	5.7	5.1	
20	1.6	2.9		*2.0	3.9	3.6	5.7	39	23	15	6.3	3.9	
21	1.8	3.1	*2.5	*1.5	4.5	3.4	5.7	33	22	28	6.3	3.6	
22	1.8	2.6		*2.0	3.4	3.1	7.4	38	25	67	8.6	3.6	
23	1.8	2.3		2.3	2.3	2.9	7.4	51	28	38	52	4.5	
24	1.8	2.1		5.7	*2	3.0	8.6	61	22	9.8	40	*428	
25	2.1	2.0		6.8	2.3	*3.0	8.6	71	18	6.3	35	*60	
26	2.1	*2.0	3.9	5.7	2.3	*4.0	8.0	77	15	5.1	55	*15	
27	2.3	*2.0		5.7	2.3	*7.0	6.3	69	15	9.3	22	*8	
28	2.3	*2.0		11	2.6	*5.0	6.8	63	16	17	100	*4	
29	2.3	*1.5		3.1	8.0	-	*4.0	6.8	54	15	12	138	*4
30	2.6	*1.5		3.1	5.1	-	*3.5	8.6	56	13	11	97	*4
31	2.6	-	3.4	3.9	-	*3.0	-	51	-	19	31	-	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						48.7	2.6	0.8	1.57	97			
November.....						80.7	3.6	1.5	2.69	160			
December.....						73.4	3.9	-	2.37	146			
Calendar year 1934.....						2,670.8	71	0	7.32	5,300			
January.....						118.8	11	1.5	3.83	236			
February.....						91.1	6.3	2	3.25	181			
March.....						106.6	7.0	2.3	3.44	211			
April.....						130.0	8.6	1.5	4.33	258			
May.....						1,066.8	77	7.4	34.4	2,120			
June.....						944	63	13	31.5	1,870			
July.....						544.7	67	5.1	17.6	1,080			
August.....						901.1	138	5.1	29.1	1,790			
September.....						847.4	428	3.6	28.2	1,680			
Water year 1934-35.....						4,953.2	428	.8	15.6	9,830			

*Estimated.

Cimarron River at Ute Park, N. Mex.

Location.- Water-stage recorder, lat. 36°34', long. 105°4', 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 1935 in reports of U. S. Geological Survey; July 1907 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year, 164 second-feet July 22 (gage height, 2.80 feet); minimum daily discharge, 1.8 second-feet Dec. 18.
1930-35: Maximum discharge, 175 second-feet July 4, 1934 (gage height, 2.92 feet); minimum daily discharge, that of Dec. 18.

Remarks.- Records good except those estimated, which are fair. Flow regulated by storage in Eagle Nest Reservoir. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	33	18	*3	*2.5	*3.0	3.6	31	34	76	82	86	16	
2	31	16		*2.6	*3.1	3.3	34	40	73	86	65	26	
3	33	11		*2.7	*3.2	3.3	34	42	75	61	28	20	
4	33	6.7		*2.8	*3.3	3.6	34	26	73	62	24	20	
5	32	6.0	*2.5	*2.9	*3.3	3.1	34	27	84	89	29	19	
6	21	6.0		*2.8	*3.4	4.7	32	32	82	57	19	18	
7	14	5.8		*2.7	3.4	5.4	31	44	82	49	19	16	
8	22	5.6		*2.7	3.2	*6	36	58	69	110	18	15	
9	22	8.4		2.6	3.4	*8	38	60	73	110	17	16	
10	23	8.7		2.5	3.4	*9	36	57	94	108	16	14	
11	24	12	2.5	2.6	3.4	9.9	38	57	100	108	15	13	
12	24	14		2.5	2.6	*3.5	7.0	36	56	108	110	18	12
13	18	14		*2.3	*2.6	*3.5	13	40	54	108	72	16	11
14	9.9	14		2.1	2.6	*3.6	15	49	50	108	64	16	11
15	11	14		1.9	2.6	3.6	16	53	47	73	106	16	10
16	21	14	2.1	2.9	*3.6	16	53	47	76	95	21	9.4	
17	22	14	2.1	*3.0	*3.6	14	57	70	116	86	19	8.7	
18	24	7.7	1.8	*3.0	*3.6	14	56	90	115	80	15	8.4	
19	24	7.7	*1.9	*3.1	3.6	14	53	100	106	82	22	7.7	
20	18	7.0	*2.0	*3.2	3.4	15	44	94	98	59	27	7.0	
21	18	6.7	*2.0	*3.2	3.2	15	42	86	100	94	29	7.0	
22	17	*7	2.1	*3.3	3.1	12	52	80	75	113	26	7.0	
23	12	*6	*2.2	*3.4	2.9	12	54	79	70	89	27	7.0	
24	12	*5	*2.2	*3.3	3.1	11	52	84	88	57	20	7.7	
25	12	*4	*2.3	*3.2	3.4	12	40	98	88	55	15	9.1	
26	12	*3	*2.4	*3.1	*3.8	19	35	101	86	49	31	9.1	
27	8.7	*3	*2.4	*3.0	*4.3	20	33	98	88	32	29	9.1	
28	12	*3	2.5	2.9	4.8	20	36	92	83	32	30	8.4	
29	19		2.2	2.9	-	21	38	86	58	47	30	7.9	
30	19		*2.3	2.8	-	22	34	82	51	44	28	6.3	
31	19		*2.4	3.1	-	28	-	79	-	54	20	-	
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet		
October.....						620.6	33	8.7	20.0		1,230		
November.....						254.3	18	-	8.48		504		
December.....						73.2	-	1.8	2.36		145		
Calendar year 1934.....						13,117.8	153	1.8	35.9		26,020		
January.....						89.2	3.4	2.5	2.88		177		
February.....						96.7	4.8	2.9	3.45		192		
March.....						375.9	28	3.1	12.1		746		
April.....						1,235	57	31	41.2		2,450		
May.....						2,048	101	26	66.1		4,060		
June.....						2,576	116	51	85.9		5,110		
July.....						2,340	113	32	75.5		4,640		
August.....						791	86	15	25.5		1,570		
September.....						356.8	26	6.3	11.9		708		
Water year 1934-35.....						10,866.7	116	1.8	29.7		21,530		

*Estimated.

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, an eighth of a mile west of Springer, 6 miles below mouth of Rayado River, and 6 miles above confluence with Canadian River. Prior to July 13, 1934, station located at highway bridge about 300 feet upstream with datum 1.61 feet higher.

Records available.- July 1907 to December 1909, October 1930 to September 1935, in reports of U. S. Geological Survey; August 1907 to December 1909, January 1921 to December 1931 in reports of State engineer.

Extremes.- Maximum discharge during year ending Sept. 30, 1934, about 625 second-feet July 23 (gage height, 4.55 feet); minimum daily discharge, 0.3 second-foot Aug. 11. Maximum discharge during year ending Sept. 30, 1935, about 4,310 second-feet Aug. 27 (gage height, 6.70 feet); minimum daily discharge, 0.5 second-foot Oct. 5, 6. 1930-35: Maximum discharge and stage, those of Aug. 27, 1935; minimum daily discharge, 0.1 second-foot Apr. 11, 1933.

Remarks.- Records good except those prior to July 1934, which are poor. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6		4.6	5.5	3.6	4.6	2.4	3.1			0.5	1.5
2	4.6	*4	5.5	5.0	4.6		2.2	2.4		*0.6	.5	1.2
3	5.0		6.0	5.0	4.1		2.2	2.2		.7	.7	1.0
4	5.5	4.1	5.0	5.5	4.1		2.4	1.3		.5	.8	.9
5	8.3	4.6	4.1		4.1		2.6	1.3		.5	.7	.9
6	*10	4.6	3.6		3.6		2.6	.9		.7	.8	.9
7	13	3.6	3.1		3.6	*6	2.4	.5	*1.5	2.2	.5	.8
8	8.3	4.1	3.6		3.6					2.0	.5	.8
9	4.6	3.1	3.6		3.6						.4	.9
10	4.1	3.1	3.1							*1.5	.4	.9
11	2.4	2.2	3.1							.9	.3	.9
12	2.2		*3.1	9.1	9.1		*3			.7	.4	.8
13	2.0		3.1	9.1	9.1	4.6				.5	.4	.8
14	2.2	*3	2.6	7.5	9.1	4.6				.5	.5	.8
15		4.1	2.2	4.1	9.9	3.6		*1	1.3	.7	.5	.8
16		3.6	3.1	2.6	9.9	4.6	4.6		1.6	.7	.8	.8
17		3.1	7.5	6.0	9.1	3.6	3.6		1.8	.6	.8	.8
18		3.6	6.0	5.5	8.3	4.6	3.1		1.9	.6	.8	.8
19		3.6	2.6	6.5	7.0	4.1	3.1		1.5	.5	.7	.8
20		4.1	2.2		6.5	3.6	4.1	1.3	1.1	.5	73	.8
21		3.6	2.4	*6.5		3.1	4.1	2.0	1.8	.6	26	.8
22		5.0			*6.5		3.6	2.6	1.8	.7	4.5	.8
23	*3						2.2	2.4	1.8	37	2.0	.8
24		*4		6.5	5.5		2.0	2.0	1.6	10	1.2	.8
25		3.1	*2.5	6.0	5.0			1.8	1.1	2.5	1.0	.7
26		2.6		5.0	5.5	*3		1.8	.7	3.3	.9	.7
27		2.6	2.6	5.5	4.6		*2.5	1.6	*.7	1.6	.9	.6
28		2.4	2.6	4.1	4.6			2.2	.7	.9	1.0	.5
29		2.4	3.1	4.1	-				1.1	.8	10	.5
30		2.6	5.0	3.6	-		3.6		.5	.7	5.6	.5
31			6.0	3.1	-	2.4	-		-	.5	1.6	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						127.8	13	2.0	4.12	253		
November.....						104.0	-	2.2	3.47	206		
December.....						111.9	7.5	2.2	3.61	222		
Calendar year 1933.....						3,042.5	268	.5	8.34	6,030		
January.....						184.3	9.1	2.6	5.95	366		
February.....						172.4	-	3.6	6.16	342		
March.....						136.4	-	-	4.40	271		
April.....						87.3	-	-	2.91	173		
May.....						47.1	-	-	1.62	93		
June.....						40.9	-	.5	1.35	81		
July.....						75.5	37	.5	2.44	150		
August.....						138.7	73	.3	4.47	275		
September.....						24.6	1.5	.5	.82	49		
Water year 1933-34.....						1,250.9	73	.3	3.43	2,480		

*Estimated.

Cimarron River at Springer, N. Mex.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.6	0.9	1.6	2.0	1.2	1.9	1.5	2.3	94	2.5	1.9
2		.6	1.0	1.5	2.0	1.3	1.9	1.5	2.3	77	4.5	1.7
3		.6	.9	1.5	2.0	1.3	2.2	1.6	5.3	28	4.7	15
4		.6	1.0	1.5	2.0	1.2	2.0	1.5	5.9	8.9	2.3	65
5		.5	1.2	1.3	2.3	1.5	1.7	1.3	5.6	6.2	2.2	7.8
6		.5	1.3	1.3	2.2	1.5	1.7	1.3	4.7	5.3	1.7	5.0
7		.7	1.3	1.3	5.6	1.6	1.6	1.3	3.7	5.0	3.7	2.8
8		.7	1.3	1.5	4.7	1.5	1.3	1.5	2.3	4.7	17	2.0
9		.7	1.3	1.3	4.5	1.6	1.6	1.3	2.2	4.5	5.0	1.9
10		.7	1.3	1.3	4.0	1.9	1.6	1.2	2.2	3.5	3.5	1.6
11		.7	1.3	1.3	3.3	1.7	1.6	1.3	2.2	3.0	4.0	1.3
12		.8	1.2	1.3	3.0	1.7	1.6	1.5	2.2	3.0	3.0	1.0
13		.8	1.2	1.5	2.5	1.7	1.3	1.5	2.3	3.3	4.5	.9
14		.8	1.2	1.5	2.3	1.7	1.2	1.5	3.3	2.5	2.8	.8
15		.7	1.2	1.6	2.3	1.6	1.3	1.3	5.3	2.5	2.2	.8
16		.7	1.0	1.6	2.2	1.0	1.3	1.3	55	2.2	2.3	.7
17		.8	1.6	1.6	2.0	1.0	1.2	1.5	43	2.2	2.5	6.6
18		.8	1.2	1.7	2.2	1.2	1.3	1.9	109	3.0	2.3	20
19		.8	1.5	1.6	1.9	1.2	1.2	2.8	119	2.2	2.5	2.3
20		.8	1.6	1.7	1.5	1.2	1.2	2.3	284	2.0	2.3	43
21		.8	2.2	1.9	1.9	1.3	1.3	2.5	318	1.9	3.0	49
22		.8	1.9	1.7	1.9	1.3	1.5	2.3	312	2.5	4.2	4.5
23		.8	1.9	1.9	1.9	1.5	1.5	2.0	324	2.8	4.2	4.5
24		.8	1.9	1.9	1.7	1.5	1.5	2.2	410	2.2	3.3	2.3
25		.8	2.0	1.6	1.6	1.5	1.5	2.2	354	1.9	3.5	2.2
26		.8	2.0	1.7	1.6	1.7	1.7	2.3	375	162	4.7	2.2
27		.8	1.9	2.0	1.6	1.7	3.3	2.2	339	215	3.5	604
28		.8	2.0	1.9	1.7	1.7	2.5	2.2	278	7.5	3.0	271
29		.8	2.0	1.9	1.5	-	2.0	2.3	219	4.5	2.8	191
30		.8	1.7	1.7	1.5	-	1.6	2.3	168	3.7	2.8	40
31		.9	-	1.9	1.5	-	1.5	-	140	-	3.0	48
Month												
	Second-foot-days					Maximum		Minimum		Mean		Run-off in acre-feet
October.....	22.8					0.9		0.5		0.74		45
November.....	44.0					2.2		.9		1.47		87
December.....	49.6					2.0		1.3		1.60		98
Calendar year 1934	1,023.6					73		.3		2.80		2,030
January.....	72.9					5.6		1.5		2.35		145
February.....	40.8					1.9		1.0		1.46		81
March.....	50.6					3.3		1.2		1.63		100
April.....	53.4					2.8		1.2		1.78		106
May.....	3,877.8					410		2.2		125		7,690
June.....	667.0					215		1.9		22.2		1,320
July.....	113.5					17		1.7		3.66		225
August.....	1,400.8					604		7		45.2		2,780
September.....	137.8					20		1.7		4.59		273
Water year 1934-35.....	6,531.0					604		.5		17.9		12,950

Cieneguilla Creek near Eagle Nest, N. Mex.

(Formerly published as Cieneguilla Creek near Therma, 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 1935 in reports of U. S. Geological Survey; April 1928 to December 1931 in reports of State engineer. No records during winters.

Extremes.- Maximum discharge during year, about 310 second-feet Aug. 23 (gage height, 4.65 feet); minimum daily discharge observed, 0.7 second-foot Oct. 3-8, Aug. 18. 1930-35: Maximum discharge and stage, those of Aug. 23, 1935; minimum daily discharge not determined.

Remarks.- Records fair except those estimated, which are poor. No discharge record Dec. 1-12, 14-31, Jan. 1 to Feb. 28. Stage-discharge relation affected by ice Nov. 23-30. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.3				4.0	13	11	27	2.4	1.2	6.2
2	.8	2.2				4.5	13	14	24	1.6	4.8	11.14
3	.7	2.4				5.1	11	15	20	1.6	14	5.9
4	.7	2.4				5.5	12	17	19	1.2	8.9	4.7
5	.7	1.5				5.1	14	16	16	1.3	8.9	6.8
6	.7	1.3				4.7	12	22	14	1.0	3.8	4.3
7	.7	1.5				4.3	9.9	20	12	1.9	3.2	3.8
8	.7	1.6				4.3	10	19	10	1.6	2.4	4.7
9	.8	1.6				4.3	14	17	9.4	1.5	4.9	3.5
10	1.0	1.5					11	17	8.4	1.2	2.2	3.0
11	1.2	1.9				*7	16	15	8.4	1.2	1.3	2.4
12	1.3	1.6					15	15	12	1.9	2.2	1.9
13	1.3	1.6	†2.0				12	15	29	1.6	1.9	1.5
14	1.3	1.5					14	16	21	1.6	1.3	1.3
15	1.3	1.2					17	17	14	2.7	.8	1.3
16	1.2	1.0				*20	19	22	11	2.2	.7	1.3
17	1.2	1.3					18	68	9.9	2.2	1.0	1.5
18	1.3	2.7					17	84	8.0	1.9	.8	2.2
19	1.3	2.2					22	84	6.4	1.6	1.3	1.6
20	1.3	4.0					21	92	5.1	1.2	1.5	1.5
21	1.3	3.5				27	19	78	5.1	1.5	20	1.5
22	1.5	3.2				30	18	76	4.7	1.6	4.3	1.5
23	1.5					27	17	73	4.7	1.2	40	1.5
24	1.5					21	19	70	3.5	1.0	9.9	2.2
25	1.5					20	17	67	2.4	1.2	6.9	2.7
26	1.5					25	15	60	2.2	2.7	36	3.5
27	1.6					22	11	55	2.4	2.4	19	5.5
28	1.5					20	11	48	7.6	1.5	19	4.3
29	1.6					19	12	43	3.8	*1.2	6.8	3.0
30	1.5					17	9.4	35	2.7	*1.0	5.1	*2.5
31	1.6					15	-	31	-	1.2	4.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	37.1	1.6	0.7	1.20	74
November.....	66.7	-	1.0	2.22	132
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	426.6	30	4.0	13.8	846
April.....	439.3	22	9.4	14.6	871
May.....	1,232	92	11	36.7	2,440
June.....	323.7	29	2.2	10.8	642
July.....	49.9	2.7	1.0	1.61	99
August.....	281.3	48	.7	9.07	558
September.....	98.6	11	1.3	3.29	196
Water year					

*Estimated. †Discharge measurement.

Sixmile Creek near Eagle Nest, N. Mex.

(Formerly published as Sixmile Creek near Therna, 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 1935 in reports of U. S. Geological Survey; April 1928 to December 1931 in reports of State engineer. No records during winters.

Extremes.- Maximum discharge during year, 14 second-feet May 24 (gage height, 1.74 feet); no flow at times.

1930-35: Maximum discharge, 16 second-feet May 4, 1933; maximum gage height, 2.06 feet Sept. 20, 1931, and May 4, 1933; no flow at times.

Remarks.- Records fair except those estimated, which are poor. No record Dec. 1-12, 14-31, Jan. 1 to Feb. 28, Mar. 2-20. Stage-discharge relation affected by ice Nov. 20-26, 28-30. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	1.1	1.1				†1.4	1.0	3.1	6.4	0.1	0	1.9	
2	1.1	1.1					1.0	2.9	5.6	0	0	2.1	
3	1.1	1.2					1.2	2.7	4.6	.1	0	2.3	
4	1.0	1.6					1.1	3.1	4.0	0	0	2.5	
5	.9	1.2					1.0	2.7	3.8	0	0	2.1	
6	.9	1.2					1.0	2.7	3.5	0	0	.8	
7	.9	1.2					.6	3.3	3.8	0	0	.8	
8	.9	1.2					1.0	4.8	3.5	0	0	1.4	
9	.8	1.4					1.2	5.1	3.3	0	0	1.7	
10	.8	1.4					2.1	5.1	3.3	0	0	1.4	
11	.8	1.1					.9	5.1	3.1	0	0	1.1	
12	.8	1.4					.7	4.8	3.3	.2	0	1.0	
13	.8	1.4	†1.8				.9	4.8	3.1	.1	0	1.0	
14	.9	1.4					1.2	4.0	3.1	.1	0	1.0	
15	.9	1.6					2.5	4.0	3.1	.1	0	1.1	
16	.9	1.4					2.9	3.5	2.9	.1	0	1.1	
17	.9	2.1					3.3	4.0	2.5	.1	0	1.2	
18	.9	1.7					3.3	6.4	1.7	.1	0	1.2	
19	1.0	1.7					3.5	8.0	1.4	.1	0	1.2	
20	1.0	1.6					2.9	8.6	1.1	0	1.1	1.1	
21	1.0	} e1.3				} *3	4.5	2.9	7.0	.7	0	1.7	1.1
22	.8						2.9	7.0	.6	0	1.4	1.2	
23	.8						2.9	8.3	.7	0	1.4	1.2	
24	.9						2.5	2.9	13	.5	0	1.9	1.2
25	1.0						2.7	2.9	13	.3	0	1.7	1.4
26	1.0	*1				3.1	2.5	11	.3	0	1.7	1.7	
27	1.0	1.0				2.9	2.5	9.6	.3	0	1.7	2.1	
28	1.0	} 1.0				2.3	2.5	8.3	.2	0	2.7	2.3	
29	1.0					1.4	2.7	8.0	.2	0	2.5	2.1	
30	1.0					.9	2.7	7.3	.1	0	2.5	1.9	
31	1.0					1.0	-	6.7	-	0	2.3	-	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						28.9	1.1	0.8	0.93	57			
November.....						39.5	2.1	-	1.32	78			
December.....						-	-	-	-	-			
Calendar year													
January.....						-	-	-	-	-			
February.....						-	-	-	-	-			
March 21-31.....						27.3	4.5	.9	2.48	54			
April.....						60.9	3.5	.7	2.03	121			
May.....						187.9	13	2.7	6.06	373			
June.....						71.2	6.4	.1	2.37	141			
July.....						1.1	.2	0	.04	2			
August.....						22.6	2.7	0	.73	45			
September.....						44.2	2.5	.8	1.47	88			
Water year													

*Estimated.

†Discharge measurement.

Moreno Creek at Eagle Nest, N. Mex.

(Formerly published as Moreno Creek at Therma, N. Mex.)

Location.— Water-stage recorder, lat. 38°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 1935 in reports of U. S. Geological Survey; April 1928 to December 1931 in reports of State engineer. No records during winters.

Extremes.— Maximum discharge during year, 46 second-feet Sept. 2 (gage height, 1.98 feet); minimum observed daily discharge, 0.1 second-foot Oct. 2, Mar. 29-31, Apr. 1-7, 11-17.

1930-35: Maximum discharge, 126 second-feet Mar. 4, 1932; maximum gage height, 2.17 feet, present datum, Mar. 20, 1931; no flow at times.

Remarks.— Records good except those estimated, which are poor. No record Dec. 1-12, 14-31, Jan. 1 to Feb. 28. Diversions for irrigation above station. Stage-discharge relation affected by ice Nov. 22, 24-30, Mar. 1-9.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.4					0.1	0.2	25	1.2	1.3	1.9
2	.1	.4					.1	.5	22	1.2	3.4	6.3
3	.2	.4					.1	.4	20	1.2	2.8	4.1
4	.2	.4					.1	1.7	19	1.2	2.3	2.5
5	.2	.4					.1	4.7	17	1.2	1.9	2.8
6	.2	.4				*0.8	.1	5.3	14	1.2	1.9	2.1
7	.2	.4					.1	6.2	12	1.3	2.1	1.7
8	.2	.4					.2	7.2	12	1.6	2.5	1.7
9	.2	.3					.2	5.3	11	1.3	3.4	1.7
10	.2	.4					.2	8.7	9.5	1.2	1.9	1.7
11	.7	.4				*2	.1	8.3	7.2	1.1	2.1	1.7
12	.4	.4	†0.2				.1	8.7	12	3.9	2.3	1.6
13	.4	.6					.1	9.5	14	1.9	2.1	1.6
14	.4	.4					.1	11	12	3.2	1.9	1.6
15	.3	.4					.1	13	9.5	2.3	1.6	1.3
16	.2	.4					.1	11	7.2	2.1	1.4	1.3
17	.6	.8					.1	29	5.3	2.3	1.4	1.3
18	.4	.6					.2	43	4.1	2.5	1.3	1.3
19	.3	.8					1.6	46	2.8	2.6	1.2	1.3
20	.3	.4					.6	49	2.6	2.3	1.3	1.3
21	.3	.2				5.0	.3	40	2.1	2.5	1.3	1.2
22	.3	*.2				1.7	.2	36	2.1	2.3	1.6	1.1
23	.3	.3				.8	.2	40	2.1	1.7	1.1	1.0
24	.3					.4	.2	48	1.9	1.3	1.6	1.2
25	.7					.2	.2	53	1.7	1.2	1.4	1.4
26	.4	*.2				.2	.2	51	1.6	1.0	1.4	3.0
27	.4					.2	.2	44	1.4	1.0	4.0	3.0
28	.4					.2	.3	39	1.6	.8	4.8	3.0
29	.4					.1	.3	36	1.6	.7	3.0	2.5
30	.3					.1	.2	31	1.3	.6	2.8	2.1
31	.4					.1	-	26	-	2.1	2.1	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						10.1	0.7	0.1	0.33	20		
November.....						11.2	.8	.2	.37	22		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						37.0	-	-	1.19	73		
April.....						6.6	1.6	.1	.22	13		
May.....						715.6	53	.2	23.1	1,430		
June.....						255.5	25	1.3	3.52	507		
July.....						61.9	3.9	.6	1.67	103		
August.....						72.2	9.5	1.1	2.33	143		
September.....						60.3	6.3	1.0	2.01	120		
Water year												

*Estimated.

†Discharge measurement.

Rayado River at Sauble ranch, near Cimarron, N. Mex.

Location.— Water-stage recorder, lat. $36^{\circ}22'$, long. $104^{\circ}58'$, in Maxwell grant, in T. 25 N., R. 19 E., 10 miles southwest of Cimarron. Prior to July 17, 1934, station located about 700 feet upstream.

Records available.— October 1930 to September 1935; May 1911 to December 1914 at site 3 miles upstream, in reports of U. S. Geological Survey. Records for 1915-31 in reports of State engineer.

Extremes.— Maximum discharge during year ending Sept. 30, 1934, about 270 second-feet Aug. 18 (gage height, 2.90 feet, present site and datum); minimum daily discharge, 1.4 second-feet Sept. 22.

Maximum discharge during year ending Sept. 30, 1935, about 408 second-feet May 17 (gage height, 3.24 feet); minimum daily discharge, 0.5 second-foot Nov. 22.

1930-35: Maximum discharge and stage, those of Sept. 30, 1935; minimum daily discharge, 0.5 second-foot Dec. 8, 1932, and Nov. 22, 1934.

Remarks.— Records good except those prior to July 17, 1934, which are fair, and those estimated, which are poor. Stage-discharge relation affected by ice Nov. 20-30, Dec. 1-9, 19-21, 23-28, 30, 31, 1934, Jan. 1-4, 8, 13, 14, 16-20, 23-27, Feb. 26-28, Mar. 4, 6-8, 12, 16-18, 21, 1935. No diversions above station.

Discharge, in second-feet, water year October 1933 to September 1934

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	2.9	3.7	3.0	3.1	} *4.0	4.0	11	14	6.8	4.3	3.5	3.5	
2	2.9	4.0	2.0	3.1		4.3	11	14	6.3	4.2	3.0	4.0	
3	3.3	3.4	2.6	3.1		3.8	4.0	10	13	*6	3.3	3.5	2.8
4	4.2	4.4	2.6	3.3		3.7	4.0	9.3	13	*6	3.1	3.0	2.2
5	3.8	3.8	2.9	3.2		3.8	5.1	9.7	13	*8	4.9	3.8	2.0
6	4.4	4.0	3.0	3.3	3.8	5.6	10	11	*7	3.4	3.5	3.0	
7	3.6	3.3	3.4	3.0	4.0	6.6	9.7	10	*7	3.2	3.0	2.8	
8	3.3	4.3	3.0	3.0	4.0	6.1	13	10	*6	3.6	4.2	2.3	
9	3.3	4.0	3.0	3.0	3.7	6.1	12	10	*6	3.4	3.0	3.0	
10	3.3	4.0	3.0	3.0	6.6	5.6	11	12	*5	3.4	2.6	3.0	
11	3.3	4.0	3.0	3.0	2.9	6.1	13	12	*5	3.3	3.0	2.2	
12	3.3	4.0	3.0	3.0	4.4	7.6	14	11	*4	3.8	3.8	2.0	
13	3.2	4.0	3.1	3.0	5.9	8.0	15	9.3	*4	3.3	3.5	2.3	
14	3.3	3.8	3.1	3.1	5.4	8.7	16	8.7	3.6	2.9	4.2	2.0	
15	3.6	3.7	2.6	3.1	4.4	9.3	16	8.0	3.6	3.0	3.2	2.0	
16	3.3	3.6	2.6	}	4.8	9.7	17	8.0	3.6	3.0	2.8	1.9	
17	3.2	3.6	2.5			8.0	16	7.1	3.6	4.0	3.0	1.7	
18	3.2	3.4	2.8			7.1	14	6.8	3.6	3.0	1.1	1.7	
19	3.1	3.0	3.2			7.6	14	6.8	3.3	3.8	4.7	1.9	
20	3.3	3.0	3.1			9.7	16	6.8	3.0	2.3	7.9	1.7	
21	3.2	3.2	3.1	} *5.0	} *4.5	12	14	6.6	3.0	1.7	4.2	1.7	
22	3.2	3.0	3.1			12	14	15	2.9	2.5	5.3	1.4	
23	3.2	3.2	3.1			10	14	10	2.8	3.0	4.2	2.5	
24	3.2	3.0	3.1			10	18	9.0	2.9	3.2	3.8	3.8	
25	3.3	3.2	3.0			9.7	16	15	3.0	5.6	5.3	2.5	
26	3.3	2.9	3.0	}	4.2	8.7	15	10	2.9	5.0	3.5	2.2	
27	3.4	3.1	3.1			9.3	16	9.0	2.7	6.6	3.2		
28	3.3	3.1	3.1			10	16	7.6	3.1	6.9	3.2	2.0	
29	3.4	3.2	3.0			11	14	7.3	4.0	4.0	3.5	2.0	
30	3.4	3.6	3.0			13	14	9.7	4.4	3.5	2.8	2.0	
31	3.4	-	3.1	}	*4.0	13	-	8.0	-	3.0	2.8	-	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						104.1	4.4	2.9	3.36	206			
November.....						106.5	4.4	2.9	3.55	211			
December.....						91.1	3.4	2.0	2.94	181			
Calendar year 1933.....						3,540.0	-	-	9.70	7,030			
January.....						120.3	-	-	3.88	239			
February.....						123.3	6.6	2.9	4.40	245			
March.....						251.9	13	4.0	8.13	500			
April.....						408.7	18	9.3	13.6	811			
May.....						311.7	15	6.6	10.1	618			
June.....						135.1	8	2.7	4.44	264			
July.....						114.2	6.9	1.7	3.68	227			
August.....						121.9	11	2.5	3.93	242			
September.....						70.1	4.0	1.4	2.34	139			
Water year 1933-34.....						1,956.9	18	1.4	5.36	3,860			

*Estimated.

75097 O-36-9

Rayado River at Sauble ranch, near Cimarron, N. Mex.

(Continued)

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	1.7	*3	*1.5	4.2	4.2	13	20	64	9.7	5.3	16
2	1.9	1.4		*1.8	5.3	4.0	14	20	58	9.7	12	14
3	1.9	1.9		*2.0	4.5	4.2	15	15	54	9.7	18	16
4	1.9	2.2		*2.3	4.5	*4.5	15	18	52	8.6	24	16
5	1.9	3.0		2.5	4.0	4.5	15	22	47	7.9	*20	16
6	1.9	3.0	*3	2.8	4.2	*3.6	14	36	44	8.2	*15	13
7	1.9	2.5		4.0	3.8	*2.8	11	58	40	10	*13	12
8	1.9	2.3		*3.2	3.5	*3.8	12	49	38	9.0	*12	13
9	1.7	2.3		3.5	3.2	4.8	11	47	36	9.0	11	12
10	1.9	2.3		5.6	3.2	3.5	4.8	7.9	46	33	7.9	*10
11	2.2	2.3	4.8	3.2	3.5	4.5	10	44	30	7.2	*9	10
12	2.3	2.5	4.2	3.2	3.5	*3.8	9.7	43	28	8.6	*9	9.0
13	2.3	2.8	3.8	*3.2	4.8	4.5	14	44	28	9.3	*8	8.2
14	2.2	2.2	3.8	*3.2	5.6	6.6	14	46	25	9.7	*8	7.6
15	2.0	2.0	3.5	3.2	4.2	8.2	18	43	25	10	*8	6.9
16	1.9	2.2	3.5	*3.2	4.2	*7.0	20	85	22	7.6	*7	6.9
17	2.0	3.8	3.5	*3.0	5.3	*7.0	18	266	21	7.2	*7	6.3
18	2.0	3.0	3.5	*2.5	4.8	*7.0	16	221	19	6.6	*7	6.9
19	1.9	2.2	*3.0	*2.3	3.8	8.2	19	*200	18	6.9	*7	6.3
20	1.7	*2.3	*3.1	*2.0	4.2	9.3	26	*180	16	6.6	*20	6.0
21	1.7	*8	*3.2	1.9	4.8	*7.0	23	*160	16	7.9	29	5.3
22	1.7	*5	2.8	2.5	5.0	8.2	25	*140	16	10	26	5.3
23	1.9	*1	*2.8	*3.0	5.3	6.9	27	*120	15	9.3	22	5.0
24	1.7		*2.5	*3.2	5.0	7.9	29	105	14	11	19	5.6
25	1.7		*2.5	*3.2	4.0	8.2	27	105	12	7.9	22	6.3
26	1.7	*1	*2.2	*3.5	*4.1	9.0	24	102	12	7.9	26	6.9
27	1.7		*2.5	*3.8	*4.3	10	22	92	12	7.6	27	7.9
28	1.7		*2.8	4.0	*4.5	10	22	85	13	6.3	24	7.9
29	1.7		3.0	4.0	-	10	22	76	11	6.3	20	7.2
30	1.7		*2.8	4.2	-	11	22	70	10	6.3	18	6.0
31	1.9		*2.2	4.2	-	12	-	66	-	6.0	16	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						58.4	2.3	1.7	1.88	116		
November.....						57.2	3.8	.5	1.91	113		
December.....						98.6	5.6	2.2	3.18	196		
Calendar year 1934.....						1,869.4	18	.5	5.12	3,710		
January.....						93.3	4.2	1.5	3.01	185		
February.....						121.6	5.6	3.2	4.34	241		
March.....						207.5	12	2.8	6.69	412		
April.....						535.6	29	7.9	17.9	1,060		
May.....						2,624	266	15	84.6	5,200		
June.....						829	64	10	27.6	1,640		
July.....						255.9	11	6.0	8.25	808		
August.....						479.3	29	5.3	15.5	951		
September.....						276.5	16	6.0	9.22	648		
Water year 1934-35.....						5,636.9	266	.5	15.4	11,170		

*Estimated.

Colmor Intake Canal near Ocate, N. Mex.

Location.- Water-stage recorder, lat. $36^{\circ}9'$, long. $104^{\circ}53'$, in SW $\frac{1}{4}$ sec. 12, T. 22 N., R. 19 E., 130 feet below headgate, 10 miles southwest of Lake Charette and 10 miles south of Ocate.

Records available.- May 1933 to September 1935.

Extremes.- Maximum discharge during year, about 400 second-feet Aug. 28 (gage height, 4.08 feet); no flow at times.
1933-35: Maximum discharge, about 695 second-feet Aug. 26, 1933 (gage height, 5.14 feet); no flow at times.

Remarks.- Records poor. Colmor Intake 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 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	0.6		0	4.8
2								0	.1		0	4.4
3								0	0		0	2.7
4								0	0		0	2.7
5								0	0		9.8	.5
6								0	0		39	.1
7								0	0		13	0
8								0	0		.5	0
9								0	0		.1	0
10								0	0		0	0
11								0	0		0	0
12								0	0		0	0
13								0	0		0	0
14								0	0		0	0
15								0	0		0	0
16								0	0		0	0
17								0	0		0	0
18								3.3	0		0	0
19								25	0		0	0
20								29	0		0	0
21								14	0		0	0
22								5.0	5.6		0	0
23								5.4	3.1		0	0
24								58	.5		0	0
25								17	0		.1	5.4
26								10	0		17	32
27								8.2	0		4.2	3.9
28								7.6	0		152	1.6
29								5.8	0		16	.5
30								3.9	0		47	.2
31								2.4	-		17	-
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 1934.....						55.2	5.8	0	.15	110		
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.....						194.6	58	0	6.28	386		
June.....						9.7	5.6	0	.32	19		
July.....						0	0	0	0	0		
August.....						315.7	162	0	10.2	626		
September.....						58.8	32	0	1.96	117		
Water year 1934-35.....						578.8	162	0	1.69	1,160		

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 La Cueva dam site.

Records available.- August 1903 to July 1911, April 1931 to September 1935.

Extremes.- Maximum discharge during year, about 647 second-feet Aug. 3 (gage height, 4.74 feet); no flow Oct. 15-17.

1931-35: Maximum discharge, about 930 second-feet May 2, 1931; maximum stage, that of Aug. 3, 1935; no flow at times.

Remarks.- Records fair except those estimated, which are poor. Stage-discharge relation affected by ice Dec. 24, 25, Jan. 1-5, 17-21, Feb. 3-5, 24-28, Mar. 4, 5. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.3	1.1	*1.1	0.8	0.8	1.5	*5	154	*30	28	80
2	2.6	1.3	1.3	*1.1	.8	1.1	1.3	11	148	*30	131	75
3	2.9	1.2	*1.2	*1.0	.9	1.2	*1.3	5.1	151	*25	230	71
4	2.6	1.1	*1.2	*1.0	*.8	*.8	1.3	5.1	150	*25	269	77
5	2.9	.8	*1.3	*1.0	*.8	*.8	*1.2	7.9	139	*20	158	69
6	3.2	.8	1.3	1.8	.8	1.3	*1.3	*52	154	17	146	61
7	3.2	.8	1.6	1.8	.8	1.8	*1.3	*60	144	26	92	56
8	3.2	1.5	1.2	1.2	.8	1.8	*1.3	*60	132	54	74	58
9	2.9	1.5	1.3	.9	.8	1.8	*1.4	75	127	49	65	56
10	2.9	1.3	1.8	.9	.8	1.8	*1.6	*60	108	44	69	53
11	2.2	1.1	1.5	.9	1.1	1.9	2.3	*90	105	38	53	49
12	1.2	.8	1.9	.9	1.1	.9	2.6	*80	122	27	80	44
13	.8	.6	1.9	.9	1.1	1.5	2.3	*70	144	24	51	35
14	.2	.6	1.8	.9	1.1	1.6	1.6	*60	156	24	37	24
15	0	.6	1.3	.9	1.6	1.6	1.8	56	152	25	30	21
16	0	1.5	1.1	.9	1.5	*1.9	1.8	80	142	20	24	21
17	0	1.5	.9	*.8	1.1	*2.2	1.6	261	117	19	24	21
18	.9	1.6	1.2	*.8	1.8	*2.5	2.8	*440	101	17	28	22
19	.9	1.5	1.6	*.7	1.8	2.8	3.0	400	91	11	27	20
20	.9	1.1	1.9	*.7	.8	2.6	2.3	438	85	11	109	17
21	1.5	.9	1.1	*1.0	.9	3.7	2.1	355	87	13	237	16
22	1.5	.9	.8	1.5	1.1	3.7	3.0	303	85	16	94	12
23	1.8	.6	1.2	1.5	1.1	3.9	3.0	303	87	11	85	11
24	1.9	.5	*1.2	1.1	*.5	3.7	3.4	294	70	8.3	94	13
25	1.6	.6	*1.2	1.1	*.6	3.2	5.4	312	53	9.7	88	30
26	1.5	.6	1.3	.9	*.6	4.4	} *5	286	49	9.7	109	41
27	1.9	.9	1.3	.8	*.7	3.4		237	44	8.8	145	44
28	1.3	.9	.9	.6	*.7	2.8		211	40	6.7	138	37
29	1.3	.9	.9	.6	-	1.9		194	*35	7.4	96	26
30	1.2	*1.0	1.1	.8	-	1.9		186	*55	8.3	95	24
31	1.3	-	1.1	.8	-	1.9	-	166	-	5.8	80	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						52.1	3.2	0	1.68	103		
November.....						30.3	1.6	.5	1.01	60		
December.....						40.5	1.9	.8	1.31	90		
Calendar year 1934.....						802.4	11	0	2.20	1,590		
January.....						30.9	1.8	.6	1.00	61		
February.....						28.2	1.8	.5	.94	52		
March.....						67.1	44	.8	2.16	133		
April.....						77.5	-	1.2	2.58	154		
May.....						5,161.1	440	5	166	10,240		
June.....						3,207	155	35	107	6,560		
July.....						639.7	54	5.8	20.6	1,270		
August.....						2,984	269	24	95.3	5,920		
September.....						1,185	80	11	39.5	2,350		
Water year 1934-35.....						13,501.4	440	0	37.0	26,780		

*Estimated.

Mora River near Golondrinas, N. Mex.

Location.— Water-stage recorder, lat. 35°53', long. 105°7', in Mora grant, half a mile above mouth of Coyote Creek and 2 miles east of Golondrinas, Mora County.

Records available.— August 1903 to September 1904 (only gage heights at former site at Weber, N. Mex.), October 1930 to September 1935 in reports of U. S. Geological Survey; March 1915 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year, about 1,220 second-feet May 18 (gage height, 7.98 feet); no flow Oct. 5, 6.

1930-35: Maximum discharge and stage, those of May 18, 1935; no flow at times.

Remarks.— Records fair except those estimated, which are poor. Stage-discharge relation affected by ice Nov. 27-30, Dec. 1-13, 31, Jan. 1-5, 16-22, Feb. 24, 25. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.9	*1.0	*1.5	2.2	2.7	1.3	0.7	191	29	2.5	100
2	.2	.8	*1.0	*1.5	2.6	2.4	1.0	1.1	184	21	66	101
3	.2	1.1	*1.1	*1.5	2.7	2.4	.9	4.9	184	22	234	88
4	.1	.8	*1.1	*1.5	2.7	2.2	.8	4.3	173	20	406	92
5	0	.6	*1.2	*2.0	2.2	1.4	.6	7.8	157	15	157	54
6	0	.7	*1.2	4.7	2.2	1.2	1.0	35	169	14	141	72
7	.2	.8	*1.2	5.9	2.2	1.6	1.2	92	160	15	122	66
8	.1	1.0	*1.2	5.1	1.6	1.3	1.0	90	167	35	100	67
9	.2	1.0	*1.2	3.4	1.6	1.2	1.3	109	156	57	74	66
10	.4	1.1	*1.2	3.6	2.2	1.0	.7	110	131	30	95	61
11	1.2	1.2	*1.2	3.6	2.1	1.3	.7	140	109	27	64	56
12	.9	1.5	*1.1	4.0	1.0	1.0	.7	127	127	19	84	51
13	.5	1.4	*1.0	3.4	.8	1.2	.5	115	159	19	54	45
14	.3	.9	.9	3.4	.8	.9	.4	88	171	17	42	29
15	.4	.4	1.3	3.0	.8	.7	1.0	82	177	22	32	24
16	.2	.5	2.1	*2.3	1.1	.6	.6	81	157	12	27	22
17	.6	1.5	1.4	*2.1	1.3	.9	.4	395	131	16	22	19
18	.4	1.2	1.1	*2.1	1.6	2.2	.5	793	106	12	29	18
19	.5	1.2	1.6	*1.8	1.3	1.0	1.6	592	94	6.6	26	19
20	.6	.6	2.1	*1.8	2.6	.9	.7	730	86	4.8	58	15
21	.7	1.6	1.2	*2.2	1.2	.6	.8	500	86	5.7	335	13
22	.4	1.6	1.2	*2.3	1.1	.8	.5	415	90	8.9	107	11
23	.9	1.5	1.2	2.5	1.3	1.1	.4	406	86	7.1	95	7.4
24	1.6	1.3	1.8	3.0	*1.2	2.6	.4	415	78	*3	97	6.5
25	1.4	1.1	2.6	3.0	*1.0	1.2	.6	379	55	*3	109	8.5
26	.8	1.0	3.2	2.6	1.5	1.3	.5	361	44	*3	103	38
27	1.1	*1.0	3.0	2.2	2.4	1.0	.9	318	37	*2	236	39
28	1.3	*1.0	1.5	2.4	2.6	.9	.7	284	40	*2	206	42
29	.6	1.0	1.2	2.7	-	.8	.7	260	32	*2	131	32
30	.4	*1.0	1.4	2.6	-	.7	.9	244	29	1.7	176	26
31	.6	-	*1.5	2.4	-	1.2	-	214	-	2.0	109	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				16.9	1.6	0	0.55	34				
November.....				31.3	1.6	.4	1.04	62				
December.....				45.0	3.2	.9	1.45	89				
Calendar year 1934.....				1,117.4	27	0	3.06	2,220				
January.....				86.4	5.9	1.5	2.79	171				
February.....				47.8	2.7	.8	1.71	95				
March.....				40.5	2.7	.6	1.31	80				
April.....				23.3	1.6	.4	.78	46				
May.....				7,393.8	793	.7	239	14,670				
June.....				3,566	191	29	119	7,070				
July.....				453.7	57	1.7	14.6	900				
August.....				3,539.5	406	2.5	114	7,020				
September.....				1,518.4	101	6.5	43.9	2,620				
Water year 1934-35.....				16,562.6	793	0	45.4	32,860				

*Estimated.

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. Prior to Oct. 10, 1934, station located about 2,000 feet upstream.

Drainage area.— 1,160 square miles.

Records available.— October 1930 to September 1935 in reports of U. S. Geological Survey; October 1914 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year, 3,100 second-feet May 18 (gage height, 6.14 feet); no flow Oct. 1-8.

1930-35: Maximum discharge and stage, those of May 18, 1935; no flow at times.

Remarks.— Records fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.8	1.8	2.2	1.6	1.6	1.1	1.1	215	5.4	0.7	111
2	0	.7	1.6	2.2	1.8	1.6	1.1	1.1	188	2.8	6.0	296
3	0	.6	1.6	2.2	1.8	1.6	1.0	2.2	178	2.8	1.04	93
4	0	.7	1.6	2.3	2.0	1.5	1.1	2.5	168	2.5	1,060	102
5	0	.7	1.6	2.8	2.0	1.3	1.0	2.5	182	2.5	227	87
6	0	.7	1.8	2.8	2.2	1.5	.8	1.6	139	2.5	131	85
7	0	.8	2.2	4.9	2.0	1.5	1.0	1.8	148	2.5	102	74
8	0	1.0	2.2	3.4	1.8	1.5	1.1	46	135	2.2	77	80
9	.2	1.0	2.3	2.5	1.8	1.5	1.1	48	133	39	62	91
10	.2	.8	2.2	2.3	2.2	1.5	.8	46	125	16	75	87
11	.4	.8	2.0	2.3	2.0	1.5	.7	40	102	2.8	75	70
12	.4	.8	2.0	2.3	2.2	1.6	1.0	58	85	.7	45	67
13	.3	1.1	2.0	2.2	2.0	1.6	1.0	51	100	2.0	55	62
14	.2	1.3	2.2	2.2	2.0	1.6	.8	45	125	2.0	55	54
15	.2	1.5	2.0	2.0	2.3	1.5	.8	38	125	1.8	26	40
16	.1	1.5	2.2	1.8	2.2	1.1	.6	30	117	2.0	20	36
17	1.0	2.2	2.0	1.8	2.2	1.5	.8	450	104	2.0	15	34
18	.7	1.6	2.0	1.8	2.2	1.5	2.8	1,670	85	1.6	14	27
19	.4	1.3	2.0	1.8	2.2	1.6	2.5	1,200	64	1.8	13	22
20	.2	1.3	2.2	1.5	2.0	1.3	1.8	1,970	53	1.6	12	18
21	.2	2.0	2.2	2.2	1.6	1.1	1.5	1,160	45	1.6	380	18
22	.2	1.6	2.2	2.0	1.6	1.0	1.5	786	37	1.5	204	18
23	.2	1.5	2.2	2.0	1.6	1.0	1.1	636	32	30	76	17
24	.2	1.5	2.2	1.8	1.6	1.1	1.0	750	25	.7	64	17
25	.2	1.8	2.2	1.8	1.5	1.1	1.0	595	24	1.6	70	20
26	.4	1.5	2.2	1.6	1.8	1.0	1.0	530	18	1.5	175	25
27	.6	1.6	3.4	1.8	1.6	1.1	1.0	452	15	1.5	261	59
28	.7	1.5	2.6	1.6	1.6	1.1	1.1	384	12	1.0	505	54
29	.6	1.6	2.3	1.6	-	1.1	1.5	325	7.0	.8	519	51
30	.6	1.5	2.2	1.6	-	1.1	1.5	234	4.5	.7	553	40
31	1.0	-	2.2	1.6	-	1.1	-	251	-	.7	221	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				9.2	1.0	0	0.30	18				
November.....				37.1	2.2	.6	1.24	74				
December.....				65.5	3.4	1.6	2.11	130				
Calendar year 1934.....				2,541.6	258	0	6.96	5,040				
January.....				67.1	4.9	1.5	2.16	133				
February.....				55.5	2.5	1.5	1.90	106				
March.....				41.5	1.6	1.0	1.54	82				
April.....				34.5	1.1	.7	1.15	68				
May.....				11,657.6	1,970	1.1	385	23,520				
June.....				2,758.3	215	4.5	91.9	5,470				
July.....				138.1	39	.7	4.45	274				
August.....				5,074.7	1,060	.7	164	10,070				
September.....				2,079	296	17	69.5	4,120				
Water year 1934-35.....				22,215.7	1,970	0	60.9	44,060				

Coyote Creek near Golondrinas, N. Mex.

Location.— Water-stage recorder, lat. about 35°54', long. 105°7', in Mora grant, three-quarters of a mile below Coyote Creek dam site, 1½ miles above confluence with Mora River, and 1½ miles northeast of Golondrinas, Mora County.

Records available.— October 1930 to September 1935 in reports of U. S. Geological Survey; April 1928 to December 1931 in reports of State engineer.

Extremes.— Maximum discharge during year, about 835 second-foot May 18 (gage height, 5.20 feet); minimum daily discharge, 0.4 second-foot July 7, 13-15, 19-22, 27-30. 1930-35: Maximum discharge and stage, those of May 18, 1935; minimum daily discharge, 0.3 second-foot June 14, 15, July 6, 1934.

Remarks.— Records good. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	2.5	1.5	1.7	*4	3.2	1.8	1.0	1.2	32	1.7	2.1	12	
2	2.4	1.5	1.5	*4	2.9	1.7	1.0	1.6	28	1.1	24	15	
3	2.4	1.6	1.6	*4	2.9	1.9	1.0	2.8	25	.8	123	11	
4	2.4	1.5	1.8	*5	3.5	2.1	1.0	3.6	22	.8	53	12	
5	2.4	1.6	1.8	*5	3.1	2.1	1.0	5.4	19	.6	16	16	
6	2.4	1.5	1.8	*6	3.5	1.6	1.1	4.5	17	.6	8.4	12	
7	2.5	1.5	1.9	10	3.4	2.2	1.1	3.6	14	.4	4.7	11	
8	2.6	1.4	2.1	6.7	3.6	2.2	1.1	3.9	13	.8	4.3	7.7	
9	2.6	1.4	2.1	5.0	3.1	2.2	1.1	2.9	7.4	11	3.4	7.7	
10	2.4	1.6	2.4	4.3	3.1	2.4	1.0	2.6	6.1	1.0	49	7.4	
11	2.5	1.6	2.8	3.6	2.9	2.9	.9	2.2	4.1	.8	3.6	7.0	
12	2.5	1.6	2.8	3.1	2.6	2.9	1.0	2.5	3.1	.5	3.1	6.4	
13	2.4	1.5	2.6	3.2	2.9	2.9	1.1	2.6	2.6	.4	3.6	5.7	
14	2.4	1.3	3.4	3.1	2.8	2.9	.8	3.6	3.1	.4	2.8	4.7	
15	2.2	1.5	2.5	3.2	2.6	2.9	.8	3.6	3.6	.4	1.8	4.5	
16	2.2	1.4	2.1	2.8	2.6	3.6	1.2	4.5	3.2	.5	1.6	4.5	
17	2.2	1.6	1.9	2.4	2.9	3.4	.8	126	3.4	.6	1.6	4.1	
18	2.2	1.6	2.2	2.2	2.8	2.6	1.2	336	3.9	.5	1.6	3.6	
19	2.1	1.6	1.7	1.9	2.6	2.6	1.6	259	3.6	.4	1.6	3.6	
20	2.1	1.7	2.2	2.5	2.5	3.2	1.6	303	2.2	.4	6.5	3.4	
21	2.1	2.1	2.5	3.2	2.2	2.9	1.6	195	1.6	.4	74	3.9	
22	1.9	2.4	2.8	3.1	2.2	2.4	1.6	153	1.7	.4	5.0	4.3	
23	1.9	2.1	2.9	2.5	1.9	2.4	1.6	136	1.8	.7	4.1	4.3	
24	1.8	2.6	2.9	2.9	1.9	2.5	1.6	108	2.5	.8	5.7	4.1	
25	1.7	2.4	3.1	3.9	1.7	3.4	1.6	94	2.4	.6	5.4	19	
26	1.5	1.9	3.2	3.6	1.9	2.6	1.8	79	1.4	.5	39	15	
27	1.5	2.2	3.6	4.1	1.8	1.7	1.8	68	1.6	.4	69	10	
28	1.5	1.6	2.9	3.6	1.8	1.6	1.8	61	1.2	.4	83	8.4	
29	1.5	1.8	3.9	3.2	-	1.3	1.9	52	1.0	.4	24	7.4	
30	1.6	1.6	3.2	3.2	-	1.0	1.5	43	1.2	.4	23	7.0	
31	1.5	-	*4	2.9	-	1.2	-	38	-	.7	17	-	
Month						Second-foot-days		Maximum		Minimum		Mean	Run-off in acre-feet
October.....						65.9		2.6		1.5		2.13	131
November.....						51.2		2.6		1.3		1.71	102
December.....						77.9		4		1.5		2.51	155
Calendar year 1934.....						1,269.7		13		.3		3.45	2,500
January.....						118.2		10		1.9		3.61	234
February.....						75.1		3.6		1.7		2.65	149
March.....						73.1		3.6		1.0		2.36	145
April.....						38.2		1.9		.8		1.27	76
May.....						2,101.1		336		1.2		67.8	4,170
June.....						232.7		32		1.0		7.76	462
July.....						29.4		11		.4		1.95	53
August.....						655.6		123		1.5		21.1	1,300
September.....						242.5		19		3.4		8.06	481
Water year 1934-35.....						3,760.9		336		.4		10.3	7,460

eEstimated.

Lee Creek near Van Buren, Ark.

Location.- Staff gage, lat. 30°29', long. 94°27', in SW $\frac{1}{4}$ sec. 31, T. 10 N., R. 32 W., at Arkansas-Oklahoma State line, $6\frac{1}{2}$ miles northwest of Van Buren.

Drainage area.- 430 square miles.

Records available.- September 1930 to September 1935.

Extremes.- Maximum discharge observed during year, 37,900 second-feet June 17 (gage height 25.0 feet); minimum, 1 second-foot Sept. 21-24, 1930-35: Maximum discharge observed, that of June 17, 1935; no flow Sept. 1-24, 1930, Sept. 8-21, 1932, July 23 to Sept. 1, 1934.

Remarks.- Records fair. Discharge estimated May 6-8, 14-17, 21, 22, 27, June 4, 5, 9, 10, 20-22, 27, 28, from observers reference readings after section of gage was washed out.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

1.0	2	4.5	2,050	11.0	9,400	18.0	21,900
1.5	45	5.0	2,460	12.0	10,900	19.0	24,100
2.0	200	6.0	3,360	13.0	12,500	20.0	26,500
2.5	490	7.0	4,320	14.0	14,200	21.0	28,500
3.0	850	8.0	5,400	15.0	16,000	22.0	30,700
3.5	1,250	9.0	6,630	16.0	17,900		
4.0	1,650	10.0	8,000	17.0	19,900		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	890	22	1,330	210	395	160	1,650	810	625	625	19	6
2	522	19	1,250	192	395	152	1,410	732	7,590	490	17	5
3	395	24	1,010	176	365	148	1,250	660	10,500	425	15	4
4	266	29	850	160	323	7,810	1,010	3,690	3,560	529	13	3
5	210	44	660	144	294	4,020	2,780	11,300	2,460	272	11	3
6	160	51	625	140	261	2,290	2,290	3,000	1,650	220	9	3
7	128	47	590	176	256	1,330	1,890	1,810	10,600	184	9	3
8	108	44	458	2,290	278	1,090	1,350	1,410	4,320	168	8	3
9	90	40	395	1,250	294	860	1,090	1,170	2,910	160	7	4
10	82	38	347	970	272	6,200	970	970	1,890	117	7	3
11	70	32	278	770	256	6,920	1,250	810	1,250	230	5	3
12	61	29	235	660	256	4,740	970	625	930	278	5	3
13	53	29	205	555	278	2,550	770	490	810	695	5	3
14	45	26	196	490	288	1,650	695	3,720	1,090	517	5	3
15	39	26	188	395	300	1,330	590	2,730	1,250	210	4	2
16	38	24	180	365	278	1,090	490	1,970	19,600	176	4	2
17	38	24	156	365	256	890	458	1,490	29,300	140	4	2
18	38	22	148	335	230	770	425	1,250	10,500	102	4	2
19	34	22	1,410	1,010	215	660	458	5,320	5,180	88	3	2
20	32	3,900	970	2,510	205	625	522	4,320	3,630	72	3	2
21	32	10,200	850	3,520	188	625	490	2,290	2,550	63	3	1
22	32	4,580	732	1,970	180	6,370	425	1,650	1,810	59	3	1
23	29	2,210	522	1,250	164	4,120	365	1,250	1,250	53	3	1
24	29	1,350	490	1,010	164	10,100	329	1,010	1,010	40	3	1
25	29	890	468	810	164	6,410	335	810	770	38	3	2
26	26	810	425	732	210	3,000	2,460	660	2,120	34	3	9
27	26	695	365	660	200	1,970	1,810	1,810	1,650	32	3	8
28	26	590	300	590	150	1,490	1,250	1,090	890	32	3	7
29	24	522	300	522	-	1,170	1,250	850	1,010	26	6	7
30	24	1,970	245	499	-	970	1,090	930	1,010	24	8	7
31	22	-	235	425	-	2,460	-	660	-	22	8	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						3,598	890	22	116		7,140	
November.....						28,289	10,200	19	943		56,110	
December.....						16,403	1,410	148	529		32,530	
Calendar year 1934.....						146,598	10,200	0	402		290,800	
January.....						25,439	3,820	140	821		50,460	
February.....						7,145	395	164	255		14,170	
March.....						85,960	10,100	148	2,708		166,500	
April.....						32,102	2,780	329	1,070		63,670	
May.....						61,287	11,500	490	1,977		121,600	
June.....						133,505	29,300	625	4,450		264,800	
July.....						5,721	695	22	185		11,350	
August.....						202	19	3	6.5		401	
September.....						105	9	1	3.5		208	
Water year 1934-35.....						397,756	29,300	1	1,090		798,900	

Red River near Colbert, Okla.

(Formerly published as Red River near Denison, Tex.)

Location.— Water-stage recorder, lat. 32°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 the confluence of Washita River. Zero of gage is 507.4 feet above mean sea level, U. S. Weather Bureau datum. Prior to Oct. 1, 1934, chain gage half a mile downstream at 0.36 foot lower datum.

Drainage area.— 38,700 square miles (revised).

Records available.— October 1923 to September 1935.

Average discharge.— 12 years, 5,170 second-feet.

Extremes.— Maximum discharge during year, 227,000 second-feet May 21 (gage height, 23.95 feet); minimum, 485 second-feet Mar. 3, 4 (gage height, 1.08 feet).
1923-35: Maximum discharge, that of May 21, 1935; 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, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,260	1,140	3,980	598	608	540	6,670	5,510	24,500	12,800	2,720	7,700
2	1,140	1,050	3,800	565	606	505	3,800	5,510	55,000	14,300	2,120	10,800
3	1,220	1,040	2,860	560	594	490	2,790	3,530	36,200	17,800	2,070	9,600
4	1,260	972	2,070	545	594	837	2,180	16,800	22,600	14,800	2,070	8,300
5	1,100	879	1,660	535	570	1,050	1,910	30,300	22,600	11,600	1,860	6,600
6	972	830	1,480	535	545	1,440	1,710	28,700	16,300	9,600	1,660	13,800
7	948	767	1,340	565	555	755	1,570	31,000	12,000	8,300	1,550	13,800
8	972	732	1,220	535	560	752	1,300	29,400	9,200	6,970	1,390	9,600
9	948	690	1,140	666	570	624	1,300	17,400	7,700	5,510	1,440	8,300
10	879	660	1,040	666	576	672	1,220	10,000	10,900	4,770	2,600	6,190
11	837	650	980	618	582	2,140	1,140	27,100	16,300	4,070	2,410	5,290
12	909	612	924	582	594	5,950	1,050	35,000	10,000	3,530	1,910	10,000
13	781	606	879	555	624	7,400	1,000	19,000	8,600	3,070	3,710	7,700
14	830	594	851	520	624	4,470	964	13,800	10,800	3,530	4,570	4,970
15	816	612	823	510	650	7,130	900	20,300	67,800	8,600	2,930	3,890
16	837	660	795	525	606	7,400	879	39,500	67,600	9,600	4,370	3,530
17	753	678	767	500	650	4,470	851	64,500	54,800	6,430	4,070	3,140
18	732	654	760	540	654	5,380	823	112,000	56,200	5,290	2,550	3,000
19	697	885	753	630	648	3,290	823	135,000	37,700	4,270	1,860	2,720
20	654	4,870	732	1,800	630	2,600	802	112,000	25,900	3,290	1,660	2,470
21	624	6,430	704	3,800	648	2,290	844	201,000	17,800	2,860	1,570	2,240
22	1,020	4,370	690	2,440	630	13,700	2,640	149,000	15,800	2,600	1,520	2,020
23	1,910	7,120	660	1,540	612	41,500	8,600	59,700	10,400	2,470	1,440	1,910
24	2,600	15,800	648	1,040	600	23,700	5,750	56,600	8,000	2,350	1,260	1,860
25	4,270	13,300	636	940	1,370	11,500	5,290	22,600	6,910	2,350	1,220	2,120
26	3,800	10,000	624	837	948	8,300	6,910	17,300	7,150	2,290	1,180	2,600
27	2,720	6,670	612	760	746	7,150	5,950	13,800	6,910	2,290	1,100	5,950
28	2,020	5,070	612	684	618	7,700	5,080	15,800	6,910	2,180	1,060	5,070
29	1,660	4,470	600	648	-	6,670	11,200	50,200	8,900	2,350	2,530	3,070
30	1,430	4,070	576	624	-	6,670	7,700	59,800	12,400	3,210	5,730	2,020
31	1,260	-	582	606	-	7,400	-	32,600	-	3,370	6,670	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	41,759					4,270	824	1,347	82,830			
November.....	96,898					15,800	594	3,230	192,200			
December.....	35,798					3,980	576	1,155	71,000			
Calendar year 1934.....	892,356					21,700	85	2,445	1,770,000			
January.....	25,760					3,800	500	831	51,090			
February.....	18,170					1,370	545	649	36,040			
March.....	192,973					41,500	490	6,225	382,800			
April.....	93,716					11,200	802	3,124	186,900			
May.....	1,419,350					201,000	3,530	45,790	2,615,000			
June.....	671,880					67,800	6,910	25,400	1,333,000			
July.....	186,150					17,800	2,180	6,005	369,200			
August.....	74,750					6,670	1,060	2,411	149,300			
September.....	172,260					13,800	1,860	5,742	341,700			
Water year 1934-35.....	3,029,464					201,000	490	8,300	6,009,000			

Red River at Garland, Ark.
(Formerly published as Red River at Garland City, Ark.)

Location.— Water-stage recorder, lat. 33°21', long. 93°42', in SE $\frac{1}{4}$ sec. 17, T. 16 S., R. 25 W., at Garland. Zero of gage is 203.08 feet above mean sea level. Prior to Oct. 1, 1934, chain gage a quarter of a mile upstream at same datum.

Drainage area.— 51,500 square miles (revised).

Records available.— October 1927 to December 1931, June 1934 to September 1935.

Extremes.— Maximum discharge during year, 143,000 second-feet June 25 (gage height, 34.37 feet); minimum, 920 second-feet Nov. 18, 19 (gage height, 3.44 feet).

1927-31, 1934-35: Maximum discharge, that of June 25, 1935; minimum, 400

second-feet Oct. 8-19, 1931 (gage height, 3.2 feet, former site).

Maximum stage known, 35.4 feet in April 1927.

Remarks.— Records fair.

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,150	3,220	14,900	4,970	25,900	5,660	31,200	68,800	104,000	84,800	4,630	2,540
2	3,830	3,370	15,700	5,310	21,700	7,180	25,400	71,500	107,000	68,300	4,470	2,200
3	4,800	3,220	15,300	7,760	15,300	7,980	25,700	69,900	104,000	69,200	4,310	2,340
4	4,970	2,770	17,000	9,900	10,200	7,360	24,500	67,700	97,000	63,000	4,310	2,480
5	5,480	2,480	18,000	10,200	7,160	7,960	25,700	68,800	99,400	47,000	4,470	4,150
6	5,840	2,200	17,700	8,640	5,660	17,800	19,600	83,200	100,000	39,600	4,800	5,480
7	4,970	1,920	16,300	7,360	4,970	30,300	16,400	92,400	95,800	33,000	4,630	6,770
8	3,990	1,750	12,200	6,580	4,630	39,200	14,600	100,000	96,600	26,400	4,510	7,560
9	3,520	1,640	9,380	6,390	4,630	40,100	14,600	110,000	75,300	19,400	3,990	7,160
10	3,070	1,640	7,560	8,880	5,310	36,800	14,000	122,000	62,900	16,100	3,630	7,360
11	2,770	1,600	6,290	12,500	5,840	34,400	12,500	129,000	54,000	14,000	3,670	9,640
12	2,620	1,360	5,480	14,600	6,200	33,000	11,900	130,000	45,500	12,200	3,370	10,400
13	2,340	1,220	4,970	15,200	6,580	38,200	11,500	127,000	37,200	11,000	3,220	9,580
14	2,200	1,160	4,470	13,100	7,360	47,000	10,400	120,000	31,600	9,640	3,070	8,640
15	2,060	1,040	4,150	10,400	8,180	54,000	9,580	114,000	22,600	9,120	3,070	7,560
16	1,920	980	3,990	8,400	8,400	57,700	8,400	107,000	28,500	8,880	3,070	6,960
17	1,920	980	3,830	7,160	8,400	56,100	7,760	102,000	55,900	8,180	3,830	7,560
18	1,790	920	3,830	6,200	8,640	51,000	7,160	105,000	85,400	7,360	4,470	8,180
19	1,640	920	4,150	6,020	8,180	46,500	4,970	109,000	96,400	7,360	5,310	7,560
20	1,640	1,160	4,150	9,040	7,360	41,100	4,800	113,000	104,000	9,900	5,660	6,770
21	1,500	1,290	4,470	27,800	6,580	34,800	8,400	117,000	115,000	11,000	4,970	6,020
22	1,430	2,600	5,140	46,500	5,660	28,600	15,500	121,000	129,000	9,120	4,800	5,480
23	1,430	19,800	5,480	57,200	4,970	23,300	21,300	126,000	138,000	7,960	4,800	5,310
24	1,430	32,500	5,510	62,900	4,470	25,700	26,300	131,000	142,000	7,160	4,470	4,970
25	1,360	35,300	5,140	65,600	3,990	47,600	28,900	136,000	145,000	6,680	3,830	4,900
26	1,290	33,000	4,800	61,300	3,830	60,300	29,800	138,000	141,000	6,020	3,370	4,630
27	1,220	35,000	4,470	57,200	3,990	56,100	32,000	137,000	136,000	5,660	3,070	4,630
28	1,100	31,600	4,800	52,000	4,800	50,500	44,000	132,000	125,000	5,480	3,070	4,470
29	990	25,400	5,660	47,000	-	46,500	51,000	120,000	115,000	5,140	2,770	4,630
30	1,040	19,400	5,660	41,600	-	42,600	60,800	108,000	101,000	4,970	2,620	4,630
31	1,920	-	5,140	36,300	-	37,700	-	101,000	-	4,800	2,480	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	80, 210	5,840	980	2,587	159,100
November.....	269,370	35,300	920	8,979	534,300
December.....	242,520	18,000	3,830	7,823	481,000
Calendar year					
January.....	734,010	65,600	4,970	23,680	1,456,000
February.....	221,890	28,900	3,830	7,925	440,100
March.....	1,112,800	60,300	5,660	35,900	2,207,000
April.....	614,270	60,800	4,800	20,480	1,218,000
May.....	3,377,300	138,000	67,700	108,900	6,699,000
June.....	2,776,100	143,000	22,500	92,540	5,606,000
July.....	618,330	84,800	4,900	19,950	1,226,000
August.....	122,740	5,660	2,480	3,959	245,500
September.....	179,660	10,400	2,200	5,989	356,400
Water year 1934-35.....	10,349,200	143,000	920	28,350	20,630,000

Pease River near Crowell, Tex.

Location.— Staff gage, lat. 34°6', long. 99°41', at Quanah-Crowell highway bridge 7 miles above Kansas City, Mexico & Orient Railway bridge and 8 miles north of Crowell, Ford County. Zero of gage is 1,330.44 feet above mean sea level (Texas State Highway Department datum). Prior to Apr. 30, 1935, water-stage recorder at same site and datum.

Drainage area.— 2,937 square miles, of which about 533 square miles is probably non-contributing.

Records available.— January 1924 to September 1935.

Average discharge.— 10 years (1924-26, 1927-35), 180 second-feet.

Extremes.— Maximum discharge during year, about 68,700 second-feet May 17 (gage height, 12.06 feet, from flood marks); no flow at times.

1924-35: Maximum discharge, that of May 17, 1935; no flow at times. Maximum stage known, 19.6 feet June 1891.

Remarks.— Yearly records fair. Daily and monthly records not sufficiently accurate for publication. No diversions. Total run-off for calendar year 1934, 53,350 acre-feet. Total run-off for water year ending Sept. 30, 1935, 365,100 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.

Drainage area.— 496 square miles.

Records available.— May 1932 to September 1935.

Extremes.— Maximum discharge during year, 6,000 second-feet May 6 (gage height, 24.81 feet); no flow at times.

1932-35: Maximum discharge, 7,750 second-feet May 26, 1933 (gage height, 25.01 feet); no flow at times.

Remarks.— Records good below and fair above 40 second-feet, except those estimated May 26 to June 21, which are poor. No diversions above station.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

4.1	0	5.2	47.2	6.8	95.3	12.0	690	20.0	2,010
4.2	.2	5.4	54.9	7.0	104	13.0	845	21.0	2,210
4.3	1.5	5.6	60.9	7.5	139	14.0	1,006	22.0	2,420
4.4	3.5	5.8	66.1	8.0	179	15.0	1,165	23.0	2,640
4.5	7.5	6.0	70.8	8.5	224	16.0	1,330	24.0	3,000
4.6	12.8	6.2	75.7	9.0	277	17.0	1,495	25.0	7,760
4.8	24.2	6.4	81.2	10.0	400	18.0	1,660		
5.0	36.4	6.6	87.7	11.0	540	19.0	1,830		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0	13	0.1	0	0.2	0.9	8.6		1,150	0.6	9.1
2	.1	0	8.0	0	0	.2	.5	3.4		917	.3	24
3	.1	0	5.6	0	0	.2	.2	1.9		37	.2	594
4	.1	0	6.1	0	0	20	.4	613		18	.2	845
5	0	0	3.6	0	0	23	33	2,520	1,180	10	.1	161
6	0	0	2.4	0	0	61	54	5,250		5.1	.1	18
7	0	0	1.5	0	0	4.8	30	2,830		2.9	.1	33
8	0	0	1.3	0	0	2.2	13	849		1.5	0	33
9	0	0	1.2	0	0	1.9	6.1	29		.6	0	115
10	0	0	.7	0	0	50	3.1	15	14	.4	0	391
11	0	0	.6	0	0	406	1.5	9.0		.3	0	46
12	0	0	.5	0	0	413	.7	5.6		.2	0	21
13	0	0	.3	0	0	43	.4	5.1	1,120	4.8	.2	11
14	0	0	.2	0	0	23	.4	16		5.4	.9	5.1
15	0	0	.2	0	.1	14	.2	260		8.6	5.6	2.6
16	0	0	.2	0	.1	7.0	.2	1,210		2.6	2.6	1.7
17	.3	5.0	.2	0	3.3	3.4	.2	1,210	16	1.2	1.0	.9
18	56	17	.2	0	4.5	1.9	.2	1,360		1.3	.2	.5
19	52	34	.2	0	2.4	1.2	.1	1,800		1.9	.2	.4
20	26	305	.2	0	1.3	.9	.1	2,270		12	.1	.2
21	12	2,280	.1	0	1.2	78	.1	666	7.0	34	.1	.2
22	4.5	2,550	.1	0	1.3	1,330	.1	32	3.9	24	.1	.1
23	1.7	4,600	.1	0	1.0	2,360	.9	23	2.0	42	.1	.1
24	.6	2,650	.1	0	1.5	1,960	92	43	1.3	195	0	.1
25	.2	576	.1	0	1.3	81	58	15	.7	735	0	.1
26	.1	20	.1	0	1.0	22	50	5.6	15	375	0	6.7
27	.1	12	.1	0	.9	12	27		16	25	0	12
28	.1	7.0	.1	0	.5	6.1	16		11	12	2.2	12
29	0	4.8	.1	0	-	3.6	13		34	4.6	8.6	4.8
30	0	8.6	.1	0	-	2.2	28	2.0	888	2.4	16	2.2
31	0	-	.1	0	-	1.5	-	-	-	1.3	22	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						156.0	56	0	5.03	309		
November.....						12,600	4,600	0	429	25,550		
December.....						47.3	13	.1	1.53	94		
Calendar year 1934.....						25,915.3	4,600	0	71.0	51,390		
January.....						.1	.1	0	0	.2		
February.....						20.4	4.5	0	.73	40		
March.....						6,933.3	2,360	.2	224	13,760		
April.....						430.3	92	.1	14.3	854		
May.....						21,059.2	5,250	-	679	41,770		
June.....						13,916.9	-	.7	464	27,600		
July.....						3,631.0	1,150	.2	117	7,200		
August.....						61.6	22	0	1.98	122		
September.....						2,350.8	845	.1	78.4	4,560		
Water year 1934-35.....						61,475.2	5,250	0	168	121,900		

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. Prior to Oct. 1, 1934, a chain gage at same site and datum.

Records available.- August 1928 to September 1935.

Extremes.- Maximum discharge observed during year, 36,400 second-feet May 19 (gage height, 37.22 feet); minimum, 240 second-feet Jan. 26, 28, Feb. 4-6 (gage height, 3.52 feet).

1928-35: Maximum discharge observed, that of May 19, 1935; 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, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	570	540	380	275	310	265	1,570	4,080	6,500	4,450	765	5,100
2	570	510	355	265	330	265	1,010	1,710	6,220	3,650	730	2,270
3	405	455	355	265	305	255	800	1,150	5,900	3,720	695	2,270
4	310	405	330	290	240	235	695	6,660	5,860	3,840	630	3,720
5	355	355	330	255	240	315	630	17,600	5,660	3,840	600	4,620
6	430	355	330	260	240	405	570	18,700	5,500	3,490	510	3,800
7	405	325	325	275	255	305	510	10,400	3,750	3,310	480	2,890
8	355	315	315	330	265	290	480	4,100	3,130	2,530	455	1,860
9	355	300	305	320	265	280	455	2,400	2,460	1,710	455	1,860
10	305	300	295	305	265	285	455	6,720	1,940	1,500	455	2,080
11	305	285	290	300	265	2,460	430	7,800	1,710	1,290	455	1,290
12	305	265	290	275	265	5,990	405	5,000	1,430	1,150	455	1,430
13	275	265	290	290	285	2,500	405	2,650	2,780	3,960	870	800
14	280	270	270	270	295	2,200	380	1,360	3,900	9,760	2,660	600
15	265	305	270	290	300	1,150	355	10,300	6,920	5,450	1,860	570
16	245	300	270	280	295	835	355	19,600	14,400	2,200	730	730
17	245	280	235	290	295	1,640	355	16,200	12,100	1,710	540	660
18	245	265	290	290	295	1,150	355	26,200	10,900	1,360	455	600
19	215	380	300	290	275	1,010	330	35,400	3,230	1,150	405	510
20	325	2,270	295	315	270	835	660	28,700	3,550	1,080	380	480
21	1,080	2,080	285	330	295	1,600	1,360	19,900	4,620	1,010	380	455
22	1,860	5,460	275	310	280	12,600	1,570	9,780	4,800	1,150	380	430
23	2,600	3,430	295	290	275	4,900	1,570	5,690	2,530	1,080	380	405
24	3,050	2,010	255	270	270	1,280	1,780	5,140	2,010	905	360	405
25	2,400	1,220	285	250	270	1,980	2,400	5,100	1,960	765	320	3,080
26	1,150	870	285	240	280	2,720	1,640	5,800	1,570	765	315	4,650
27	835	630	285	270	275	1,860	1,640	6,080	3,840	800	305	2,340
28	630	480	285	240	275	2,140	1,150	6,240	6,080	800	300	870
29	870	430	285	250	-	2,660	2,790	6,650	4,350	765	300	600
30	510	405	265	270	-	2,660	3,840	6,600	5,220	765	4,420	480
31	455	-	290	320	-	2,460	-	6,650	-	765	5,300	-
Month												
	Second-foot-days					Maximum		Minimum		Mean		Run-off in acre-feet
October.....	21,905					3,050		215		707		45,450
November.....	25,780					5,460		265		859		51,150
December.....	9,285					350		270		300		18,420
Calendar year 1934.....	305,230					7,460		17		836		605,300
January.....	8,760					330		240		283		17,380
February.....	7,775					330		240		276		15,420
March.....	59,790					12,600		255		1,929		118,600
April.....	30,995					3,840		355		1,033		51,460
May.....	312,560					35,400		1,150		10,080		620,000
June.....	148,720					14,400		1,430		4,957		295,000
July.....	70,720					9,760		765		2,281		140,300
August.....	27,363					5,300		300		883		54,280
September.....	51,805					5,100		405		1,727		102,800
Water year 1934-35.....	775,460					35,400		216		2,125		1,538,000

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., .2 miles south of Horatio. Prior to Feb. 5, 1935, chain gage at same site and datum.

Records available.— December 1930 to September 1935.

Extremes.— Maximum discharge during year, 42,700 second-feet May 6 (gage height, 34.80 feet); minimum, 35 second-feet Nov. 17 (gage height, 3.70 feet).

1930-35: Maximum discharge, that of May 6, 1935; minimum, 1 second-foot Aug. 18 to Sept. 1, 1934.

Maximum stage known, 38 feet in August 1915.

Remarks.— Records good.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 24 to Sept. 30)

3.5	10	7.5	2,030	14.0	7,700	24.0	19,600
4.0	115	8.0	2,380	15.0	8,700	26.0	22,600
4.5	265	8.5	2,780	16.0	9,700	28.0	26,300
5.0	465	9.0	3,180	17.0	10,800	30.0	30,600
5.5	685	10.0	4,000	18.0	11,900	32.0	35,400
6.0	990	11.0	4,900	19.0	13,050	34.0	40,600
6.5	1,530	12.0	5,800	20.0	14,250		
7.0	1,690	13.0	6,700	22.0	16,850		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,310	43	4,990	2,940	2,100	3,180	5,430	19,600	4,000	2,100	139	56
2	1,690	39	6,610	6,160	1,820	2,780	6,250	17,600	2,540	1,750	130	55
3	1,330	49	6,250	5,530	1,610	2,480	4,990	17,900	6,560	1,400	115	61
4	1,120	91	7,100	3,910	1,470	2,970	3,820	18,500	14,800	1,330	94	64
5	790	109	5,710	3,100	1,330	13,800	3,180	30,000	12,200	1,260	88	61
6	635	97	4,000	2,460	1,190	20,300	2,940	42,200	6,900	1,120	88	55
7	485	85	2,940	2,170	1,120	19,200	3,660	39,800	3,910	990	79	51
8	425	79	2,380	4,270	1,120	17,100	3,660	36,200	3,910	850	70	51
9	345	76	1,960	9,200	1,350	13,400	2,940	34,700	5,170	735	70	51
10	305	76	1,610	9,000	1,620	9,500	2,540	26,700	3,500	635	70	53
11	265	67	1,400	7,500	2,700	14,100	2,620	21,200	2,540	585	53	55
12	235	55	1,190	4,990	2,780	16,900	2,540	15,300	2,030	585	49	55
13	220	51	990	3,800	2,860	21,500	2,240	8,300	1,680	635	49	61
14	205	47	850	2,860	3,020	20,300	1,520	4,720	1,540	790	49	55
15	190	45	735	2,310	3,540	16,500	1,610	5,900	1,690	685	49	49
16	175	39	685	1,960	3,660	15,200	1,400	17,800	6,980	585	55	43
17	167	35	685	1,680	3,500	9,510	1,330	26,500	25,700	505	157	35
18	145	45	735	1,610	3,180	5,170	1,120	25,700	33,400	445	190	32
19	139	39	1,120	8,100	2,700	3,660	1,580	26,700	39,000	405	166	29
20	133	64	1,750	25,900	2,380	3,180	10,000	28,000	36,700	365	142	26
21	127	11,800	2,240	32,500	2,100	3,020	14,200	28,400	33,700	325	121	26
22	115	17,800	2,030	32,300	1,890	8,190	18,600	25,900	30,600	305	115	26
23	103	17,800	1,620	28,000	1,680	16,500	17,100	22,800	27,100	265	106	26
24	97	15,700	1,540	24,400	1,470	18,200	12,600	18,600	25,900	250	97	26
25	91	11,800	1,530	21,000	1,540	16,300	7,700	11,500	24,200	235	85	26
26	85	6,430	1,400	15,400	2,460	13,200	9,760	5,170	20,300	220	85	49
27	76	3,100	1,920	7,600	3,660	9,900	19,600	3,180	13,000	205	97	139
28	64	2,860	1,680	4,090	3,660	4,900	20,300	2,540	5,080	190	79	505
29	55	2,240	1,470	3,260	-	3,420	21,000	4,180	4,180	175	70	735
30	51	2,240	1,260	2,700	-	2,780	21,300	11,400	2,860	163	70	445
31	47	-	1,190	2,380	-	2,540	-	8,200	-	151	64	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				12,200		2,310	47	394	24,200			
November.....				92,997		17,800	35	3,100	184,500			
December.....				71,470		7,100	685	2,305	141,800			
Calendar year 1934.....				722,440		24,900	1	1,979	1,433,000			
January.....				282,750		32,500	1,610	9,122	560,900			
February.....				63,490		3,660	1,120	2,268	125,900			
March.....				334,660		21,500	2,460	10,800	663,800			
April.....				228,030		21,300	1,120	7,601	452,300			
May.....				605,090		42,200	2,540	19,520	1,200,000			
June.....				403,660		39,000	1,540	15,460	800,600			
July.....				20,239		2,100	151	653	40,140			
August.....				2,591		190	49	95.3	5,730			
September.....				2,993		735	26	100	5,950			
Water year 1934-35.....				2,120,506		42,200	26	5,810	4,206,000			

Sulphur River near Darden, Tex.

Location.- Water-stage recorder, lat. 33°15', long. 94°37', at bridge on State Highway 1, half a 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. Prior to Oct. 26, 1934, staff gage with same datum located at railway bridge half a mile downstream.

Drainage area.- 2,754 square miles.

Records available.- October 1923 to September 1935.

Average discharge.- 12 years, 1,938 second-feet.

Extremes.- Maximum discharge during year, 40,300 second-feet Jan. 23 (gage height, 30.16 feet); no flow Oct. 1 to Nov. 17.

1923-35: Maximum discharge, 87,200 second-feet May 19, 1930 (gage height, about 32.8 feet, present site, from graph based on gage readings at former site corrected for slope between sites); no flow at times.

Remarks. Records fair. No diversions. Gage-height record Oct. 1-26, July 6, 7, 9-16, July 19 to Aug. 14 furnished by U. S. Weather Bureau.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Nov. 1-22)

1.0	0.1	2.0	16.7	5.0	180	10.0	700	20.0	2,830	26.0	13,000
1.2	.7	2.5	33	6.0	260	12.0	1,015	22.0	3,830	27.0	17,800
1.4	2.3	3.0	55	7.0	345	14.0	1,380	23.0	4,660	28.0	23,500
1.6	6.0	3.5	81	8.0	444	16.0	1,780	24.0	6,200	29.0	30,300
1.8	10.9	4.0	111	9.0	565	18.0	2,230	25.0	9,100	30.0	38,600

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	565	144	3,000	196	93	18,900	4,730	2,920	11	11
2		0	780	123	2,080	184	95	18,300	20,200	2,330	8.8	8.1
3		0	1,490	105	1,290	198	538	17,800	22,300	1,660	7.6	7.6
4		0	1,880	114	690	275	642	16,900	18,900	1,020	6.9	6.0
5		0	1,980	188	569	1,070	396	15,800	17,300	561	6.5	5.0
6		0	1,800	228	232	1,860	232	18,200	21,100	308	6.0	4.6
7		0	1,500	212	172	2,350	162	29,300	22,900	254	5.2	5.0
8		0	1,150	268	176	2,780	430	38,500	18,900	383	4.8	5.2
9		0	914	327	565	3,340	1,090	35,900	18,900	310	4.0	5.9
10		0	790	620	1,090	4,130	1,210	27,500	9,810	202	3.2	7.6
11		0	623	1,080	1,420	5,010	990	20,600	6,630	120	2.3	6.5
12		0	361	1,080	1,750	5,140	866	15,600	4,420	81	2.0	5.2
13		0	194	870	1,980	4,650	738	12,200	3,470	65	1.5	146
14		0	120	599	2,050	4,110	617	9,100	2,560	55	1.2	329
15		0	87	386	2,190	3,700	578	6,490	2,020	44	1.2	373
16		0	68	268	2,570	3,120	591	4,300	1,690	37	1.1	309
17		0	124	195	3,010	2,420	591	3,060	1,730	228	99	212
18		.1	204	148	3,300	1,680	578	2,620	2,610	327	211	134
19		.2	200	464	3,350	1,000	492	2,760	15,500	208	115	84
20		.3	162	1,520	2,920	532	314	3,360	33,400	114	78	56
21		3.1	308	2,540	2,290	305	954	5,410	35,000	72	108	38
22		1.5	433	17,100	1,700	214	1,960	16,400	28,200	58	81	28
23		609	383	37,800	1,140	176	2,560	21,100	21,100	42	52	22
24		1,310	292	37,600	663	273	3,580	18,900	18,300	32	34	17
25		1,640	212	28,900	386	531	9,220	15,200	18,900	27	24	16
26		1,890	151	21,700	336	514	14,400	11,700	15,800	23	52	16
27		1,780	114	16,500	284	374	15,300	9,100	11,700	38	75	13
28		1,240	99	12,400	235	248	15,200	6,490	8,780	30	50	102
29		803	114	9,120	-	165	14,800	4,370	5,910	23	31	730
30		644	154	6,490	-	126	16,900	3,230	3,930	18	22	850
31		-	158	4,300	-	108	-	2,690	-	14	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0	0	0	0	0
November.....	9,921.2	1,690	0	331	19,680
December.....	17,420	1,980	68	562	34,550
Calendar year 1934.....	400,777.7	15,900	0	1,098	795,000
January.....	203,399	37,800	105	6,561	405,400
February.....	41,236	3,360	172	1,473	81,790
March.....	50,749	5,140	108	1,637	100,700
April.....	107,017	16,800	93	3,567	212,500
May.....	431,680	38,500	2,620	13,930	856,200
June.....	411,690	35,000	1,690	13,720	816,600
July.....	11,604	2,920	14	374	23,020
August.....	1,120.3	211	1.1	36.1	2,220
September.....	3,553.9	850	4.6	118	7,050
Water year 1934-35.....	1,289,380.4	38,500	0	3,533	2,558,000

Note.- No flow during October.

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 1935.

Average discharge.- 11 years, 591 second-feet.

Extremes.- Maximum discharge during year, 13,200 second-feet May 8 (gage height, 20.31 feet); minimum, 0.3 second-foot Oct. 28 to Nov. 1.
1924-35: Maximum discharge, about 22,600 second-feet May 20, 1930 (gage height, 25.37 feet, from flood marks); no flow for several periods.

Remarks.- Records good. No diversions.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

0.0	0.0	1.4	17.5	3.5	128	8.0	668	15.0	3,295
.2	.5	1.6	25.5	4.0	168	9.0	858	16.0	4,380
.4	1.6	1.8	30	4.5	219	10.0	1,018	17.0	5,830
.6	3.4	2.0	38	5.0	268	11.0	1,216	18.0	7,830
.8	5.6	2.3	51	5.5	326	12.0	1,488	19.0	10,130
1.0	9.0	2.6	66	6.0	388	13.0	1,868	20.0	12,430
1.2	13.0	3.0	92	7.0	528	14.0	2,445	21.0	14,830

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	0.3	99	78	1,160	304	156	964	982	414	30	4.1
2	.8	.4	99	83	1,910	316	148	1,320	787	195	59	3.8
3	.8	.9	130	102	629	304	140	2,020	787	128	80	4.2
4	.9	.3	216	113	365	336	132	2,440	910	110	64	4.8
5	.9	.7	296	110	268	549	128	2,320	1,120	99	42	4.5
6	.9	.7	268	99	228	702	120	4,520	1,220	86	29	4.4
7	.9	.7	233	96	206	821	116	7,230	1,270	83	21	7.2
8	.8	.6	233	116	245	886	110	12,400	1,320	76	16	7.4
9	.7	.6	243	148	751	856	106	12,000	1,490	67	12	6.9
10	.7	.6	223	152	592	574	113	8,750	1,620	58	10	7.0
11	.6	.6	173	164	946	928	148	5,830	1,560	52	8.3	7.0
12	.6	.6	124	208	946	1,000	213	4,160	1,400	46	7.0	8.6
13	.5	.6	89	233	1,020	1,080	218	3,200	1,200	44	6.9	9.2
14	.8	.6	69	228	1,080	1,030	198	2,740	982	41	8.0	8.8
15	.8	.6	58	208	1,080	1,040	188	2,600	719	36	14	7.0
16	.8	.7	54	173	1,080	964	178	2,380	528	34	9.6	6.6
17	.7	.8	54	136	1,100	656	164	2,180	364	39	13	5.8
18	.6	.9	61	116	1,120	702	148	1,960	430	40	14	9.8
19	.6	1.5	70	106	1,120	556	132	1,960	584	34	11	14
20	.5	5.1	76	136	1,120	416	124	2,130	640	31	7.9	13
21	.5	19	75	332	1,100	328	128	1,960	666	28	6.7	11
22	.5	33	69	479	1,020	274	132	1,700	702	26	5.9	8.8
23	.4	52	69	556	892	248	156	1,490	821	28	6.1	7.2
24	.4	50	83	640	702	226	180	1,380	1,020	46	4.8	6.2
25	.4	41	99	719	500	213	283	1,560	1,200	63	4.3	5.9
26	.4	34	102	821	376	203	388	1,910	1,300	55	4.1	8.1
27	.4	41	99	1,000	328	203	514	2,020	1,270	50	4.3	22
28	.3	56	96	1,180	304	198	584	1,830	1,160	44	4.3	46
29	.3	66	89	1,350	-	183	654	1,620	1,000	42	4.2	28
30	.3	96	83	1,380	-	173	770	1,430	736	40	5.2	22
31	.3	-	79	1,300	-	164	-	1,240	-	35	5.1	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				19.0	0.9	0.3	0.61	38				
November.....				505.3	96	.3	16.8	1,000				
December.....				3,010	298	54	123	7,570				
Calendar year 1934.....				174,108.9	4,730	.1	477	345,300				
January.....				12,562	1,380	78	405	24,920				
February.....				21,540	1,160	208	769	42,720				
March.....				16,955	1,080	164	547	33,630				
April.....				6,749	770	106	225	13,390				
May.....				101,644	12,400	964	3,285	202,000				
June.....				29,790	1,620	364	993	59,090				
July.....				2,170	414	26	70	4,300				
August.....				517.7	90	4.1	16.7	1,050				
September.....				309.3	46	3.8	10.3	613				
Water year 1934-35.....				196,779.3	12,400	.3	539	390,300				

Ouachita River at Rammel 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 Rammel Dam and 9 miles northwest of Malvern. Zero of gage is 247.94 feet above mean sea level.

Drainage area.- 1,540 square miles.

Records available.- January 1925 to September 1935.

Extremes.- Maximum discharge during year, 70,500 second-feet May 5 (gage height, 28.97 feet); minimum daily discharge, 64 second-feet Aug. 11.
1925-35: Maximum discharge, about 138,000 second-feet Apr. 21, 1927 (gage height, 35.7 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 Rammel Dam.

Rating table, water year 1934-35 (gage height, in feet, and discharge, in second-feet)

2.0	60	6.5	2,970	11.0	10,000	20.0	36,100
2.5	140	7.0	3,600	12.0	12,100	21.0	39,800
3.0	290	7.5	4,260	13.0	14,400	22.0	43,500
3.5	550	8.0	4,900	14.0	16,900	23.0	47,300
4.0	850	8.5	5,550	15.0	19,600	24.0	51,900
4.5	1,150	9.0	6,400	16.0	22,600	25.0	54,900
5.0	1,500	9.5	7,250	17.0	25,600	29.0	70,500
5.5	1,890	10.0	8,100	18.0	28,900		
6.0	2,370	10.5	9,050	19.0	32,400		

Discharge, in second-feet, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	244	649	2,760	3,030	4,200	2,260	2,970	2,910	1,380	632	126	449
2	272	257	2,680	3,080	3,200	1,860	2,910	5,750	904	937	107	109
3	567	112	2,970	3,090	2,750	1,250	2,970	16,200	5,180	620	85	589
4	591	95	2,910	3,090	3,090	2,160	2,970	24,300	5,760	107	89	510
5	504	454	2,910	3,030	3,090	2,970	2,490	64,900	2,370	396	88	678
6	378	408	2,970	2,970	3,090	4,150	8,600	51,600	2,540	769	256	1,170
7	99	265	3,050	3,210	3,050	5,200	5,480	24,900	2,920	816	237	593
8	368	472	2,910	3,030	2,910	4,010	3,710	10,700	2,270	721	121	633
9	194	572	2,790	3,030	2,790	5,800	8,050	7,260	816	533	100	256
10	709	589	3,030	3,900	2,730	6,390	4,900	6,940	2,440	504	319	324
11	1,180	114	3,030	3,400	2,970	12,800	4,350	3,380	2,110	454	64	566
12	717	762	2,910	2,840	2,640	21,000	2,850	1,930	2,210	182	487	593
13	958	643	2,820	2,850	2,970	10,600	2,850	2,300	2,050	263	351	949
14	136	606	2,760	3,090	2,920	9,080	2,750	3,200	1,770	161	92	701
15	568	400	2,590	3,090	2,940	7,250	3,030	3,620	2,200	94	139	641
16	569	490	2,160	3,090	2,660	7,080	2,640	7,150	6,030	150	232	485
17	571	200	2,780	3,090	1,170	4,680	2,810	9,340	24,400	583	101	416
18	630	197	3,010	3,090	2,220	2,970	2,530	8,560	40,600	514	484	802
19	424	359	2,970	5,110	2,250	2,910	2,540	5,800	27,000	301	332	632
20	414	757	3,090	53,400	2,780	2,910	2,700	11,000	10,200	291	376	1,470
21	124	1,550	3,030	51,400	2,440	2,910	3,210	10,300	7,490	105	361	365
22	607	1,680	2,970	24,800	2,550	7,370	10,000	6,610	4,130	267	513	533
23	603	1,490	2,790	10,100	2,220	10,300	9,080	4,560	2,220	215	455	851
24	986	1,250	688	5,380	1,650	9,850	6,460	2,910	2,470	163	460	716
25	449	665	156	5,200	2,010	6,500	3,760	2,790	2,450	98	624	990
26	627	1,420	1,250	5,050	2,020	6,320	2,670	1,120	2,610	225	287	1,230
27	392	2,000	2,280	5,050	2,180	6,120	4,430	1,980	2,450	108	432	1,840
28	135	1,720	2,970	3,620	2,280	3,460	4,320	2,860	766	113	302	764
29	170	1,890	3,030	3,090	-	3,030	5,780	2,750	648	181	617	168
30	568	2,930	2,570	3,090	-	3,030	3,250	2,500	824	118	599	817
31	432	-	3,080	3,090	-	2,500	-	1,740	-	380	505	-
Month												
	Second-foot-days					Maximum		Minimum		Mean		Run-off in acre-feet
October.....	14,788					1,180		99		477		29,330
November.....	25,396					2,930		95		847		50,370
December.....	81,954					3,090		156		2,644		162,600
Calendar year 1934.....	524,826					45,400		48		1,438		1,041,000
January.....	214,390					51,400		2,840		6,916		425,200
February.....	73,930					4,200		1,170		2,640		145,600
March.....	177,530					21,000		1,250		5,727		352,100
April.....	124,040					10,000		2,490		4,135		246,000
May.....	511,850					64,900		1,120		10,060		618,500
June.....	170,958					40,500		648		5,700		339,100
July.....	10,761					94		94		348		21,360
August.....	9,340					624		64		301		18,530
September.....	21,216					1,840		102		707		42,080
Water year 1934-35.....	1,236,203					64,900		64		3,387		2,462,000

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 Louisiana State Highway 7 half a mile north of Krotz Springs, 10 miles above mouth of Bayou Courtableau, 16 miles above Alabama Bayou, and 30 miles below mouth of Red River. Zero of gage is at mean Gulf level.

Records available.— October 1934 to September 1935.

Extremes.— Maximum discharge during year, 345,000 second-feet July 8 (gage height, 34.42 feet); minimum, 24,200 second-feet Nov. 1, 2, 6, 7; minimum gage height, 5.77 feet Nov. 1.

Maximum stage known, 36.5 feet above mean Gulf level May 15, 1927, half a mile downstream, at Missouri Pacific Railroad bridge.

Remarks.— Records excellent except those for Oct. 1 to Feb. 14. Records fair Oct. 1 to Nov. 14 (most mean daily gage heights partly estimated and no discharge measurements made); records good Nov. 15 to Feb. 14 (some mean daily gage heights partly estimated), and periods between discharge measurements from 7 to 11 days.

Discharge measurements, water year October 1934 to September 1935

Date	Width	Area of section	Mean velocity	Gage height	Discharge	Date	Width	Area of section	Mean velocity	Gage height	Discharge
	Feet	Square feet	Feet per second	Feet	Second-feet		Feet	Square feet	Feet per second	Feet	Second-feet
Nov. 15	769	29,400	0.88	6.32	26,000	May 27	2,366	65,600	4.91	33.50	312,000
Nov. 23	828	32,500	1.25	9.65	40,700	May 29	2,372	65,600	4.96	33.42	315,000
Nov. 30	844	35,100	1.70	12.76	59,500	May 31	2,392	64,500	4.97	33.64	320,000
Dec. 7	864	39,600	2.27	17.75	89,900	June 3	2,431	64,700	5.06	33.79	327,000
Dec. 13	874	40,500	2.29	18.62	92,400	June 5	2,440	65,200	5.08	33.95	331,000
Dec. 24	894	46,400	2.17	17.79	84,900	June 7	2,453	65,100	5.11	34.04	335,000
Jan. 5	861	37,000	1.61	11.70	64,000	June 10	2,487	65,700	5.12	34.23	337,000
Jan. 5	861	37,100	1.73	14.75	66,500	June 12	2,470	65,800	5.16	34.28	340,000
Jan. 7	861	37,000	1.84	16.28	68,100	June 14	2,470	65,800	5.16	34.26	339,000
Jan. 8	861	37,800	1.90	16.50	71,900	June 17	2,470	65,900	5.14	34.26	338,000
Jan. 9	861	37,700	1.97	16.06	74,100	June 19	2,470	66,000	5.15	34.30	340,000
Jan. 11	861	39,800	2.11	17.04	81,800	June 21	2,468	65,700	5.10	34.19	335,000
Jan. 16	894	46,400	2.06	14.94	132,000	June 24	2,468	65,800	5.15	34.28	340,000
Jan. 17	864	39,500	2.11	17.75	84,500	June 26	2,459	65,500	5.11	34.09	335,000
Jan. 19	864	39,500	2.08	17.67	81,700	June 28	2,459	65,900	5.07	34.10	335,000
Jan. 28	889	46,700	3.42	26.46	160,000	July 1	2,467	65,700	5.13	34.17	337,000
Jan. 31	889	47,900	3.78	27.87	181,000	July 3	2,470	66,100	5.13	34.23	339,000
Feb. 2	839	48,500	3.98	28.54	192,000	July 5	2,472	66,200	5.19	34.32	344,000
Feb. 4	839	48,900	4.09	29.70	200,000	July 8	2,474	66,600	5.17	34.39	344,000
Feb. 15	899	48,600	3.75	28.06	151,000	July 11	2,468	66,200	5.13	34.28	340,000
Feb. 16	904	48,000	3.65	27.56	145,000	July 14	2,432	65,500	5.09	34.12	337,000
Feb. 18	899	46,700	3.30	26.25	154,000	July 17	2,367	64,400	5.02	33.61	324,000
Feb. 20	895	45,600	3.17	25.28	145,000	July 20	2,325	62,800	4.82	32.82	305,000
Feb. 21	892	45,400	3.00	24.76	136,000	July 22	1,680	58,600	4.92	32.10	288,000
Feb. 23	891	45,000	2.98	24.42	134,000	July 24	1,851	57,100	4.67	31.10	297,000
Feb. 26	890	45,100	2.99	24.66	135,000	July 28	935	52,000	4.85	30.49	282,000
Mar. 1	889	45,600	3.10	24.90	141,000	July 27	924	50,700	4.24	29.52	215,000
Mar. 4	890	46,200	3.31	25.72	153,000	July 28	930	48,900	3.75	27.37	182,000
Mar. 6	890	46,200	3.31	25.72	153,000	July 29	905	48,500	3.68	26.28	178,000
Mar. 7	889	46,400	3.43	26.33	159,000	July 30	897	46,700	3.51	25.28	164,000
Mar. 9	896	46,900	3.41	26.57	160,000	July 31	892	46,100	3.28	24.31	151,000
Mar. 12	895	47,500	3.51	27.17	166,000	Aug. 1	886	45,000	3.13	23.45	141,000
Mar. 14	896	47,700	3.77	27.54	180,000	Aug. 2	883	44,700	3.02	22.86	135,000
Mar. 19	909	49,700	4.10	28.97	204,000	Aug. 3	881	44,800	2.98	22.44	131,000
Mar. 21	911	49,500	4.32	29.56	215,000	Aug. 5	877	43,900	2.89	21.26	127,000
Mar. 23	913	50,000	4.48	29.97	224,000	Aug. 8	875	42,800	2.71	21.18	116,000
Mar. 25	916	50,200	4.54	30.20	228,000	Aug. 10	871	42,500	2.54	20.36	108,000
Mar. 26	916	51,000	4.68	30.56	239,000	Aug. 12	869	41,900	2.48	19.36	104,000
Mar. 28	1,636	54,700	4.68	30.74	251,000	Aug. 13	865	40,900	2.50	18.83	94,200
Mar. 29	1,636	55,100	4.57	30.87	252,000	Aug. 14	860	40,800	2.24	18.21	91,500
Mar. 30	1,642	55,700	4.67	31.16	260,000	Aug. 16	866	39,900	2.12	17.86	84,700
Apr. 1	1,652	56,600	4.79	31.63	271,000	Aug. 16	863	39,800	2.01	16.98	80,100
Apr. 3	1,635	57,500	4.90	32.06	281,000	Aug. 17	851	38,700	1.97	16.40	76,500
Apr. 5	2,297	80,500	4.78	32.40	288,000	Aug. 18	850	38,800	1.95	15.94	75,600
Apr. 6	2,319	81,000	4.82	32.61	294,000	Aug. 19	847	38,200	1.94	15.62	74,300
Apr. 8	1,683	58,500	5.15	32.86	300,000	Aug. 22	853	38,600	1.94	15.52	74,800
Apr. 10	2,357	82,600	4.94	33.16	309,000	Aug. 24	867	39,900	2.10	16.20	81,900
Apr. 12	2,365	82,600	4.97	33.40	311,000	Aug. 27	868	39,800	2.20	16.97	87,500
Apr. 13	2,362	82,100	5.00	33.50	316,000	Aug. 30	868	39,400	2.12	16.94	85,600
Apr. 15	2,377	83,500	5.04	33.68	324,000	Sept. 2	868	39,900	2.04	16.16	80,500
Apr. 17	2,402	83,800	4.97	33.67	317,000	Sept. 4	851	37,600	1.83	14.84	68,900
Apr. 19	2,408	84,400	5.00	33.79	322,000	Sept. 5	839	37,000	1.67	14.00	61,800
Apr. 20	2,408	84,200	5.01	33.81	322,000	Sept. 6	827	36,200	1.54	13.14	55,800
Apr. 22	2,417	84,600	5.04	33.95	326,000	Sept. 7	821	35,500	1.47	12.38	52,100
Apr. 24	2,432	84,600	5.03	33.97	325,000	Sept. 8	819	34,700	1.40	11.76	48,500
Apr. 26	2,439	84,400	5.06	33.98	326,000	Sept. 9	817	34,500	1.32	11.25	45,500
Apr. 27	2,443	84,700	5.05	34.00	326,000	Sept. 11	813	34,100	1.31	11.20	45,000
Apr. 29	2,448	84,700	4.94	34.06	324,000	Sept. 14	812	33,700	1.34	10.42	45,300
May 1	2,449	84,500	4.98	34.05	321,000	Sept. 16	819	34,800	1.49	11.14	51,900
May 3	2,450	85,000	4.96	34.07	323,000	Sept. 18	851	35,200	1.68	12.32	59,500
May 7	2,465	85,500	5.14	34.52	336,000	Sept. 19	855	36,400	1.72	13.00	62,500
May 9	2,467	85,200	5.09	34.19	332,000	Sept. 20	853	36,500	1.78	13.48	64,700
May 11	2,415	84,500	4.97	33.86	319,000	Sept. 23	852	36,600	1.70	13.42	62,400
May 13	2,368	83,500	4.90	33.57	306,000	Sept. 26	844	35,000	1.41	11.60	50,500
May 15	2,355	82,900	4.82	32.98	300,000	Sept. 27	822	34,400	1.32	10.88	45,500
May 17	2,341	81,800	4.78	32.78	295,000	Sept. 28	812	33,500	1.25	10.22	41,900
May 20	2,359	82,500	4.88	33.02	305,000	Sept. 29	803	33,100	1.17	9.55	38,700
May 22	2,365	82,700	4.89	33.18	307,000	Sept. 30	799	32,500	1.10	9.01	35,800
May 24	2,369	83,400	4.91	33.30	311,000						

Gage height, in feet, of Atchafalaya River at Krotz Springs, La., for water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.3	5.81	14.2	14.29	28.14	24.92	31.63	34.05	33.63	34.14	23.39	16.47
2	9.0	5.81	15.2	14.29	28.54	24.96	31.85	34.02	33.68	34.21	22.84	16.08
3	8.6	5.88	15.6	14.39	28.61	25.00	32.02	34.08	33.77	34.24	22.41	15.50
4	8.2	5.93	16.2	14.53	28.68	24.99	32.20	34.09	33.98	34.25	22.13	14.77
5	8.0	5.89	16.8	14.72	28.78	25.34	32.36	34.15	33.91	34.30	21.93	13.92
6	7.6	5.84	17.4	14.94	28.86	25.77	32.60	34.31	33.99	34.30	21.72	13.06
7	7.4	5.83	17.8	15.24	28.92	26.27	32.71	34.32	34.09	34.31	21.46	12.33
8	7.1	5.90	18.01	15.58	28.91	26.53	32.87	34.29	34.14	34.33	21.12	11.71
9	7.1	6.01	18.21	16.05	29.00	26.57	33.01	34.18	34.20	34.31	20.71	11.23
10	7.6	6.08	18.34	16.60	28.99	26.65	33.17	34.00	34.24	34.27	20.30	10.91
11	8.3	6.13	18.4	17.08	28.99	26.65	33.30	33.80	34.20	34.23	19.81	10.61
12	8.9	6.12	18.5	17.45	28.88	27.17	33.40	33.56	34.25	34.20	19.32	10.39
13	9.4	6.12	18.6	17.68	28.71	27.33	33.46	33.36	34.25	34.16	18.90	10.34
14	9.62	6.20	18.72	17.79	28.43	27.55	33.51	33.16	34.25	34.04	18.15	10.45
15	9.67	6.34	18.78	17.79	28.02	27.75	33.56	32.98	34.28	33.91	17.51	10.72
16	9.52	6.54	18.80	17.74	27.51	28.00	33.65	32.87	34.25	33.72	16.90	11.14
17	9.20	6.79	18.81	17.72	26.90	28.35	33.66	32.78	34.26	33.51	16.35	11.69
18	8.78	7.04	18.72	17.66	26.29	28.68	33.70	32.65	34.22	33.35	15.90	12.39
19	8.37	7.35	18.44	17.56	25.74	29.01	33.79	32.57	34.26	33.08	15.53	13.05
20	7.94	7.90	17.95	17.51	25.23	29.26	33.80	32.97	34.21	32.79	15.37	13.50
21	7.57	8.50	17.31	17.86	24.80	29.53	33.87	33.02	34.17	32.41	15.37	13.70
22	7.26	9.19	16.59	18.39	24.56	29.71	33.93	33.15	34.20	32.06	15.55	13.66
23	7.06	9.65	15.85	19.33	24.41	29.92	33.93	33.22	34.21	31.69	15.86	13.36
24	6.92	9.76	15.08	20.75	24.53	30.07	33.97	33.29	34.21	31.01	16.22	12.88
25	6.85	9.71	14.42	22.52	24.41	30.20	33.97	33.31	34.14	30.54	16.57	12.27
26	6.72	9.70	13.91	24.31	24.55	30.54	33.99	33.31	34.09	29.47	16.82	11.55
27	6.58	9.80	13.92	25.51	24.68	30.47	34.00	33.31	34.09	28.44	16.97	10.84
28	6.40	10.40	14.03	26.43	24.82	30.70	34.01	33.36	34.09	27.31	17.01	10.15
29	6.21	11.50	14.16	27.04	-	30.85	34.05	33.39	34.07	26.23	16.98	9.51
30	6.00	12.5	14.20	27.54	-	31.08	34.06	33.47	34.11	25.19	16.88	8.97
31	5.89	-	14.23	27.86	-	31.41	-	33.55	-	24.22	16.73	-

Discharge, in second-feet of Atchafalaya River at Krotz Springs, La., for water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38,800	24,200	67,500	62,600	188,000	141,000	270,000	322,000	322,000	336,000	140,000	81,200
2	37,500	24,200	72,300	62,600	192,000	141,000	275,000	322,000	324,000	339,000	135,000	78,400
3	35,700	24,600	75,900	63,100	196,000	141,000	280,000	324,000	327,000	339,000	130,000	74,000
4	33,900	24,600	79,500	64,200	200,000	140,000	284,000	324,000	330,000	342,000	128,000	68,000
5	33,000	24,600	83,400	65,300	202,000	147,000	287,000	327,000	330,000	342,000	126,000	61,200
6	31,400	24,200	87,300	66,400	202,000	154,000	293,000	336,000	333,000	342,000	124,000	55,600
7	30,600	24,200	89,900	68,100	204,000	158,000	296,000	336,000	333,000	342,000	120,000	51,800
8	29,400	24,600	91,200	71,700	204,000	160,000	301,000	336,000	336,000	342,000	115,000	49,000
9	29,400	25,000	91,800	74,100	202,000	160,000	306,000	333,000	336,000	342,000	112,000	46,500
10	31,400	25,400	92,600	75,300	200,000	161,000	308,000	334,000	336,000	340,000	108,000	44,600
11	34,400	25,400	92,500	82,100	200,000	162,000	311,000	319,000	336,000	340,000	104,000	43,500
12	37,000	25,400	92,500	84,700	198,000	166,000	311,000	313,000	339,000	340,000	101,000	43,600
13	39,300	25,400	92,500	85,400	194,000	172,000	313,000	308,000	339,000	337,000	96,600	44,000
14	40,200	25,800	91,800	85,400	188,000	180,000	316,000	303,000	339,000	334,000	91,000	45,500
15	40,600	26,200	91,200	84,700	180,000	182,000	313,000	301,000	339,000	332,000	84,000	49,000
16	39,800	27,000	91,200	84,700	174,000	188,000	316,000	298,000	339,000	330,000	79,800	51,800
17	38,400	27,800	90,600	84,000	164,000	194,000	316,000	296,000	339,000	324,000	76,400	55,100
18	36,600	29,000	88,000	82,100	155,000	198,000	319,000	293,000	336,000	320,000	75,200	59,500
19	34,900	30,200	85,400	81,400	150,000	204,000	322,000	293,000	339,000	312,000	74,000	62,800
20	32,600	32,600	82,100	82,100	145,000	210,000	322,000	303,000	336,000	302,000	73,400	65,000
21	31,400	35,200	77,700	85,400	137,000	212,000	324,000	306,000	336,000	294,000	73,400	65,000
22	30,200	38,400	72,900	88,600	135,000	217,000	324,000	306,000	336,000	288,000	75,200	64,400
23	29,400	40,600	68,100	95,100	134,000	222,000	324,000	306,000	336,000	276,000	79,400	61,700
24	28,600	41,100	65,600	105,000	134,000	227,000	324,000	311,000	339,000	264,000	81,900	58,400
25	28,200	41,100	60,000	118,000	134,000	227,000	324,000	311,000	336,000	250,000	84,700	54,000
26	27,800	41,100	59,000	134,000	135,000	238,000	327,000	313,000	336,000	232,000	86,800	49,000
27	27,400	41,600	60,500	147,000	137,000	244,000	324,000	313,000	336,000	214,000	87,500	45,500
28	26,600	45,000	61,000	160,000	139,000	249,000	324,000	313,000	336,000	192,000	86,800	41,800
29	25,800	52,000	62,000	169,000	-	252,000	327,000	313,000	336,000	177,000	85,400	39,500
30	25,000	58,000	62,000	175,000	-	252,000	324,000	313,000	336,000	155,000	85,400	35,500
31	24,600	-	62,000	180,000	-	265,000	-	319,000	-	150,000	82,600	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,009,800	40,600	24,600	32,570	2,003,000
November.....	954,600	58,000	24,600	31,620	1,993,000
December.....	2,437,900	59,500	24,600	31,620	4,386,000
January.....	2,970,100	180,000	62,600	95,810	5,391,000
February.....	4,823,000	204,000	134,000	172,200	9,566,000
March.....	5,970,000	265,000	140,000	192,600	11,840,000
April.....	9,305,000	327,000	270,000	310,200	18,460,000
May.....	9,740,000	336,000	293,000	314,200	19,320,000
June.....	10,048,000	339,000	322,000	334,800	19,930,000
July.....	9,177,000	342,000	150,000	286,000	18,200,000
August.....	2,999,400	140,000	75,000	96,750	5,849,000
September.....	1,640,400	81,200	35,500	54,680	3,254,000
Water year 1934-35.....	61,075,100	342,000	24,200	167,300	121,100,000

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in Lower Mississippi River drainage basin during the year ending September 30, 1935*

Date	Stream	Tributary to-	Locality	Gage height (feet)	Discharge (sec.-ft.)
June 28	Brook Spring	Dry Fork	SW $\frac{1}{4}$ sec. 22, T. 26 N., R. 6 W., 2 $\frac{1}{2}$ miles east of St. James, Mo.	-	4.69
Feb. 10	McIntosh Spring	Pine Creek	NE $\frac{1}{4}$ sec. 12, T. 38 N., R. 5 W., 3 miles south of Cuba, Mo.	-	1.36
Dec. 2	Lost River	Meramec River	Missouri Caverns, 4 miles southeast of Lebanon, Mo.	0.95	5.36
Oct. 7	McDade Spring	Brush Creek	Sec. 16, T. 39 N., R. 5 W., 5 miles northwest of Cuba, Mo.	-	.8
Mar. 3	Rock Spring	Meramec River	T. 34 N., R. 3 E., 2 $\frac{1}{2}$ miles southeast of Allenton, Mo.	-	.1
July 12	Big Creek	St. Francis River	Sec. 18, T. 30 N., R. 5 E., 6 miles north of Patterson, Mo.	-	53.4
13	Mill Spring	Asher Creek	SE $\frac{1}{4}$ sec. 4, T. 26 N., R. 7 W., 2 miles southwest of Wappapello, Mo.	-	5.61
Feb. 26	Roaring River Spring	Roaring River	Sec. 27, T. 22 N., R. 27 W., 7 miles south of Cassville, Mo.	-	52.0
Nov. 21	Lost Spring	South Fork of Spring River	SW $\frac{1}{4}$ sec. 26, T. 22 N., R. 9 W., about 12 miles southwest of West Plains, Mo.	-	.015
Mar. 13	Kenner Spring	Black River	Sec. 9, T. 26 N., R. 5 E., 6 miles south of Williamsville, Mo.	-	43.0
July 16	Thomasson Mill Spring	Eleven Point River	Sec. 16, T. 22 N., R. 2 W., 18 miles southeast of Alton, Mo.	-	57.5
18	Blue Spring	.....do.....	Sec. 6, T. 22 N., R. 2 W., 18 miles southeast of Alton, Mo.	-	100
May 30	Fall River	Verdigris River	Neodesha, Kans.	**23.7	24,400
...do...	Verdigris River	Arkansas River	Neodesha, Kans., above confluence with Fall River	†29.2	26,600
1934					
Apr. 14	Canadian River	Arkansas River	Sec. 22, T. 6 N., R. 10 E., half a mile northeast of Calvin, Okla.	† 3.35	494
May 18	.....do.....	.....do.....	.....do.....	† 2.85	248
June 10	.....do.....	.....do.....	.....do.....	† 2.95	156
July 10	.....do.....	.....do.....	.....do.....	† 1.72	13.0
26	.....do.....	.....do.....	.....do.....	† 1.43	†† 1
Sept. 27	.....do.....	.....do.....	.....do.....	† 1.88	152
Oct. 22	.....do.....	.....do.....	.....do.....	† 2.98	806
Nov. 21	.....do.....	.....do.....	.....do.....	† 5.22	6,770
Dec. 21	.....do.....	.....do.....	.....do.....	† 2.43	196
1935					
Feb. 8	.....do.....	.....do.....	.....do.....	† 2.51	157
Mar. 6	.....do.....	.....do.....	.....do.....	† 2.85	304
13	.....do.....	.....do.....	.....do.....	† 4.99	5,640
26	.....do.....	.....do.....	.....do.....	† 5.57	7,140
Apr. 26	.....do.....	.....do.....	.....do.....	† 3.72	1,430
May 20	.....do.....	.....do.....	.....do.....	† 7.05	27,200
21	.....do.....	.....do.....	.....do.....	† 6.9	24,800
June 13	.....do.....	.....do.....	.....do.....	† 2.78	652

*Except records for Canadian River, which include measurements for 1934 and 1935.

**Crest stage was 24.55 feet at 6:40 p.m.

†Crest stage was 29.6 feet at 6:40 p.m.

‡U. S. Weather Bureau wire-weight gage on highway bridge.

†††Estimated.

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